

THE TRANSACTIONS

AND

Journal of Proceedings

OF THE

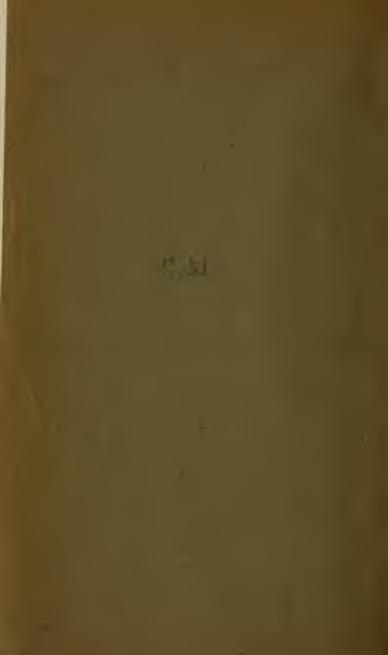
DUMFRIESSHIRE AND GALLOWAY

Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862.

SESSION 1905-1906.

PRINTED AT THE STANDARD OFFICE, DUMFRIES.





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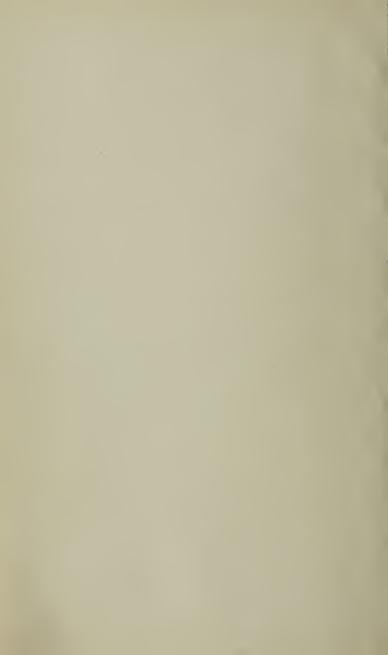
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PROCEEDINGS AND TRANSACTIONS

OF THE

DUMFRIESSHIRE AND GALLOWAY

NATURAL HISTORY & ANTIQUARIAN SOCIETY.

SESSION 1905-6.

Friday, 6th October, 1905.

ANNUAL MEETING.

Chairman—Professor Scott-Elliot.

New Members.—Miss Smith, Llangarth, Maxwelltown; Miss Landale, Fernbank, Maxwelltown; Miss Watt, Crawford Villa, Dumfries; and Mr Francis Armstrong, Burgh Surveyor, Dumfries.

The reports of the Treasurer and Secretary were read, and approved, that of the latter showing a nett gain of nineteen members.

The following Office-bearers were appointed:—President, Professor G. F. Scott-Elliot of Newton; Vice-Presidents, Mr James Barbour, Mr Robert Murray, Mr Robert Service, and Dr James Maxwell Ross; Librarians and Curators of Museum, Rev. W. Andson and Mr James Lennox; Curators of Herbarium, Miss Hannay and Professor Scott-Elliot; Secretary, Mr S. Arnott; Treasurer, Mr M. H. M'Kerrow; other Members of Council, Mr J. T. Johnstone, Rev. John Cairns, Dr Martin, Mr James Davidson, Dr Semple, Mr W. Dickie, Mr W. M'Cutcheon, Rev. H. A. Whitelaw, and Mrs Atkinson; Auditors, Mr John Symons and Mr Bertram M'Gowan.

It was remitted to the Council to appoint a committee to compile a Catalogue of the Antiquities of the District, with one to make a collection of photographs of the local antiquities, and to issue reply post-cards to ascertain the feeling of the members regarding the best evening for the meetings.

PRESIDENTIAL ADDRESS. By the President, Professor Scott-Elliot.

Advances in Science: Origin of Vegetation in Nithsdale.

This last year has been eventful and epoch-making; at no time since the year of Waterloo has the world been so disturbed, but at the same time 1905 has seen an extraordinary advance in science. It is curious how events seem to crowd at the beginnings and middles of centuries. In 1605 Bacon published "Advancement of Learning," and "Don Quixote" also appeared. In that year France had just finished for a time, and Holland was still engaged in, the Wars of the Reformation. In 1656-58 there was war between France and Spain; Dunkirk taken by Cromwell: Cardinal Mazarin and Turenne were in their prime. Yet this was the flowering period of Descartes, Galileo, Copernicus, not to speak of Milton, Moliere, etc. In 1705 Blenheim and Ramillies were fought, and Halley had so far mastered astronomy as to predict the return of his comet, which appeared, up to time, in 1758. In 1756-7 Rossbach Leuthen was fought, England abandoned Hanover, whilst Linnaeus, Buffon, and Voltaire were in full work. 1805 was the year of Trafalgar and Austerlitz, and the same year saw Laplace's Celestial Astronomy and Monge's Algebraic Geometry. In 1857-8 the Indian Mutiny and Crimean War did not interfere with the publication of the Origin of Species. During this year of 1905 the Russo-Japanese War has, for a time at least, ended, but revolution in Russia, threatenings of civil war in Austria and Norway, have not ceased, and anxiety exists all through Europe and Asia. Yet this year has seen the first plain statement of a theory which, by its simplicity and by its boldness, far surpasses any previous conception of the human brain. That is the new theory of matter, lucidly explained by George Darwin at Cape Town and Johannesburg. That the supposed indivisible atom is really a world of itself, composed of hundreds of electrons. That these electrons cannot be called material

particles, and consist of, or are charged with, negative electricity. That they are kept in their multitudinous and agitated orbits within the boundaries of the atom by some tie which is certainly not material. So far this is a gigantic conception, and, amongst other things, abolishes materialism as a serious scientific hypothesis, but that is not all. George Darwin goes on to contrast the world of electrons in the atom, the world of atoms in the molecule, and the world of planets and satellites in a solar system. If an atom were magnified to the size of our earth an electron might be larger than a marble and smaller than a cricket ball. I think I am right in saying that if a molecule of some common salt were as large as a church, an atom would be the size of a full stop in print. The molecules themselves are so small as to be quite invisible. The most interesting part of this address to me is the manner in which all sorts of systems of stability and instability are compared. The cells which make up the bodies of vegetables and animals may be compared to a world of chemical substances. The body itself is a world of cells. And we may indeed go farther than this. The bees in a hive are not held together by any material chain, yet each, in obedience to Maeterlinck's "Spirit of the Hive," does not hesitate to sacrifice itself against an enemy, which would be to the bee's eve about as big as 350 feet in height is to ourselves. The cells in any plant are like the bees, all, without exception, working for the good of the plant as a whole. We cannot say the same of human societies, such as cities or nations, but though we are all intensely conscious of our freedom we are generally obliged by some cogent reason, as a rule want of money, to do something which the good of the community requires.

Now I should never have said this to you a year ago: it may be too fanciful and imaginative, but the tie which unites and governs the electrons in the atom or the bees in a hive is not a material one. Perhaps you will, however, excuse me on account of the imaginative stimulus of this great idea. The birth of this theory is interesting, it has risen from the investigation of radium, that extraordinary substance of which one ounce is said to possess sufficient energy to lift 10,000 tons a mile above the earth. Moreover, amongst the many British, French, and Italian scientists who have been working in a scientific entente cordiale, it is, I think, to Mr J. J. Thomson that the credit is mainly due.

So that we are, in physical science, well in the forefront of discovery.

I wish I could honestly say as much for botany and the natural sciences. Almost all the interesting botanical discoveries of to-day have to be dredged and dug from the slime and tenacious clay of German botanical literature. The digger is generally so exhausted in the process that he cannot clean up and tidy his treasure so that the world may observe it. Even our own English botany is mostly inaccessible to the general reader, and there is a most distressing want of sympathy between the botanist and the practical man, such as the gardener, farmer, or forester. This is especially dangerous for the future of botanical science.

All this makes our work as members of this society very difficult. But I will try to show you some of the many things which we can discover in this district. There is first the way in which societies of plants gradually occupied Nithsdale. These plant societies or associations may be compared to the hive of bees or to the body of the plant itself, for each plant in one of them has its own special work to do for the good of the whole.

First, then, at the close of the Great Ice Age, some 200,000 years ago, the climate was of the most terrible kind. cold, almost daily gales and hurricanes with snow, sleet, and rain, drenching fogs, and occasionally hot blazing sunshine. There was no "soil," in the gardener's sense of that term, nothing but subsoil of rock, boulder clay, gravel, or sand. Moreover, this was permanently frozen hard and only thawed on the surface. The first immigrants would be pioneers which would be scattered, fixing themselves at distant intervals, wherever they could find a root hold. It would be what botanists call an open flora, the ground being visible between the plants. These first Arctic immigrants would consist of such plants as Scurvy Grass, Plantago maritima, Suaeda, Oraches, Chenopodium album, Glaux, Caltha palustris, Armeria, Matricaria inodora, etc. these still occur along the seashores as they did then. Besides these there would be (2) water plants, such as Phragmites, various Reeds, Grasses, and Sedges; and (3) Mountain Saxifrages, Polygonum viviparum, Ferns, such as Woodsia and Cystopteris, Sedum Rodiola, Silene acaulis, Oxyria, Draba, Cerastium alpinum, Pyrolas, all of which are mountain plants. These, except the water plants, would form a scattered open flora rooted in rock crevices or growing singly in sand and gravel.

The next stage of colonisation would begin by the development of lichens on bare rock surface or on gravel and clay. These would be mostly crust lichens, such as those here exhibited. Soon, however, mosses would form tufts on the rock or ground mixed with reindeer moss and other lichens. This process is of great importance, because such moss tufts produce true soil in which worms and other insects can be found. Then various Arctic plants would proceed to colonise these moss carpets. The most important of these Arctics are Blaeberry and other Vacciniums, Sheep's Fescue, Nardus, Deschampsia, Poa annua and alpina, Common Heather, Cotton Grass, certain Bushes and Deer's Hair, Cloudberry, Lycopodiums. These plants would at first be singly planted in the moss carpet, but if things were at all favourable they would very soon occupy the ground almost to the destruction of the moss, forming a continuous carpet or "Blaeberry-Grass-Heath " Association. I have not time to show how wonderfully these Blaeberries and Heather are adapted to do this. But with the appearance of this association true soil began to appear. The underlying rock or clay was penetrated and broken up by the roots, and the upper surface of the soil received regular supplies of leaf-mould.

Now, as the climate became more genial, this Blaeberry-Grass Association would gradually creep up the valleys and hill-sides away from the sea until it reached the projecting points of Queensberry, Whitecombe, and the other storm-vexed and desolate summits of the Dumfriesshire mountains. It has not yet completely occupied them, for the original Mountain Saxifrages, Oxyria, etc., still occur in ravines and rocks which are not yet covered by moss.

I have found this Blaeberry-Grass-Heath on Mistylaw and Robber's Craigs in Renfrewshire, and something almost identical is the summit flora so well described by Smith, Lewis, and others in Eden, Wear, Tees, and Tyne, and Yorkshire. The plants are for the most part identical, and all seem to be Arctic.

If you ascend one of these hills you see no sign of man; nothing is visible but desolate whaup-haunted mosses and moorlands stretching for miles. Indeed the cultivated and inhabited valleys of Dumfriesshire are exceedingly narrow, and form a very

small proportion of its area. This old Silurian tableland plastered with boulder clay in places is almost everywhere capped by peat 10-17 feet thick.

Now, the point which I wish to make is that these moorlands are a tableland and flat so that natural drainage is difficult. Thus on these flatter summits the Blaeberry-Grass-Heath would be subject to the attacks, especially of Cotton Grass, Deer's Hair, and Sphagnum moss, which would eventually kill out the Blaeberry and Grasses, and in many places the Heather, though this last might remain on dry rounded "humps." Thus peat might be produced and go on forming as it has done until to-day. But was there never anything else in Dumfriesshire? Remains of Scotch fir exist in the Highlands up to 1800 feet, where the great Silva Caledonica of Pinus Silvertris existed in Roman times. Lewis found Scotch fir remains on Crossfell in Yorkshire at 2500 feet, which are probably the great trunks recorded by Winch in 1825. Birch does occur in the mosses, but I have no record of remains of Pine even at 1400 feet. But I think that these remains will be found. At Kirkconnel this summer I was shown hundreds of little Scotch fir seedlings thriving on a dry peat moss of the most typical character, and some had become quite respectable trees. When the Blaeberry-Grass-Heather Association was attacked pretty soon by the Pine forest with its attendant Rowans. Birches, Bracken, Bluebells, and others, the result would be to form an enormously greater amount of good fertile soil. The next crowd of immigrants, the Oak, Beech, and their attendants, ferns and flowering plants, would then invade and dispossess the Pine forest, so covering lowland Scotland with the historic Oak forest.

I do not wish to say that the process here sketched was invariably the same. On steep slopes one may see, even now, that the Blaeberry-Grass-Heather Association has been altered to permanent pasture by the Nardus, Airas, and Fescues suppressing the other members.

So also in Lochar Moss, and in most of the fertile alluvial holms, the Arctic water plants, such as the Reeds and Grass Seeds, probably began to act very soon after the glaciers retreated, as they may be seen at work to-day. With the aid of Willows, Alders, and marsh plants, they are retaining the silt and floating stuff, changing shingle, mud, and sand into valuable pasture and arable.

For the recent history of the vegetation we are scandalously ignorant. Neolithic people were contemporaneous with the Pine forest of the Danish peat mosses and people with bronze weapons in the Oak forest period in the same mosses. What happened in Scotland? Were these Pine forests, if they existed, destroyed by being cut down by stone and bronze axes? Were they burnt off, or were they grazed by goats, sheep, and Galloway cattle?

The importance of this question to us in Dumfries can scarcely be overrated. At present on these moorlands 1000 acres supports about one shepherd and half a gamekeeper. If they can be planted the same area would support 10 foresters and at least one whole gamekeeper. There are very many thousand acres of this country.

Now from what I have said you will see how much remains to be done. We are behind other countries in the study of plant associations. We ought to study them, examine and catalogue the plants, and we ought also to take photographs of them.

I know that Mr Barbour, Mr Lennox, and others have already done an enormous amount of work in this direction, but to get a complete picture of the distribution of the remains of each successive period is necessary for us to understand the life of early man in Dumfriesshire and his influence in Dumfries.

We also propose this session to inaugurate a photographic section in accordance with a suggestion made to us some time ago by Mr Johnson-Ferguson. We shall hope to have photographs exhibited at every meeting, and I would call upon all members present who possess cameras to remember this. If the suggested club in Dumfries is started we shall hope to work in sympathy with it. I think in this next session we ought to have plenty of interest.

14th October, 1905.

OPEN MEETING.

Chairman—The President.

New Members.—Mrs George Thomson, George Street; Mrs A. C. Penman, Airlie; Mr and Mrs J. P. Milligan, Aldouran; and Mr Alex. Turner, Chemist.

FORESTRY. By Sir HERBERT MAXWELL, Bart., M.P.

I come before you to-night rather in the spirit of a converted criminal than in the hope of telling you anything you don't know already. I hope that my presence here may be taken as evidence of the awakening conscience of landowners to the opportunities we have missed, to the valuable source of income which we have squandered, and to the urgency for a reform in our system of forestry. I was brought up with an intense and sedulous love of trees. Some of my earliest recollections are connected with the instruction given me by my father in what were, at that time, the approved principles of wood management, and I continued to act on those principles after I succeeded to the estate 27 years The result has been that, although I possess a considerable extent of ground under trees, there is hardly any of it more than 15 years old which I should not be ashamed to show to one who understood the three principles of forestry as distinct from arboriculture.

I have said thus much as preliminary, in order that too much may not be expected from me in the way of instruction. When Lord Mahon asked the Duke of Wellington whether his experience in his first campaign—that disastrous one in the Netherlands under the Duke of York—had been of any service to him, he replied—"Why, I learnt what I ought NOT to do, and that is always something." Wellington, happily for his country, learnt his lesson while the best part of his life still lay before him. I have learnt mine at a period when Horace's lines have a peculiarly mournful significance:

With all the trees that thou hast tended Thy brief concern is almost ended, Except the cypress—THAT may wave Its tribute o'er thy narrow grave.

WHAT THE STATE MIGHT DO.

Well, now, I have tackled a subject rather unwieldy to be dealt with in an hour's discourse, and I will try and confine myself to a few of the most salient points. I will divide it into two branches—first, what I conceive the State might do with prudence and profit to develop the national resources; second, what private owners might do to develop the resources of their estates.

Since I entered Parliament 25 years ago two enquiries have

been directed into this subject—the first a Select Committee of the House of Commons which sat 1885-6-7, the second a Departmental Committee which reported in 1902. No action was taken on the report of the first; of the result of the second we have more hopes, because we have now, what we had not in 1885-7, a Government Department-the Board of Agriculture and Fisheries-to which has been committed the duty of promoting instruction in forestry. Among the many points upon which both these committees were in thorough agreement were these facts:-1st, that "the world is rapidly approaching a shortage, if not an actual dearth, in its supply of coniferous timber, which constitutes between 80 and 90 per cent. of the total British timber imports; 2nd, that there is a vast area, estimated in millions of acres, capable of growing timber of the finest quality; 3rd, that the climate of the British Isles is favourable to economic forestry conducted on a proper scale (not in grudging patches, clumps, and strips); and 4th, that it requires only the exercise of timely forethought and a moderate annual expenditure to anticipate the time when scarcity of foreign timber shall have greatly enhanced the price, and to replace with British-grown timber much of those enormous imports upon which we depend at present.

A SCHEME OF STATE FORESTRY.

These four points having been emphatically affirmed by the two committees, I need say nothing more upon them to-night; but there is a fifth point on which I venture to go a little further than the Departmental Committee. "We do not feel justified," says the report, "in urging the Government to embark forthwith upon any general scheme of State forests under present circumstances." Well, I have the temerity which the committee lacked to urge strongly the wisdom of embarking upon a scheme of State forestry, and if I am blamed for that temerity, I make the same excuse for my scheme as served a certain young person who had added an unforeseen unit to the population—"Please, sire, it's only a very little one!" I only ask for the investment—the investment, mind, not the gift—of £10,000 a year for the purchase and planting of suitable land.

No branch of agriculture, not even wheat growing, has suffered such a slump in the last twenty-five years as hill sheep farming. There are hundred of thousands of acres in Scotland,

once valuable sheep pasture, now rented at from sixpence to not more than two shillings an acre. From some of it a good additional return—say, a shilling an acre—is obtained for the grouse on it, but a great deal of it is unsuitable for grouse, but very suitable for growing timber. Such land is constantly being offered for sale. Twenty-five years' purchase would secure 1000 such acres for £2500. If the ground is level, planting three feet by three will take 4,840,000 trees; the cost at £6 an acre—£6000 for the 1000 acre. On sloping or steep ground fewer trees will be required, and the cost proportionately less. I make no provision for houses or fences, assuming that the farm is bought all standing, but £500 must be allowed for repairs and preliminary draining, making a total initial outlay of £9000 on the 1000 acres. The interest on the balance of £1000 ought to pay the annual tool bill.

WILL IT PAY?

Now, the great question is—Will this investment pay? Well, I am bound to say that it is not one that I could advise any private individual to make and expect good interest upon his capital; the lock-up would be more than the circumstances of most landowners would permit. I shall return to that point presently. But I do consider it an investment which the State, which pays no death duties, not only might make with prudence, but is bound to make as a matter of public policy.

It is a difficult thing to find any woodland in Great Britain, either Crown property or in private hands, which have been systematically managed on a working plan over a sufficiently long period to estimate the results commercially. Nevertheless, I have had the advantage of examining the balance sheets for five years of 3700 acres of wood on the estate of Novar, in Ross-shire. Extensive planting was done there from the beginning of last century continuously, except during thirty-two years from 1850 to 1881. This was an unfortunate break, for it vitiated the regular rotation of the working plan: nevertheless the results are not unsatisfactory. The average nett profit upon these woodlands for the five years 1892-6 was slightly over 11s an acre.

Next I took the official returns of the German State forests covering five years, and found that the average nett return was exactly the same as from the Novar woodlands—11s an acre. Here, then, we have this result, that land which, for agricultural purposes, is not worth at the highest estimate more than 2s an acre annually, has been made to return an annual nett profit of 11s an acre. I say, then, that money so invested cannot be regarded as unprofitable. Moreover, these results were obtained upon the prices of timber current at the close of last century, whereas all indications point to a considerable rise in that price. The German official returns show that during the last forty years the nett profit per acre has been steadily increasing, owing to rise of prices and the establishment of pulping mills and chemical works.

BRINGING THE PEOPLE BACK TO THE LAND.

All I ask, then, is that the State should invest £10,000 a year in the purchase and planting of land. At the end of fifty years it would have made a progressive investment of half a million sterling-the cost of four days' campaign against the Boers. The property which it had acquired on the rent basis of 2s an acre would be yielding 11s an acre, a rise in value of 550 per cent., and this assuming, against all appearances, that the price of timber will continue stationary for half a century. But that is not all the advantage to be gained. The minds of politicians and sociologists are grievously exercised just now, and justly so, about the physical deterioration of our population owing to the concentration of the working classes in our large No greater boon can be devised than healthy and remunerative work in the open-air of the country. Suppose my fifty thousand acres to have been planted by the State. Instead of a rural population of one shepherd to 1000 acres of pasture -50 shepherds on the whole extent—you will have established one woodman to every 100 acres, or 500 woodmen on the whole ground. Then there are the forest industries which will spring up; each requiring a number of hands. In the whole United Kingdom there is not a single pulping mill; we import £3,000,000 worth of wood pulp and wood paper annually. The first pulping mill was established in Saxony in the year 1854, fifty years ago. There are now 600 pulping mills at work in the German Empire alone.

ALLEGED DISADVANTAGES.

There appeared lately in one of the evening papers a letter from a noble earl in reference to Mr Keir Hardie's proposal for State forestry. His lordship declared that it was futile to think of profitable forestry in the United Kingdom, for two reasons—first, because of the furious storms which sweep these islands at irregular intervals; second, because the timber produced in our woods is far inferior in quality to that grown on the continent. As to the first objection, I deny emphatically that we are more exposed to storm than, say, Norway or Sweden, whence we draw such large supplies of coniferous timber. It is true that we suffer far more from wind damage than is the case in continental forests, but that is the result partly of our custom of planting in narrow belts and isolated small masses, and partly of the mischievous system of overthinning which came into vogue in the nineteenth century. Trees that have been encouraged to grow heads out of all due proportion to their height will succumb to a storm that may be lifted harmlessly over a solid block of well-grown forest. A thousand contiguous acres of woodland will suffer far less from gales than 1000 acres scattered over an estate of 10,000 acres.

Next as to the alleged inferiority of British timber to continental. Surely that is a strange allegation against a country that used to supply timber for the noblest fleets that ever put to sea. I may say in passing that it was the demand for ship timber which initiated our vicious system of over-thinning. Shipwrights did not want straight boles; they wanted bent timber, and you will actually find in old treatises on forestry instructions about tying the limbs of oaks to produce the desired contortion. The result has been that we have conceived and aim at a false ideal. Our notion of what an oak ought to be is framed upon such a magnificent deformity as the "Major" oak in Sherwood Forest. we can grow fine straight oak if we choose may be seen in this example from the New Forest—a domain which, unhappily, the State is not permitted to treat on right principles. Here, again, is a wood of self-sown oak at Thornbury, in Gloucestershire, 30 to 40 years old, which promises to develop into splendid clean timber. But to obtain examples of the highest development of oak timber we must go to France. Here are a series of photographs showing a forest of sessile-flowered oaks in France through all its stages.

A QUESTION OF FOREST MANAGEMENT.

Now that we want straight, clean timber, there is no country in the world better able to produce it than our own. "Ah, but," says the timber merchant, "your firs are grown too fast. British deal cannot compare with Scandinavian, which is grown much slower." True, but here again the evil comes from over-thinning. Grow your trees in close forest, and no matter what height they attain, or how soon they attain it, the annual rings will be close together, and the timber will be slow grown. It is a mere question of forest management. Trees in open order will produce branches and coarse timber, with wide annual rings; trees grown in close forest will yield clean planks, with close annual rings. Here are some examples from a wood of Mr Elwes' at Colesborne, in Gloucestershire. Most of these trees measure 125 feet in height, and compare favourably in cleanness of bole with the following examples from Savoy. Silver fir with a few spruce, and silver fir with a larch or two.

It is idle to say that timber cannot be grown at a handsome profit in Great Britain, but it is equally idle to attempt to grow it at a profit unless sound principles of commercial forestry are adopted.

WHAT PRIVATE OWNERS MIGHT DO.

I now come to the other branch of my subject—the condition of woodland or private estates in this country. In dealing with that, I must be understood to generalise. I could name certain properties on which the principles of sound forestry are in full practice, and of which the proceeds of the woods contribute a considerable part of the revenue. But taking one estate with another, I shall not be accused of exaggeration if I describe the woods as run upon amateur lines, more or less modified by local custom. It is not the custom to expect a land agent to have had any training in economic forestry; still less likely is it that the owner himself shall have had such training. It would be natural, then, that neither the agent nor his employer should attempt to interfere with the management of the woods. But what landowner is there so poor in spirit that he does not aspire to direct in person the operations in his woods. He has a forester or

woodman, no doubt, with an efficient staff under him, but that forester is very seldom remunerated on a scale calculated to secure sound technical knowledge. On some estates he combines the duties of forester with that of head gardener; on others he receives a salary equal to that of a head gamekeeper. He is at best but a foreman woodman, and even if he pursues sound routine operations, these are constantly liable to be interrupted or diverted at the caprice of his employer. It would be strange, indeed, if the result of such a want of system proved anything but disastrous. Imagine any man investing liberal capital in a large farm without any technical knowledge of farming or the rotation of crops, and yet dictating to his farm bailiff how and where those crops were to be grown. The result would be apparent in a very few seasons, and, so far as that farm was concerned, the balance sheet would spell bankruptcy. Even in that case, the amateur farmer would have the example of sound agriculture as practised by his neighbours, and he would have the sense to pick up some knowledge as he went along. But where is the amateur forester to turn for guidance in this country? Perhaps there is not within his country a single example of close canopy and clean timber. To go to the State forests of England is to learn the shortest road to ruin; for what is the latest balance sheet of H.M. Office of Woods and Forests:-

Royal Forests and Woodlands—1903-4.

Receipts				£32,48	31 18	8
Expenditure			•••	58,40	2 16	1
Rala	nce los	20		£25.99	20 17	5

There is one aspect in which a vicious system of forestry is far more disastrous than bad farming. The farmer may see where he has gone wrong after the experience of two or three seasons, whereas mistakes in forestry do not become fully apparent until the third and fourth generation.

THE RESULT OF THINNING.

I stood not long ago beside the owner of one of the noblest parks in England. He had brought me to see an oak wood, originally pure forest, about 50 acres in extent, which was causing him much concern. They were splendid trees, about 180 or 200

years old, averaging 100 feet in height, with 40, 50, 60 feet of glorious clean boles. I don't know the like of this wood, as it must have been, if it be not the forest of Cour Chevernay, on the Loire (opposite Blois). Twenty years ago, there cannot have been less than 9000 or 10,000 cubic feet per acre, which, taken at only 1s a foot, represents a value on the 50 acres of some £25,000, or £500 an acre. Who could have blamed the owner had he treated this woodland as a crop? Well, all his neighbours would have blamed him bitterly, so deeply rooted has become our habit of looking upon woodland merely as an extra—a luxury -a playground. And yet I maintain that it was folly not to turn this timber to account. For look you what has happened. My friend had all the amateur love of trees which is characteristic of English country gentlemen. About twenty years ago, thinking to improve the landscape, he had glades cut in this noble grove, and thinned out the whole of it severely. His grandfather, if he knew his business, may have warned him what must happen if pure oak high wood is suddenly converted into trees in open order. If he did so, his advice was disregarded: the owner knew what he wanted, but the result has been far different. Nearly every tree has become stag-headed, and thrown out an eruption of growth all along the stems and branches. The grove has been ruined.

My friend did me the honour to ask my opinion. If I had given it, he would have called me a beggarly Scot, so I held my peace—even from good. But I had no doubt what a good forester's advice would be. Fell all the remaining trees and re-plant. As near as I could judge, there seemed to be an average of thirty oaks left on every acre. These cannot be worth less than £7 10s a-piece standing, or an aggregate of £11,300 on the fifty acres. I have purposely put this calculation very low, for I was shown where one of these oaks had been felled recently, and the timber sold for £20. But I know what will happen. My friend loves his trees; he will never harden his heart to part with them; they will go from bad to worse, and the greater part of this money will be sacrificed. The future of these noble trees will be like that of the mournful ruins of Cadzow Forest, Lanarkshire.

LANDOWNERS' OBJECTS.

Now, one must take things as one finds them, even if one may entertain a hope that better understanding may prevail some

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day. The British landowner has a perfect right to manage his woods in the way best calculated to secure the objects he has in view. These objects, I think, are generally as follows:—1st, landscape effect, especially park scenery; 2nd, game cover; 3rd, shelter; 4th, timber for estate purposes. To insist upon the uniform application of strict continental system to all classes of land in this country is very far from what I advocate. In the first place, I don't think close canopy is as essential on a great part of our area as it is on dry soils and climate. The climate and soil of our islands, part of them, at least, is far more propitious to tree growth than those of a great deal of the forest area of Europe. But what I do advocate is the application of strict system, modified to suit our peculiar circumstances.

Now let us take these four objects which I have mentioned as uppermost in the average landowner's purpose, and see how far they are to be reconciled with a sound system of forestry.

LANDSCAPE EFFECT.

1. Landscape effect, especially park scenery-He must be callous indeed, be he landowner or simple wayfarer, who is indifferent to the charm of English park scenery, which consists of prairie with groves and scattered trees. But it is an effect which can only be obtained as the result of age. The finest park scenery is a gradual evolution from close forest, and never can be attained by planting single trees apart upon a plain. By that means you attain nothing but huge cabbages with an ugly horizontal browzing line, or picturesque monstrosities such as the great beech at Kilkerran, Ayrshire, which girths 19 ft. 6 in. at 5 ft. high, or malformed specimens like this ash. Now compare with such results some park effects that have been evolved out of high forest. Trees are social creatures; for the development of their true character they require the discipline of close company to rear stately stems and preserve symmetrical heads. I must not linger over long upon this fascinating subject, but if anyone doubts my contention that good forestry is not only reconcileable with the finest park scenery but is actually essential to its production, let him visit Ashridge Park, in Hertfordshire, and reflect upon the process which reared the famous beeches there. It is out of a well-grown woodland only that you can carve a beautiful park. For the last sixty or seventy years most of us have been

doing our best to render growing woods incapable of producing fine park scenery. We have been taught to thin mercilessly—to allow no tree to interfere with another, thereby preventing the development of clean stems, and encouraging instead a wild profusion of branches, as if the object had been to produce an orchard. Well, but it is argued, a regular forest, grown on continental principles, is painfully monotonous. You will lose all the variety and life of an English park if you insist upon close canopy. My answer is that of all rural industries forestry, in its ordinary operations, is productive of the most picturesque scenes.

THE AFFLUENCE OF LANDOWNERS.

There is another and more pressing aspect of park management. British landowners are far less affluent than they were thirty, fifty, one hundred years ago; it is a question with many of them whether they can maintain their parks at all. Is it not sheer blindness to refuse to develop what may be rendered not only a source of regular income, but a reserve to be drawn upon in times of special pressure, such as the payment of death duties? Why, so far from destroying English park scenery, the application of science and system to wood management may be the very means of saving many a park from the hammer or the speculative builder.

Before it can be hoped that landowners will take that course, they must apply themselves vigorously to acquire the principles of the craft, unlearn a great deal that they have been taught, and harden their hearts to deal with their woods in general as a crop.

GAME COVER.

2nd. Game Cover—This is perhaps the point at which British landowners and foresters are most directly at issue, and I admit that it is not easy to reconcile the idea of an English game cover with economic forestry, seeing that underwood has ceased to have any commercial value. At the same time, it is a fact that our present system of battue came from Germany, where forests are managed on the strictest principles of commerce. Close high wood is disliked by game, chiefly because of the scarcity of food there; but cover shooting is such an artificial affair now that pheasants may be made to haunt whatever ground is best adapted for their artistic destruction. It is merely a question of where

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their food is provided. As for cover, there is no cover better than young wood up to 15 or 20 years, and in a woodland managed on economic principles there will always be a due proportion of young wood, into which birds may be driven for the rise.

But there is one form of game absolutely incompatible not only with profitable but with decent forestry. Will any landowner honestly and boldly calculate what ground game—especially rabbits—cost him per acre of plantation? Every yard of ground that is planted must be wire netted, and this cannot be done at less than 6d a vard. Where the woodland is worked in proper annual rotation, ten acres, say, felled every year, and ten acres replanted, the cost of wire netting is at a minimum, for a square of ten acres may be fenced for between £20 and £30-say an additional cost of 50s an acre. A pretty heavy inroad upon capital expenditure; but you must multiply this indefinitely if you wish to deal with blocks of less than 10 acres—if you wish, for intsance, to plant up blanks in woodland from half an acre to two or three acres in extent. And even this is not all. Where the detestable rabbit abounds, ground cleared of timber cannot be restored by natural regeneration. In such a case there must be placed to the debit of the rabbit account, not only 50s an acre (the cost of wire-netting), but £6 an acre (the cost of replanting), which would be unnecessary on ground suitable for natural regeneration. other words, the presence of rabbits means an initial tax upon young forest of £8 10s an acre—which may be equal to half the fee of the land. If British forestry is ever to regain the place to which our soil, climate, and requirements entitle it, it must be relieved from the intolerable scourge of rabbits. The place for the rabbit—and the only place—is the warren. In those scenes I showed on the screen from Ashridge Park you may have noticed how bare was the ground, not only under, but around the beech trees. To show what that ground is capable of doing in the way of natural regeneration, look at this part of it, which has been protected from rabbits and deer for the last 15 or 20 years.

SHELTER.

3rd. Shelter—Shelter from sea blasts or from the prevailing wind is a most legitimate object in forming a plantation. I have only a few words to say about it. Do not grudge a few acres in laying out belts. Even a narrow strip affords warmth and shelter

so long as it is young, but there are few things more cheerless than the same strip when the trees are approaching maturity, and the wind blows draughtily through it. The most successful sea shelter which I have seen is on Lord Leicester's estate of Holkham, where miles of sand dunes have been planted with four different species of conifer, Scotch pine, pinaster, Austrian, and Corsican, and the Corsican has beaten all the others in a very remarkable manner. It even reproduces itself, although there is much ground game about.

TIMBER FOR ESTATE PURPOSES.

4th. Timber for Estate Purposes—A most important object this, and one that is usually accomplished—but at what a cost! I do not hesitate to say that, on many estates, if the rent of the ground, annual rates, cost of planting, and wage bill be reckoned, much money would be saved if not a foot of home wood were used and foreign supplies bought from the timber merchant. And yet you say that timber ought to be grown for the market at a profit! Certainly it ought; but not on the present system—not unless timber is treated as a crop, with a regular fall, and grown of good quality. It is the cut-and-come-again method that is ruinous both in cost and in quality. The annual fall ought to supply both estate purposes and the timber market. Yet I have heard within the last few months landowners complaining that they cannot get an offer even for fine timber. No; because they have not secured a proper business connection. To do that, two things are necessary, as any greengrocer will tell you—regularity of supply and uniformity of quality. It is estimated that there are 3,000,000 acres of woodland of sorts in Great Britain and Ireland. In Belgium there are only 1,750,000 acres, yielding a return of £4,000,000 a year. At that rate British woodlands ought to yield £7,000,000 a year. At what figure would the most liberal estimate fix the return? Yet British timber, properly grown, would be no whit inferior to Belgian.

The fact is, there is no regular trade in home timber. Merchants cannot rely upon a steady home supply, so they have recourse to countries where they can be sure of getting exactly the quantity and quality they require. Mr Nisbet has put the case concisely:—"Available markets cannot be utilised to the best advantage if the quantity of wood offered one year is large, the

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next small, a third year wanting altogether, and so on irregularly. 'First a hunger, then a burst' is bad in this as in all other cases.'' Add to this that woodland subject to inordinate thinning—to arboriculture instead of forestry—produce timber of such inferior quality as to lead architects to stipulate for foreign timber in all their work.

Now I think I have said enough to explain the general character of what is on my mind in this matter. To go closer into details would outrun reasonable limits of time. I am convinced that by adopting sounder principles and continuity of treatment, both the State and private owners of land might indefinitely enrich future generations, and indemnify themselves meanwhile, wholly or in part, for the outlay and lock-up of capital, but clearing the ground of a great deal of ill-grown wood which occupies it just now.

One circumstance is highly favourable to reform. There is plenty of sound instruction in silviculture to be had. Five and twenty years ago British landowners could only turn to such vicious and misleading instructors as Brown and Michie. Now there is abundance of good literature, and such writers as Schlich, Nisbet, and Forbes are at hand to pilot inquirers into the true course.

3rd November, 1905.

Chairman—The President.

New Members.—Mr R. Chrystie, Irving Street, Dumfries; Mr Dewar, manufacturer, Maxwelltown; and Mr Andrew M'Cormick, solicitor, Newton-Stewart.

NATURAL HISTORY NOTES. By ROBERT SERVICE, M.B.O.U.

In the course of a very interesting contribution, Mr Service drew the attention of members to the first occurrence in this area of a species of fish not hitherto found on our shores. On 11th July last, he said, he received a telegram in the course of the morning from his friend, Mr M'Queen, the lessee of the fishings at Port Ling, to say that late on the previous evening at the ebb of the tide he had found a very big fish, which no one could

recognise. He got down in the evening, when he found the fish lying at the foot of the cliffs. It was a large specimen, 5 feet long and 32 inches in girth behind the first dorsal. It displayed brilliantly iridescent colours, silvery white beneath and ultramarine blue as to the fore part of the shoulders. Behind the dorsal fins there was a reddish colouration, and the whole aspect of the monster was foreign to our fishes. He found it to be the Maigre, a well-known Mediterranean fish that is also found in Atlantic waters on the North African and Portuguese coasts. Only some two instances of the occurrence of the Maigre on the coasts of Scotland had been hitherto recorded, and this was the first in our own area, and indeed over the whole of the western coast, till Cape Wrath is rounded. He could not preserve at the time such a large fish, but he took a few of the scales, and these were quite sufficient to enable an expert to identify the monster by. Another item to which he invited the notice of the society was one of the rarest birds which he had come upon in this area a specimen of the Ruff, shot on Tuesday, by Mr Quinn, the head keeper at Lord Herries's Caerlaverock estate, near the shore. He had never previously seen this bird in the area, but he understood that some three or four had been got at various times, though a considerable period since. In the summer the bird has a rich plumaged ruff or tippet, no two, however, being alike. Some were barred with brown, some were almost black, and some were white. Shortly after the breeding season was over the dress of the summer disappeared, and the bird became a rather inelegant creature. Mr Service next exhibited two larvæ of the Death's Head Moth, which had been found a week or two ago on the farm of Townhead in Closeburn when potatoes were being dug. At one time the Death's Head Moth was an excessively rare insect, and he had no doubt whatever that at the present moment it was becoming a comparatively common species. Year after year they were being noted, whereas formerly five or six years passed without one being heard of. He remembered the late Mr Lennon, who was a most enthusiastic entomologist, saying to him that it was quite an event in his life-time to find one of these moths. In 1897 the president (Professor Scott-Elliot) brought him a larva, which turned out to be the first specimen that was ever got in Scotland. A second turned up that same season from Kirkmahoe, but Professor Elliot's was the first. In 1899 no

fewer than 26 larvæ were found in different parts along the Galloway coast. None were found in Dumfriesshire, but an odd straggler or so were got about Kirkgunzeon and Corsock. Most of them, however, were got about Colvend and Kirkbean. thought it likely that the larvæ might have originated from eggs on the Ti tree—a tree which grows very luxuriously at Colvend, and is known to be a favourite food of the larvæ. Not a single one had reached the imago stage. The eggs and larvæ were not in a natural environment here at all, and the tendency was for these colonists to die out. Two years later-in 1901-some larvæ were got, but from that time till now none had been seen. One moth was recorded from Thornhill last June, and it was just likely that there might have been a small party of immigrants, one of which had deposited eggs there. In 1898, one afternoon in going home, when it was still bright daylight, he had the good fortune to see one of these immense insects crawling up the wall of one of the houses in Laurieknowe. He climbed after it up a drop pipe, getting on to one of the windows at the risk of being taken for a burglar, and secured it. A show had passed by shortly before, and a boy's comment on his proceeding was that he was "after yin o' the wild beasts" that had escaped. He next exhibited an insect belonging to the same division as the Death's Head Moth, namely, the Convolvulus Hawk Moth. This insect never seemed to become quite established, although in recent years it had been much more in evidence than it used to be when he first became acquainted with it. These Hawk Moths, as they were called, had very strong powers of flight, and there was no reason whatever why they should not emulate the birds in their powers of getting across the country by the overhead route, because they could fly as well as any bird, and no doubt in the higher reaches they could get along as easily. A number of years ago he got one of these moths from Sir George Walker of Crawfordton, who took it from the sails of a yacht on which he was travelling between Malta and Sicily. Another one he had was got off the west coast of Ireland in an almost similar way, having been taken from the sails of a fishing boat. Another was taken from the sails of a boat sailing between the Isle of Man These facts showed that the Hawk Moth was and Whitehaven. accustomed to taking long flights at sea. He added that our area had the honour of producing the only known instance in Scotland

of the larvæ of the Sphinx Convolvuli, which were found in Corsock.

The President said that the occurrence of the Maigre on the Solway was especially interesting. Apparently it must have been swept out of its native waters into the West Atlantic, and then brought up the west coast, finally landing on our shores. fact was particularly interesting from the point of view of botanical distribution, because he had never been able to find out how it was that a special group of Portuguese plants—and the Maigre was to be found chiefly in the Mediterranean and off the North African and Portuguese coasts-colonised Cornwall and the western coast of Ireland, and were to be found nowhere else. In regard to the Death's Head Moth, he should like to know whether it was likely that it might become established here or not. He remembered seeing off the Madagascar coast enormous clouds of butterflies which had been swept off the land by a breeze, and they could see the wretched things with their white wings twinkling in the sun drifting away across the sea, where, of course, they would be drowned. Was there any hope of our ever having these moths prevalent here?

Mr Service, in replying, said the President had raised an interesting point, and that was as to the occurrence of some of those southern forms in our latitudes. It was pretty well known that a number of fish that really belonged to the Mediterranean fauna came up towards British shores each summer. There was a very well marked migration of the Mediterranean forms each July, continuing as far on as to the middle of September. He referred more especially to such fish as the Bonito, Germon Bonito, Pelamid, Swordfish, and now the Maigre. What caused these migration movements they could hardly ascertain. They did not come north to breed as many other fish did. It might be that they were after food, as the mackerel and some of their congeners came in advance in larger shoals. As to whether the Death's Head and other moths were ever likely to form permanent settlers here he was not sure from the information at present in their possession. Perhaps five years ago we saw the initiation of one of those warm periods-periods which were hardly recognisable in the midst of those curious masses of figures we got from meteorologists, but which were well enough defined. Well, the prevailing feature of such weather was that from the end of April till perhaps the middle of June we have a long occurrence of pretty strong southerly and south-easterly winds. These were known to bring migratory birds to Great Britain in augmented numbers, and it would appear also that they brought these strong winged species of lepidoptera. That migratory process had again become very pronounced of late years. The last warm period occurring in the early spring months came to an end somewhere about 1865, but for thirty or thirty-three years before that it had continued. Since then there had been a marked absence of these seasons till within a few years ago, when these moths had become very noticeable.

HODDOM BRIDGE. By the late GEORGE IRVING.

The following correspondence, which relates to the building of a bridge over the River Annan at Hoddom, followed upon an agitation for its erection as a substitute for the old ferry boat, led by the Duke of Queensberry on the west and Sir James Johnstone of Westerhall, Sir William Maxwell, and other county gentlemen on the east. Nothing could be done so long as Mr George Sharp was laird of Hoddom, but pressure was again brought to bear upon his brother Matthew on his succession to the estate.

"Dear Sir,-Upon Tuesday's night the water waxed unexpectedly, and as I suppose the Boat had opened by the strength of the water betwixt the Keel and the Boards, and being very crasey, the reason for me thinking so is; That I found the pouls and other Pieces of Timber that were louse within her floating in the Boat Pool, on Wednesday, which undoubtedly had gone out when she had sunk; I went next morning down to the foot of the River; and to the Seafield, and Battlehill, and along the coasts of Newby, in search of Her, but could Find nothing. On Thursday morning I found her mostly all gone in Pieces in Scale's Pool, opposite to Turnshawhead, and thought to have got her out but could not make it with all the hands I could get. Next day I went to her again in order to see if I could get her out; and took the Trows along with me, and went into the Pool and fixed Ropes to the chain in order to draw her out, and the Stern, and some of the Beams came from her along with the chain, and Ropes, and the water being Pretty Big we lost sight of the

Remains of Her, and could never see more of her, nor can I make any more search for her till the water turns little, and clear, and then I shall make all the search possably I can for the Remains of Her; She had carried the stone that she was fixed to alongst with Her and when I found Her there was not one Link of the Chain Broke.—I am,

"Dr. Sir, Your most obedt. and most humble servant,

" PATT. NORRIS.

"Halyards, ye 16 Novr., 1761."

Addressed to Matthew Sharp of Hoddom, Esqr., at his lodgings in Dumfries.

Extracts from Letter from Hoddom to Lord Garlies, 1st March, 1762.

Annan Bridge Tolls.

"My Lord,—I am told that all Black-Cattle pay two shillings per Score. Sheep I don't remember what. A chaise a shilling. A cart with two horses I sh. A cart with one horse 6d, and every person on horseback \frac{1}{2}d. I know that the Cattle which come in droves from the North Country by Moffat, and so come not within 4 miles of Annan Bridge or town of Annan in their way to England have been stoped at Ecclefechan and at Burnswark by the Tacksman of the Toll till they paid the toll as alleged due to Annan Bridge. I do believe the Annan people never had any regular tables made up of these tolls, for I cannot recollect upon reading their act of Council sometime agoe there was any such. It is but of late years that they had either chaise or cart in that part of the country; and now all our chaises from Dumfries pay a shilling, and the Carlisle one horse carts with merchant goods sixpence each. I have been told that this bridge toll is yearly sett by Roupe sometimes at £100, and sometimes at £120; but the magistrates and Town Council who are possessed of the records can only answer this. I am told they have remitted £200 to their agent as part of the public revenue for the Town at the expence of the Country. . . . It appears there was a fund left for Building this Bridge and no doubt Annan has a copy of Doctor Johnstone's will as well as Dumfries. . . I would have sent you a copy of the will, but as Mr Johnstone of Carnsalloch can direct you where to have an authentick extract from the Register of the Prorogative Court of Canterbury, I thought it was needless. The Exrs. nominate in the will and codicil did administrate 18th October and 4 Novr., 1639, and Lord Johnstone with Sir David Cunningham of Robertland were overseers to the Exrs. in seeing the Will duly executed. In the Codicil there is £3000 left to Lord Johnstone to be applied to pious uses in Scotland which I imagine went the same way with the £500. . . . We have reason to complain that the town of Annan did not get the family of Annandale to apply the money left, but rather took, as they alledge, that very sum by way of loan from that family, for that purpose, and we therefor obliged to pay a toll at Annan Bridge, while all the other Bridges in the County are free to them and every body. . . . The North Country have reason to complain of paying this toll for the Cattle that come by Moffat on their way to England which are never within 4 miles of either the town or Bridge of Annan.

I am with the utmost regard,
My Lord,
Your Lordship's most obedt. and most humble
servant.

"MATTW. SHARPE.

"Dumfries, March 1, 1762."

Hoddom Bridge.

In a letter without date, but evidently 1762, Matthew Sharp of Hoddom writes about the proposal to build a bridge over the Annan at Hoddom, now known as Hoddom Bridge:—

"Dear Sir,—I had a letter from Sir Robt. Laurie at Edinr. by last post wherein he writes me that Lord Garlies wants an explanation of the enclosed note for himself and the other members which he desires me to send him. I have wrote him all I know about it which I desired him to communicate and could have been more particular had I been in ye country to have had the information of my tennants. But I shall freely write you my reasons for opposing the toll at the Bridge of Annan which are in some measure particular as to my self.

Sir James Johnstone and the late Sir Willm. Maxwell and the gentlemen from Esdale, had long insisted for a Bridge over Annan (Water) near to Hoddom (Castle), which my Brother would not consent to as he must have sunk five pound as the Rent of his boat and made the road much more publick by his house

and through the most of his whole lands which are arable ground. But this Sir Will Maxwell and other Gentlemen in that part of ve Country and Esdale insisted with me what advantage it would be to the Country in generall and them in particular to have a Bridge as the Boat did not answer frequently. To which I consented, knowing that the then toll at Annanbridge will soon expire. If the toll is continued at Annan Bridge and the Bridge at Hoddom to be built free, I shall have the whole Galloway Droves to pass my Door and my planting destroyed and the tenants' ground abused. There is another inconveniency that has not been adverted to. There is a road thro' Locharmoss by which the Drovs will then come which was made at greater expense and in which I had a grat hand, and is of great advantage to the Country and myself, as it makes me four miles nearer the town of Dumfries in place of going the round by Tinwald and Lochar Bridge. If the Galloway Droves go that way for Two years it will make that road so bad that it will not be in the power of the Town of Dumfries to support the expense thereof to which they are bound. It is at present in a bad state and the Town grudges the repairs upon it already, and you may be sure the Drovers will take the roads that are attended with the least expense.

"I think it hard to raise a publick revenue to the Burgh of Annan at the expense of the Country to Drink and Squander away which is the use that is most generally made of it. But if the D. Q. (Duke of Queensberry) shall think it will tend to the public good of the Country you have my consent to it, however I may think my own private interest may suffer.—I am, Dr. Sir,

"Your most affect. humble sert.,

"MATTW. SHARP."

No address is upon the letter.

The bridge was built, and has been a great comfort and convenience to the public ever since.

Raising Double Polyanthuses and Primroses from Seeds. By the Secretary.

As is well known to most, a number of double Primroses and Polyanthuses have been cultivated in gardens for many years. From time to time additions have been made to their number, but these have generally been the result of what may be termed chance seedlings appearing in gardens or among plants raised from the single forms and sown without any definite purpose beyond that of raising single-flowered varieties. Some interesting experiments which have come under my own observation may be considered worthy of consideration, and these may perhaps induce some of the members of our society to begin similar work upon the same or other lines. The experiments were made by Mr P. Murray Thomson, S.S.C., Edinburgh, the Secretary of the Royal Caledonian Horticultural Society. Mr Murray Thomson applied the pollen of a double Polyanthus called platypetala plena to a single white Primrose. From the seeds which resulted a number of seedlings were produced. When these flowered all were single and none were white. These were allowed to seed without any attempt to cross-fertilise them artificially, and the result has been a number of plants of various colours, some of them white, like the original seed bearing progenitor, and a considerable proportion of double flowers, almost entirely of the Polyanthus or bunch-flowered types. Out of a number of these seedlings sent to me for trial I had one good double flowered one of a light purple colour. Mr Murray Thomson has, however, some which are more double than my one, and of considerable variety of There are whites, pale vellows, pinks, roses, magentas, and purples.

One of the most remarkable things about this experiment has been the fact that the first cross gave no double flowers, and that it was not until the next generation that the double flowers appeared. This suggests several considerations in our treatment of the interesting study of the heredity of plant characters.

17th November, 1905.

Chairman—The President.

New Members.—Miss Thomson, Langlands Place, Dumfries; Mr W. R. Farish, Amisfield Tower; and Mr J. G. Drummond, Sandon, Dumfries.

REPORT REGARDING VOTING CARDS.

The Secretary submitted a report from the Council regarding the result of the vote on the question of the night of meeting, together with a recommendation that the Friday be adhered to. This recommendation was adopted.

A report from the Council was submitted recommending the appointment of a committee to revise the rules, and it was remitted to the Council to revise them and to submit a report to the Society.

SEEDLING POTATOES.

A number of Seedling Potatoes raised by Mr W. R. Farish, Amisfield Tower, Dumfries, were exhibited, and the following record of their parentage, treatment, and yield, was submitted by Mr Farish, and read by the Secretary.

The following are the varieties of seedling potatoes:

Parentage.	No. of Tubers.				
A. 1. Dobbie's Cent	tral	•••		15	Late
В. т. Do.				23	,,
A. 3. Northern Star	•••			14	,,
A. 4. The Crofter	•••	•••	•••	I 2	,,
B. 4. Do.	•••	,	•••	20	,,
C. 4. Do.	•••	•••		17	,,
A 5. Fidler's Recor	rd			12	Early
A. 6. Duchess of Co	ornwall	•••	• • •	25	Late
A. 7. Up-to-Date	•••		•••	12	,,
B. 7. Do.	•••			20	2nd Early
C. 7. Do.	•••		•••	17	,,
A. 9. The Factor	•••		•••	7	Late

All the same numbers are from the same plum.

TREATMENT.

March 28th, 1905—Sowed seed under glass. April 28th, 1905—Pricked into boxes. May, 18th, 1905—Planted outside, 30 inches apart in the rows and 12 inches between the plants, and put a slate deep down between each variety to keep them from mixing. The plot was manured with farmyard manure in autumn and dug down. In spring it was sown with kanit, and later

covered with leaf mould, which was dug down, after having lain on the surface for a week or two. When planting out I gave each plant some sand to give the tender rootlets a chance. When ready I gradually earthed them up, giving them occasionally a little kainit and superphosphates. When I raised them on the 5th October, if I had a shaw showing any disease, I discarded the lot, but I had only four shaws showing any.

THE FAUNA OF GLENCAIRN. III. THE FISHES. By Dr J. W. MARTIN, Newbridge.

1.—THE PIKE OR JACK (Esox lucius).

The curse of many of our fine trout lochs and streams. It is more numerous than most rod fishers desire, but of late years it has not been seen in any quantity in the river Cairn to my knowledge, although still numerous in Loch Urr in the confines of the parish. It seems there to have almost exterminated the trout, and takes toll of young mallard, black-headed gulls, and any other chicks that come within reach of its terrible jaws. From a rod fisher's point of view it is almost worthless, giving little sport, as it is necessary to use very strong tackle to resist the sharp teeth and consequently is more easily brought to net. Their flesh is also coarse and dry, and is only palatable when disguised by the skill of some culinary artist. It is extremely retentive of life, and instances have been recorded of its survival after hours out of the water. Stories of its voracity are numerous. Some years ago several were caught in this district weighing from 5 to 10 lbs., all by night lines. The Pike lives in a hole principally, and there watches for its prey, which is very multifarious. Its colour is olive brown on the back, lighter hue on the sides varied with green and yellow, while the abdomen is silvery white.

2.—The Perch (Perca fluviatilis).

Unless it be in Loch Urr or private ponds, I do not think there are any in the Cairn or its tributaries.

3.—TROUT (Salmo fario).

The Trout is still fairly plentiful in most of the burns and streams of the parish and district, but not nearly so numerous or well-grown as it seems to have been fifty years ago. Odd fish, however, still run to considerable weight, one killed near the village of Moniaive two years ago turning the scale at 51/4 lbs., while two others weighed over 3 lbs. The silting up of many of the old spawning beds, through the excessive draining on the hills, and the consequent sudden spates, may have helped to diminish their numbers: but it is also accounted for by the extra number of rods now on the water compared to former times. Other agencies may be affecting the ova, such as tame ducks, otters, birds, etc.] The dastardly practices of the night poachers, with salmon roe, net, and other illegal methods, contribute also to decrease the number of trout. In the Cairn the trout vary very much in colour. In the deeper parts one often gets them very dark, whereas others are of a beautiful clear vellow colour, with the flesh of a pinky shade. The spawning season extends from November to February, and one rarely kills a well-mended "Kelt" before May. They quickly improve about the season of early spring. The burnie or moor trout might be called a distinct variety or species, seeing that it spawns in its habitat. is dark in colour and of smaller size. The bulltrout, according to some, is probably a full-sized river trout. It is classified as Salmo eriox, and corresponds to the griseus or gray trout of the Welsh rivers. It resembles the salmon, but is inferior to eat. It is often mistaken for salmon or grilse, and is sometimes sold as such, but may be easily detected from the body being more thickly spotted with brown, and the paler colour of its flesh when cut. I have not heard of them being taken in the Cairn, although they have been killed in the Annan. They are very common in the Tweed. It ascends rivers to spawn, and visits the sea to recuperate, like the salmon. It is possible they may have been taken in mistake for salmon in this district. The great lake trout, Salmo ferox, is not found to my knowledge in any of the lochs in the district.

4.—MINNOW (Leuciscus phoscimus)

Is fairly numerous, and may be seen in considerable shoals in the shallow back-water of the Cairn during the summer months.

5.—Loach (Namaechilus barbatula).

This somewhat sluggish fish is fairly plentiful in most of our streams, though nowhere can it be said to be numerous; although its brownish colour, which matches so perfectly the stones among

which it rests, and its habit of keeping for the most part to the bed of the river, may help to conceal its numbers. It is locally known as the "beardie," and I remember well while attending the parish school we used to consider it a great amusement to go "nicking beardies." It is of small size, rarely exceeding 5 or 6 inches in length, and is easily identified by the 6 barbels on the upper jaw, which, no doubt, give to it its local name of "beardie." It belongs to the carps. The Bullhead or Miller's Thumb (Catus gobio) is another common fresh water fish very like the above in habit and appearance, but I am not aware that it is found in this locality (the Cairn).

6.—THE STICKLEBACK (Gasterosteus aculeatus).

The 3-Spined Stickleback is the only variety found in the Cairn or neighbouring lochs, and one can call to mind the pleasure with which you admired its brilliant colouring when just brought to land in a small net, or even with the hands among the gravel, together with a lot of minnows. This colouring we now know is peculiar to the male at the spawning season. It does not appear to be numerous, and is not a desirable acquisition to the river from the fisher's point of view: this because of its pugnacious habits and voracious appetite for the fry of other fish.

7.—FLOUNDER, SCOTCH FLUKE, SWEDISH FLUNDRAS (*Pleuronectis flesus*).

Is not found in the Cairn of the higher district, but is so in some of its affluents into the Nith. It may here be remarked that there are extensive falls over high rocks above Cluden Mills which prevent fish of various kinds from ascending the Cairn.

Here in this connection may be mentioned the

8.—GRAYLING (Thymallus vulgaris),

which is very plentiful below the falls and down to the Nith. This fish is characterised by a larger dorsal fin, and the flavour of the flesh when newly cooked is compared to wild thyme, hence the generic name (title). It may grow to 4 or 5 lbs. weight, and is in best condition from October to November.

9.—EEL (Anguilla vulgaris).

The Common Eel is very plentiful in this district, and often proves a great nuisance to the juvenile bait fisher, from its sly mode of removing the bait without being hooked, and tangling the tackle when landed by the twisting and turning of its slimy body. They do not grow to any great size, although one was taken in the Dardarroch portion of the Cairn within recollection that weighed several pounds, and was fully two inches in diameter and over three feet long. Their mode of propagation was a much discussed subject among naturalists for many years, but it is now generally believed that they migrate to the sea for the purpose of spawning, the young alone returning, while the old ones die. The Eel is not much prized as food, at least in this district, though when denuded of its skin and well cooked it is not at all unpalatable. Skinned eel tails make good bait for catching pike. I have known of a tame eel fed by a person daily in a burn on curds. It came regularly for its meal.

Often when drains are cleaned out in marshy land eels are found in great abundance imbedded in the mud. They may be hybernating or at least fasting.

10.—LAMPREY (Petromyzon fluviatilis)

does not occur above the Falls of Cluden in this district. I have already brought a specimen before the Society and shortly described it—caught at Cluden Rocks, 18th October, 1901; 22 inches in length, and evidently a female.

11.—SALMON (Salmo salar).

This king of British river fishes is not so plentiful in the Cairn or its tributaries as it used to be, owing to the many obstacles which it has to encounter on its annual journey from the sea, for the purpose of spawning. Few, if any, find their way to the higher reaches of the river before the month of July, and these of moderate weight—the largest I ever heard of being taken weighed about 15 lbs. The general run is from 3 to 10 lbs., fish of the latter weight being scarce. It quickly loses its brilliant silver sheen in the clear waters of the Cairn, and although it gives good sport in the autumn, the flesh of fish caught then is generally soft and without flavour, as it is almost impossible to secure a fish that has been less than a week out of the sea, owing to some of the rocks it has to surmount being impassible, except during a heavy flood. They may consequently have been in the river for a month before reaching the higher portions of the

district. The Cairn has many splendid pools suitable for salmon, and might be one of the best rivers in Scotland had the fish free access from the sea.

12 .- SEA TROUT (Salmo trutta).

The Sea Trout, though found, is not at all plentiful in the Cairn, a few being caught by rod each season. I saw one taken that weighed 3 lbs., but the average for this district is from 1 to 2 lbs. It is considered a migratory variety of the common brock Trout, but there is such a diversity of opinion regarding the various salmondiæ that it is difficult to decide regarding them. There is no doubt, however, as to their resemblance to the common trout during the spawning season, though they are beautifully silvered and dotted with black spots when they first quit the sea on their annual migration. In the South of Scotland it is known in its grilse state by the name of Herling, and in other parts of the country as Phinnock or Pinnock or Whinnock, also Whitling.

GLEANINGS OF OLD DUMFRIES. By E. J. CHINNOCK, LL.D.

UPKEEP OF THE CASTLES.

1291, Nov. 25.—To Sir Alexander de Bayllol, chamberlain, or to those holding his place within the aforesaid kingdom, William de Boyville, knight warden of the Castle of Dounfries, Kyrkcutbriht, and Wyggetone, wishes health, Know that I have received from the baillies of the burgh of Dounfries £8 of the Sterlings for the support of my house held in the aforesaid castle, by the hand of Robert de Nam, burgess of the same burgh from his farm the term of St. Martin last past, and therefore I beg you to be so kind as to allocate to the same baillies the aforesaid money of £8 within the sum of money which you owe to me for the custody of the aforesaid castle assigned to me by the illustrious prince the lord Edward king of England & superior lord of the kingdom of Scotland. In evidence of which thing I have had this my letter patent given to the same baillies. Given at Dounfries, on the day of St. Katerine in the year of Grace 1291.

1292, March 24.—W. & R., by divine permission bishops of St. Andrews & Glasgow, John Cumyn, James the seneschal of Scotland & Brian son of Brian, guardians of the kingdom of Scot-

land, appointed by the most serene prince lord Edward, by the grace of God, the illustrious king of England, superior lord of Scotland to Alexander de Balliol, chamberlain of Scotland, or to those who hold their place or deligated, wish health. We command you in the name of the same king of England and order you to pay to Richard Siward, knight, 40 marks of the Sterlings for the three castles in Galloway & Nithsdale of which he has the custody, protection & entry from the Lord's day (23 March) next after the feast of St. Cuthbert the Confessor last passed, and do not omit this. And we will make the said 40 marks to be allocated to you more fully in your first accounts. In evidence of which thing we have had this letter patent sealed with the seal designed for the rule of the kingdom of Scotland. Given at Edinburgh 24th day of March in the year of Grace 1291.

THE SUPPORT OF THE HOLY FRIARS.

1297, Novr. 23.—Edward by the grace of God king of England, lord of Ireland and duke of Aquitaine, to his treasurer of Scotland health. We command you to examine the rolls of Alexander, formerly king of Scotland, & of John, lately king of Scotland, which you have in your keeping as it is said, of the accounts themselves rendered of the farms of the towns of Berewyke, Rokesburghe, Hadintone, Dumfres, & Forfare, from which farm of Berewyke the Minor Friars of Berewyke each week in the year for their support 3 shillings and a pise of wax yearly (120 pounds); and of which farm of Rokesburghe the Minor Friars of Roxburghe each week in the year 3 shillings & 18 stones of wax for the support of the light in their church, and one cask of wine per annum for celebrating divine service there; and from which farm of Hadintone the Minor Friars of Hadintone 3 shillings each week in the year for their support, and from which farm of Dumfres the Minor Friars of Dumfres each week in the year for their support 3 shillings & 17 stone of wax and one pipe of wine per annum; & of which farm of Forfar, the Minor Friars of Dundee £10 of the Sterlings & 20 lbs. of wax per annum by different charters formerly of the king of Scotland; what the same friars have thence they have been accustomed to receive as they assert, of that which happens to be found in the aforesaid rolls of the receiving & allocation of all the things which the aforesaid friars claim to have, inform without delay our beloved and faithful John earl of Warenne, guardian of the kingdom & land of Scotland, remitting to him this brief. Witness J. Earl of Warenne, guardian of the kingdom & land of Scotland at Jeddeworthe, 23rd day of November in the year of our reign 25th. (On the back)—For the Minor Friars—In the time of King Alexander, in the year of Grace 1281, Dunfres. Item, in support of the Minor Friars of that year 117 shillings. Item, to the same Minor Friars of Dunfres from the enquiry of the sheriff of Dunfres it is found as follows:—Item, 17 stones of wax, 5 shillings.

COMPLAINTS AGAINST THE SHERIFF.

April, 1304.—Complaints against Sir Matheu de Redman, sheriff of Dumfries. He imprisoned William Jargon, & notwithstanding a fine of 40 shillings given for his goodwill, impressed all the carts in the country & carried off William's corn to the value of 10 Marks. And though the king of his grace gave William and other goodmen of Dumfries seisin of the land Sir Matthew by duress extorted fines from them, some 1 mark & others more or less, forgetting possession, and he and his sergeants seek occasion to grieve & distress the poor people by tallages. When William, who was in the king's service guarding the town, saw Sir Matthew's outrages and was going to complain to the Guardian and Treasurer, Sir Matthew seized his horse & keeps it to his damage of 100 shillings & more. He also took all the beasts that came one market day to the number of 100 oxen & cows, and afterwards took fines before delivering them except 5 cows which he sent to Stirling; 2 of these being taken from a poor stranger Thomas of Hardingstone by name, who had bought them for 16 sh. & keeps them still, though his sergeant had 6 pence to deliver them up. John de Heytone prays remedy from the king & council against the said Sir Matheu, who has disseised him of the land he held of the Hospital of St. John both before & since the war; & has done the same lawlessly & by means of champerty with Malkun of Terregles, made at the king's last parliament of St. Andrews as contained in the following transcript of said champerty:-

Transcript.—Letters patent by Matheu de Redeman declaring that as Malcolm of Terregles is due to him 100 marks sterling by a recognisance in the king's chancery of St. Andrews payable by equal portions at Easter and Michaelmas next, he binds himself & his heirs, if Malcolm gives & enfeoffes him in one half of all his

lands, rents & debts which he acquires by plea or otherwise in the county of Dumfries (provided he always goes by the granter's advice) to free him from the recognisances. Appends his seal. Done at St Andrews 28 March in the king's 32nd year. He also took from John's plough worth 2 sh. against law ejected him from 12 tofts in Dumfries called "our Lady's tofts," which John held in mortgage & detains them to his damage of 100 sh. & more. Also from the tofts & burgages formerly of Gilberd le fitz Bel., of which John was possessed before & since the war, and has given seisin of them by means of champerty to John the Grocer, who was never in seisin before the war, nor his father nor mother brother or sister, nor uncle or aunt, and has done this in the petitioner's absence to his damage of £10 & more, as if the lands had been in the king's hands, wherease John was always of the king's party. (Endorsed)—The Guardian of these parts, the Chamberlain of Scotland, James de Dallileghe & Friar Ralph de Lindebee, warden of the Hospital of St. John or 3 or 2 of them, are appointed to hear & determine the case. The Chamberlain of Scotland to issue the appointment under the Great Seal of Scotland. (From Bain's Calendar of State Papers.)

1302-4.—Account of James de Dalileye, clerk for escheats south of the Frith in the 31st & 32nd years of Edward I. The County of Dumfries. He accounted for 9 sh. of the farms of the king's demesnes of Dumfries by the hands of John de Bix for Pentecost last and for £15 of the farm of Metoun of Dumfries by same hands, for Pentecost & Martinmas terms, and for 23 sh. received from the farms of Gurdona, Aleynton, and Alisland by same hands for same terms. Total £16 12s.

For 1304-5.—The same James de Dalileye states that the issues for Dumfries are:—From Sir Matthew de Redman, sheriff, from the issues of his baillary, 100 sh. From said sheriff from the issues of same:—£30.

1305-6.—Account of Gervase Avenel & William Matkynson, John Semerles & John the Lang, bailies of the burgh of Dumfres from the said 15th day of October until the feast of St. Michael next following. The same render account of the farm of the town of Dounfres from the term of St. Martin & Whitsuntide last past of £9 17s 8d, & of 2 shillings coming from the burgage of William Malkymson in the same burgh, being in the king's hand by the eviction of John, son of Laghlan & John Mounville for the time

aforesaid of 16 pence of yearly rent coming from a certain tenement of William Malkymson in the town afore said, remaining in the king's hand by eviction of William de Hay, and 8 pence rent coming from the tenement of Gilbert the Smyth in the same town remaining in the king's hand by the eviction of the same Gilbert, there is no reply, because the said two tenements lie waste at the time of this account. Of one tenement in the same burgh remains in the king's hand by the eviction of Earl Patrick, there is no reply because the said tenement was waste at the time of this account. The sum of the whole received £10 1s, which they paid upon their account and are quiet.

FORTIFICATION OF CAERLAVEROCK.

1305-6.—Account of Sir James de Dalilegh for Carlaverock Castle of the Fortification of the Castle of Carlaverock. To Sir James de Dalilegh, clerk, for wages of William de Percy, John de Geodeston, & six of their comrades, men at arms & 20 foot archers, one of whom is a serjeant, dwelling within the fortification of the Castle of Carlaverock by order & arrangement of Sir Henry de Percy, then the king's Lieutenant in Scotland, from 29 May to 17 July, both days being reckoned for 1 day, to each man at arms 12 pence a day & to the sergeant 4 pence & each foot archer 2 pence a day:—£28 15s.

FORTIFICATION OF TYBRES.

To the same for the wages of Robert Belle & his comrades men at arms & 6 foot archers, dwelling within the fortification of the castle of Tybres by the arrangement of the king from 22 February till 25th September, both days being reckoned, for 216 days, to each man at arms, serjeant, & foot soldier per day as before £223 4s.

FORTIFICATION OF DURRISDEER.

To the same for the wages of Robert Belle & his three comrades men at arms & 12 foot archers, dwelling within the fortification of the Castle of Dorresdere by the arrangement of the king himself from 1 May till 30 July, each day reckoned, for 91 days, each man at arms & foot soldier receives per day as before £27 6s.

(From the Register of the Great Seal of Scotland.) 20th James 1st, 1425, at Edinburgh, 24 January.—The king has

granted to Hugh Makgilhanche, burgess of Dumfress, to his heirs, and assigns the tenement in the burgh of Dumfresse which was formerly John Smerles's, & has come into the king's hand by reason of escheat, lying on the west side of the great street of the same between the land of the Provost of Linclouden on the one side and the land of Thomas Gibson on the other side. The farm of and the land of Thomas Gibson on the other side. The farm of the burgh & other services owed & accustomed to be paid to the king; and to the heirs & assigns formerly of D. Duncan de Kylpatrick of Thorthorwald, knight, 5 shillings & 4 pence yearly.

1st December, 1906.

Chairman-The PRESIDENT.

New Member.—Mr A. Weatherstone, Bank of Scotland, Dumfries.

OLD PUBLIC LIBRARIES IN DUMFRIES. By G. W. SHIRLEY.

1717.—That is the first date I can find on which mention of a library in Dumfries is made. It occurs in Dr Burnside's MSS. "History of Dumfries' among his extracts from the Presbytery records. The portion relating to the Presbytery library is as follows:—"4th September, 1717—The first regulations anent the library. 11th March, 1730—The library purged. 2nd February, 1731—Ten pounds received for the books sold. 4th March, 1729—A house for the library to be built. The town to pay £60 and the Presbytery £30 upon their obtaining a legal transmission of the piece of ground, and of such a share of the house as is condescended upon. For this sum the ministers gave their bill, 1st April, 1730."

I have here an old MSS. catalogue, unfortunately incomplete and without date, of the books belonging to the Presbytery of Dumfries. It is possibly the original MS. of the catalogue printed in 1784 by Robert Jackson, Dumfries, which is preserved among the books of the Antiquarian Society. This catalogue runs to 50 pages. It is well printed, and shows the press and shelf of each book. The majority of the books are theological and ecclesiasti-

cal, but there are many of general interest, including classics in the original, and French and Spanish works. There are many collections of Acts of Parliament, and many English classics of great value, including Sir Thomas Browne, Sir Walter Raleigh, Bacon, Butler, Baxter, Samuel Rutherford, etc. That many odd books had crept into the collection is apparent from the following entries:—"Balmford's Application of Habbakuk's Prayer to the Present Times,'' "Beddle Dispossessed, or his Catechism Reformed,'' "Byefield on Mineral Waters,'' "Bradshaw on Justification,'' "Beer: Warm Preferable to Cold,'' etc. There is also quite a collection of books on fruit culture. Many of the entries are of great interest to the bibliographer, including as they do a great many first and curious editions.

There is an abiding tradition to the effect that the library contained a prayer book which was used by Charles the First at his execution. Two Common Prayer Books, dated respectively 1637 and 1549, appear among the entries, though the former, being a folio, is not likely to have been the book in question.

I have here also the record-book of issues—unfortunately also incomplete. The first entry is "July 12, 1732, given out to Mr Robinson, The Feeholder (a book edited by Addison) and Watts on Practical Religion," the entry being signed by Alex. Robisone. Names occurring frequently in the book are Ed. Buncle, Geo. Duncan, W. M'Millan, Rob. Patoun, Will. Irvine, Luke Gibson, Rob. Wight.

This issue-book also reveals the fact that in 1736 an arrangement was come to by which citizens might use the library on the payment of a fee. The entry is as follows:—" March 8th, 1736.—The names of those who entered cives and agreed to observe the rules relating to the library on their part, which by their respective subscriptions they oblige themselves to do—John Gilchrist, Jo. Hynes, Thos. Kirkpatrick, Jas. Dickson, Jas. Ewart, Alex. Copland." The next entries are for the second year, and the subscription is five shillings. These entries finish with the name of Capt. Riddell of Caryeld (Carzield?), Feb. 22, 1771.

Nothing more have I been able to find about this Presbytery library until 1885. The Presbytery-house at this time had got into a semi-ruinous condition, and the books were in a very neglected state. A committee was appointed, consisting of Dr Wilson, Mr Underwood, and the Rev. Mr Weir, which attempted

to make up a revised catalogue, but the work involved a good deal of labour, and was never completed. Ultimately it was decided to send the books to the General Assembly's library in Edinburgh. This was done in 1885. They are now well preserved, and it is probable that a catalogue of them will be forthcoming shortly.

1750.—About this date must have been founded "The Society Library," for it is advertised in Oliver and Boyd for 1845, as having been "Established a century ago." It had in 1845 thirty proprietors, and the librarian was John Sinclair.

The only other record of this library that I have found is the "Catalogue of The Society Library, Dumfries, taken 24th June, 1851," at which time it contained some 2300 volumes. From the rules it appears that the subscription was £1, and that members of the Dumfries and Galloway Club were eligible to the use of the library on the same terms as the original proprietors. The librarian's salary was £4 annually.

What became of the library I have failed entirely to discover. The list of members in 1851 was as follows:—Robert Adamson, John Babington, W. T. Carruthers, Col. Clark, rep. of the late Thos. Clark, John Clark, James Connell, John H. Craik, rep. of the late Thomas Crichton, Major Davis, John Laurie, Admiral Lennox, John Lyon, J. M. Leny, A. H. Maxgwell, Wellwood Maxwell, Francis Maxwell, William Maxwell, Sir J. S. Menteath, Bart., J. Macmorrin, W. M'Lellan, John Staig, R. Threshie.

It evidently existed as late as 1859, for among the final entries is Darwin's Origin of Species. The collection was a very fine general one, rich in travel, biography, and history. As it appears to have been the finest collection of then current literature gathered in Dumfries, I should like very much to learn what became of it.

1792.—The Dumfries Public Library was established in this year "as a general benefit to the town and neighbourhood." Burns' connection with it has kept it in greater prominence than any of the other libraries. An advertisement in the "Courier" dated Nov. 14, 1838, informs us that the committee propose reducing the entrance fee from ten to three guineas to induce more members to join. At that time they state that they have a library of 3000 volumes of standard excellence. There were seventy-two subscribers in 1841. From 1841 to 1851 at any rate, the

subscription was 10s, and the librarian was James M'Robert. At the latter date (1851) they had 1400 volumes in their possession, a considerable reduction on the former estimate, you will notice.

1811.—In the "Courier" for September 24, 1811, appeared an advertisement inviting proposals of members for the Subscription Reading Room.

1819.—This is the earliest date I can find upon a book belonging to the Dumfries Law Library. It occurs in an inscription on a copy of Stair's "Institutes, 1681," and states that the book was presented by Christopher Smyth in 1819. The collection of the "Dictionary of Decisions" dates from 1811, so it is possible the library may have existed earlier than 1819. Many of the books are dated 1852. In 1865 the Faculty of Procurators of Dumfriesshire was constituted and the Library properly taken care of. It is now a collection of 500 or 600 volumes, almost entirely law books. About this date also must have existed the Dumfries Medical Library, of which a few books are still in private hands in the town. The date of its origin and dispersal I have failed to find.

1825.—The Mechanics' Institute—A preliminary meeting to form this was held in the Trades' Hall on Tuesday evening, March 15, 1825, with Provost Thomson in the chair. On April 1 a meeting of subscribers was held, and office-bearers were appointed as follow:—President, Provost Thomson; vice-president, Mr Thomson, architect; treasurer, Mr Barker, Bank of Scotland; secretary, Mr Carson, writer; with fourteen ordinary members of committee and four honorary members.

The project was taken up with great avidity. On May 3rd John Staig (collector of customs) had presented them with £500, and William Taylor with £330. By May 23rd there was a membership of 200. The books that had been presented were valued at over £70, and the library was opened in a room in the Academy set apart by the magistrates for that purpose. The original subscription was 8s, and 4s for children of members and apprentices. Lectures were regularly given and classes held on mechanics and science in the Assembly Rooms.

Its fortunes were very varied. It appears to have possessed some 600 volumes in 1838, and an exhibition was held in the old Assembly Rooms in 1841 "to reduce," says M'Dowall, "the debt on the erection of the hall," though it does not appear what

hall. It twice or thrice almost ceased to exist. I find that in 1855 Messrs Blackwood & Sons, Edinburgh, made a goodly present of books to the Institute. Among these are two notable ones—"The Strayed Reveller, and other Poems," by A., 1849. This is marked "From the Author" on the fly-leaf, and is the first edition of Matthew Arnold's poem. It is valued at about £2 now. The other is "The Seraphim, and other Poems," by E. B. Barrett, 1838. This would have been valuable had it not been badly mutilated.

In 1861 the Mechanics' Hall was erected, and in June, 1865, an exhibition was held again to reduce debt. We have here copies of the catalogues of both exhibitions. At what date the Institute came into the possession of the books of the Dumfries Public Library I have not been able to determine. It must have been before 1877, for the catalogue (pp. 64) of that date is divided throughout into two sections "D." and "M.," and many of the books at present in our reference department correspond with the "D." section. The "D." section at that date is clearly the better one. Both sections contain fiction. I have also a catalogue (pp. 61) dated 1895, which shows considerable change in the Library-a decided decline on that of 1877. In 1897 a large addition of nearly 1400 volumes was made by the legacy of the Rev. W. N. Dodds. It was a very mixed addition indeed, but contained many good books. The three collections together amounted to 6995 volumes when handed over in 1903 to the Ewart Public Library. 1200 were available for the lending department. Practically all the fiction had to be destroyed.

1863.—The first presentations made to your own library were in 1863. One of them, "The King's Quair, a Poem by James the First, ed. by E. Thomson, Air, 1815," I have here. In 1881 the collection was housed, by agreement, in the Observatory, and consisted of 37 volumes, besides a great many pamphlets and transactions. Subsequently it was removed to the restored Presbytery-house, and finally to this building. The Robert Dinwiddie Library was presented in 1891, and consisted of some 240 volumes. A complete catalogue of the collection was published in 1898.

1840 (?).—There must now be mentioned the congregational libraries in the town, which latterly became important. The first of these was Loreburn Street U.P. Church. It was founded

during the ministry of the Rev. James Clyde—that is, before 1851.—It has at present over 900 volumes.

1883.—Next in point of date is Irving Street Congregational Church. It was started in 1883 with half-a-dozen volumes, the Rev. W. H. Pulsford being the moving spirit. It now has 300 very well selected volumes.

1888.—The congregational library of Greyfriars' was established in 1888. There have been at least two catalogues compiled, 1891 and 1902, and now the Sunday School and congregational libraries together number 3000 volumes.

1887.—Free St. George's Library was established March 17, 1887, £50 having been received from a lady member of the congregation. Two catalogues have been published, 1887 and 1896. Their stock now amounts to over 1000 volumes.

In the Statistical Account of Dumfries in 184I we find the following statement:—"The Presbytery of this district has a valuable library, besides which there are three others belonging to societies. Of what are called circulating libraries there are four kept by booksellers on speculation, and a select one, open to the public. There also exists a Mechanics' Institute, in the list of whose members appear many respectable individuals belonging to the town. There are already four public reading-rooms."

Notes on Excavations at Moffat Sewage Works. By John T. Johnstone, Moffat.

The valley of the Annan at Moffat as we now see it may be said to be a relic of the great Ice Age. An excavation made nearly anywhere down into the till reveals the fact that nearly all the stones are striated or otherwise marked by the grinding and crushing forces of the moving masses of ice in its course down the valley. The flat holms and meadows bordering on the Annan, and known as the Hammerlands and Kerr, have been filled up to a considerable depth from their former level by this action, and partly to the silting up of the ever-shifting beds of the Annan and Birnock waters, which in their course through the ages have meandered at their will over the full width of the valley at some time or other. At the excavation made for the new sewage works constructed in 1901-2 this old land surface

was laid bare at a depth of seven feet, where it formed a layer of peat moss. The thickness or depth of this peat was just similar to that of the combined turf and soil on any ordinary ground. From portions of this peat, on breaking it up into small pieces and examining it carefully, I gathered a few hazel nuts, pieces of bark, and small pieces of wood. The roots and branches of a large tree were also taken from the excavation at the same depth. A few years ago I spent part of a day examining the peat mosses around Loch Skene. I did not do any digging, but examined where the hags showed a good section. Pieces of wood of varying thicknesses up to one inch and a half in diameter were plentiful, and as far as I could make them out myself, I had specimens of hazel, alder, birch, and oak. diameter of the one large piece I noticed would be six inches. The specimens brought away were subsequently forwarded to Professor Scott-Elliot at Glasgow. The peat formation at Loch Skene covers a considerable area of ground, as it extends between Whitecoomb and Winterhope Burn head the one way, and along the Tail Burn the other. Loch Skene itself is the result of glacier action, as its waters have been ponded back and formed into a loch by the accumulation of glacial debris and moraine matter which have been deposited in the valley there, the moraines there being one of its interesting features. The Midlaw Burn, which is only separated from Loch Skene by the Midcraig Hill, has cut its way through this moraine matter, which at one time had ponded it back so that the loch formed by it is drained away, and its bed is now a flat meadow, and through time Loch Skene will succeed in cutting for itself a course deep enough to drain itself away similar to the Midlaw Burn. Loch Skene is fully 1700 feet above sea level.

Following upon the reading of the paper there were exhibited specimens of hazel nuts, bark, and other vegetable matter taken from the peat in the trenches, and Permian breccia and striated stones from the glacier drift of the Moffat valley.

List of Wild and Naturalised Flowers Found on St. Mary's Isle, Kirkcuderight. By Mrs Jeffrey, St Mary's Isle Gardens.

Ranunculus acris, Ranunculus repens, Ranunculus bulbosus, Ranunculus Ficaria, Thalictrum flavum, Thalictrum minus, Caltha palustris, Anemone nemorosa, Chelidonium majus, Meconopsis cambrica, Cardamine pratensis, Cardamine bulbifera, Cochlearia officinalis, Capsella Bursa-pastoris, Alliaria officinalis, Brassica Sinapis, Barbarea vulgaris, Helianthemum vulgare, Viola odorata, Viola canina, Polygala vulgaris, Polygala amara, Lychnis vespertina, Lychnis diurna, Lychnis Flos-cuculi, Silene Cucubalus, Stellaria uliginosa, Stellaria graminea, Stellaria Holostea, Cerastium vulgatum, Cerastium alpinum, Sagina procumbens, Sagina maritima, Sagina apetala, Hypericum perforatum, Arenaria peploides, Hypericum linariifolium, Linum catharticum, Geranium robertianum, Geranium sylvaticum, Geranium columbinum, Geranium pyrenaicum, Geranium pratense, Geranium sanguineum, Geranium rotundifolium. Geranium dissectum, Geranium phaeum, Oxalis Acetosella, Impatiens Noli-me-tangere, Erodium maritimum, Erodium cicutarium, Vicia lathyroides, Vicia sativa, Vicia tetrasperma, Vicia sepium, Vicia sylvatica, Anthyllis vulneraria, Astragalus glycyphyllos, Lathyrus pratensis, Lathyrus sylvestris, Trifolium pratense, Trifolium minus, Trifolium repens, Lotus corniculatus, Ononis arvensis, Cytisus scoparius, Ulex europaeus, Rosa pimpinellifolia, Fragaria vesca, Fragaria elatior, Geum rivale, Geum urbanum, Geum intermedium, Potentilla tormentilla, Potentilla fragariastrum, Potentilla anserina, Agrimonia Eupatoria, Alchemilla vulgaris, Rubus fruticosus, Prunus spinosa, Epilobium roseum, Epilobium augustifolium, Epilobium hirsutum, Circaea lutetiana, Sedum acre, Sedum Rhodiola, Sedum anglicum, Saxifraga umbrosa, Saxifraga granulata, Chrysosplenium oppositifolium, Sanicula europaea, Hippuris vulgaris, Oenanthe fistulosa, Oenanthe pimpinelloides, Conopodium denudatum, Heracleum sphondylium, Ligusticum scoticum, Daucus carota, Pastinaca sativa, Aegopodium podograria, Adoxa moschatellina, Lonicera periclymenum, Galium Aparine, Galium saxatile, Galium Mollugo, Galium palustre, Valeriana officinalis, Valeriana pyrenaica. Valeriana dioica, Arctium lappa, Bellis perennis, Anthemis nobilis, Taraxacum dens-leonis, Tussilago farfara, Tussilago

petasites, Sonchus oleraceus, Sonchus arvensis, Doronicum pardalianches, Doronicum plantagineum, Hieracium pilosella, Hieracium sabaudum, Crepis hieracioides, Achillea millefolium, Achillea ptarmica, Carduus heterophyllus, Solidago virga-aurea, Senecio aquaticus, Senecio jacobœa, Centaurea nigra, Aster tripolium, Artemisia maritima, Artemisia absinthium, Scabiosa succisa, Filago germanica, Gnaphalium sylvaticum, Campanula trachelium, Campanula latifolia, Campanula rotundifolia, Vaccinium Myrtillus, Primula vulgaris, Primula veris, Lysimachia vulgaris, Lysimachia nemorum, Lysimachia nummularia, Anagallis arvensis, Glaux maritima, Samolus valerandi, Centunculus minimus, Vinca minor, Erythraea, centaurium, Convolvulus sepium, Myosotis palustris, Myosotis arvensis, Lithospermum officinale, Datura Stramonium, Solanum dulcamara, Atropa belladonna, Veronica scutellata, Veronica serphyllifolia, Veronica Hederaefolia, Veronica arvensis, Veronica chamaedrys, Veronica Beccabunga, Veronica agrestis, Veronica Buxbaumii, Veronica montana, Bartsia odontites, Digitalis purpurea, Linaria vulgaris, Verbascum thapsus, Rhinanthus cristagalli, Nepeta glechoma, Lamium album, Lamium purpureum, Lamium amplexicaule, Ajuga reptans, Teucrium chamœdrys, Teucrium scorodonia, Calamintha clinopodium, Mentha arvensis, Mentha aquatica, Thymus serpyllum, Galeopsis tetrahit, Prunella vulgaris, Armeria vulgaris, Statice limonium, Plantago coronopus, Plantago major, Plantago media, Plantago lanceolata, Chenopodium urbicum, Atriplex patula, Salicornia herbacea, Suaeda maritima, Suaeda fruticosa, Polygonum bistorta, Polygonum aviculare, Polygonum persicaria, Polygonum lapathifolium, Rumex acetosa, Rumex acetosella, Hippophae rhamnoides, Thesium linophyllum, Euphorbia lathyris, Euphorbia peplis, Mercurialis perennis, Arum maculatum, Triglochin maritimum, Triglochin palustre, Orchis maculata, Orchis mascula, Orchis pyramidalis, Orchis purpurea, Listera ovata, Listera cordata, Epipactis latifolia, Iris pseudacorus, Galanthus nivalis, Crocus vernus, Narcissus pseudonarcissus, Scilla festalis, Ornithogalum umbellatum, Allium ursinum, Allium ampeloprasum, Polygonatum multiflorum, Ruscus aculeatus.

15th December, 1905.

Chairman—The President.

New Members.—Rev. J. M. Campbell, St. Michael's Manse; Rev. Wm. Edie, Greyfriars' Manse; Rev. G. T. Ferguson, St. Mary's Place; Mr J. M. Bowie, architect; Mr John Cowan, Glenview, Maxwelltown; Mr John Charlton, Huntingdon Lodge, Dumfries.

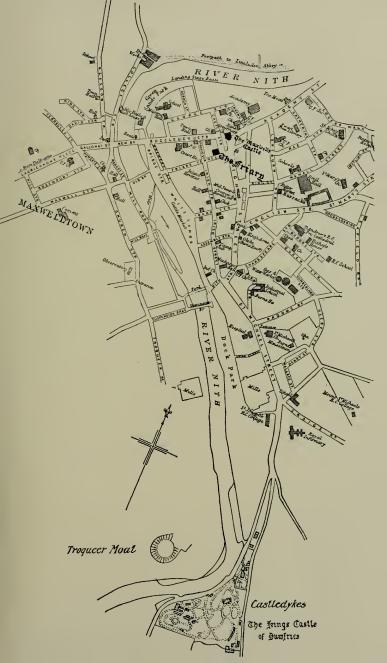
The Castle of Dumfries. By James Barbour, F.S.A.Scot. Preliminary.

The pages of general history reveal little of the character and circumstances of the Castle of Dumfries; nevertheless, together with the Castle of Lochmaben, it takes its place as a fortress of outstanding importance in relation to the control of the south-west parts of Scotland during the Edwardian wars. Our castle was held for lengthened periods by the English, and it is associated with the advent of Bruce, being the first stronghold captured by him from the English, and in which he and his followers found refuge after the slaughter of Comyn in the neighbouring church of the Greyfriars' monastery. The writer has gathered information relative to the subject, from such sources as he could command, and has ventured to put together the following pages, allowing the original papers to speak largely for themselves, in the hope of reviving interest in a local monument environed with the flavour of former times.

The authorities chiefly relied on are prints of original documents preserved in the London archives—"The Wardrobe Account of the 28th Year of Edward I.," printed by the Society of Antiquaries of London, in 1787; "Documents Illustrative of the History of Scotland," by the Rev. Joseph Stevenson; "Calendar of Documents Relating to Scotland," by Dr Joseph Bain; etc. Dr E. J. Chinnock supplied extracts from several original sources, and by his favour translations where required have been made.

EARLY NOTICES OF THE CASTLE AND ITS SITE.

Dumfriesshire is studded with the remains of ancient castles. Bruce possessed Lochmaben, Comyn owned Dalswinton, Caerlaverock belonged to the Maxwells, and Baliol had Buittle, in





Galloway. The Castle of Dumfries differed from these inasmuch as no family name is associated with it; it was the King's Castle.

As the situation has lately come to be in doubt, it is desirable to differentiate the spot where the castle stood; events and locality frequently lend colour one to the other. The earliest known references to the castle are contained in charters of the time of William the Lion (1165-1214). One of these gives it the appellation of "The Old Castle of Dumfries," and the terms of another are important as showing the direction in which it lay. The document is a lease or feu-charter, by the Abbot and Convent of Kelso in favour of Henry Wytwell, a burgess of Dumfries. The following is the text as translated, taken from a "Notice of some Old Documents Relating to Dumfries," by the Rev. John Cairns, M.A.*:—

"On the first Tuesday after the feast of the Beheading of John the Baptist, this agreement was made between the religious men, the Lord Abbot of Kelso and the Convent of the same place, on the one side, and Henry Wytwele, burgess of Dumfries, on the other, viz., that the said Lord Abbot and the Convent of the same place conceded and demised to the said Henry and his assignes the whole of those lands which Malcolm the son of Utred of Terregles held from the decease of the formerly named inheritance of William, son of Bele; with tofts and crofts in the territory and town of Dumfries, . . . as they lie, viz., Between the land of St. John, which lies beside the cemetery of the Mother Church of Dumfries, on the north side, and so by the road which leads from the town of Dumfries towards the castle as far as the road which leads towards the chapel of St. Lawrence of Keldwood on the south side, and so towards the east beside the Crown lands as far as the Dumfries Burn which falls into the mill pond of Dumfries."

The chapel of St. Lawrence no longer exists, but Kellwood remains, and the road described as leading towards the chapel is that now known as Craigs Road (it crosses the Dumfries burn, or mill-burn, as it is now called), and St. Michael Street, which leads from the town southwards past the cemetery and Craigs Road, corresponds with the road of the charter, which leads from

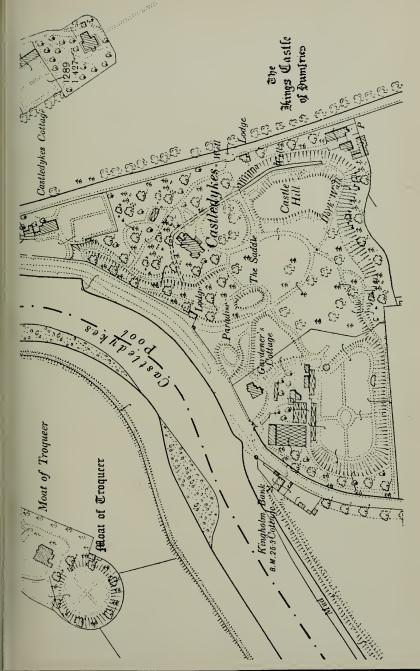
^{*} Transactions of the Dumfriesshire and Galloway Antiquarian Society, 1892-93.

the town of Dumfries towards the castle. Following St. Michael Street southwards past Craigs Road we shortly arrive at the place bearing the suggestive name of "Castledykes," which apparently represents the ancient Castle of Dumfries of the Kelso Charters; and confirmatory evidence is forthcoming.

Sir Eustace de Maxwell of Carlaverock held the office of Sheriff of Dumfries for Edward III. of England in 1335, and an item of his account of the revenues reads: - "Of the mote of the castle and certain royal lands called Kingsholm at Dumfries, which were won't to be worth 60 shillings, there is no reply " (being waste). The Castle and Kingholm are here conjoined, as Castledykes and Kingholm lie adjacent to-day. As usual a chapel was connected with the castle. The Chapel of the Castle of Dumfries was in part a subject in dispute between Ralph, dean of Dumfries, and the Convent of Kelso in the beginning of the thirteenth century, and mention is made of it in several documents. George Neilson, in a communication made to the Dumfries and Galloway Antiquarian Society in February, 1905, exhibited a document concerning the "crukitakyr" on the road from the Chapel of St. Mary the Virgin at Castledykes, dated 26th March, 1532. Its interest lay, Dr Neilson said, in the mention of the Castle Chapel of St. Mary in Castledykes.

But the most conclusive document connecting Castledykes with the ancient castle of Dumfries is a manuscript report made by a military officer of the English Government about the period 1563 to 1566, regarding the defensive condition of Dumfries. The distinctive name, "The Old Castle of Dumfries," is repeated, showing its identity with the castle of the early charters. Aulde Castell of Dumfreis," the report proceeds, "fyve myles and a half within the mowth of the Nytht, standing upon the side of the same, very good for a fort. The platt and ground thereof in manner lyke to Roxburght Castell; it may late the town and the brige of Dumfreis and receive boates of ten tounes as said ys furtht of Englonde. Distant from Holm lordship over the revare of Sulvaye xvi. myles. . . . This towne of Dumfreis standeth vi. myles within the mowth of the Nytht the head towne of the Schyre. The lord Maxwell hatht a fair house battled within the towne, but not tentable nor strong agains any battery or gownes."*

* Armstrong's "Leddesdale."





The report proves that the Castle stood on the side of the river five and a half miles within the mouth of the Nith, and the town was and a half miles within the month of the Nith, and the town was six miles within the mouth of the Nith, that is to say, half a mile further up the river than the castle. Castledykes similarly stands on the side of the river, and is just half a mile, as measured on the Ordnance Map, below the site of the South Port of the town at the corner of St. Michael's Cemetery; and so its claim to represent the ancient castle of Dumfries is fully confirmed.

The report shows also that another castle situated within the town, which has generally been mistaken for the Castle of Dumfries, was a house of the Maxwells. The house occupied the site covered by the present Greyfriars' Church at the head of High Street. Its history will be noticed later.

Finally intrinsic evidence presents Castledykes as a natural strength adapted to the purpose of a fortress; and well preserved vestiges of ancient fortifications are yet exhibited within the grounds.

CASTLEDYKES.

As it stands to-day Castledvkes, or The Castledvkes, as it is written in Dr Burnside's MS. History of Dumfries, notwithstanding many changes consequent on the building of a small mansion and adapting the grounds for ornamental and garden purposes, retains something of the character of the ancient Norman Castle of mote and bailey type. The mote, an elevated oblong mound, lies on the east part of the ground furthest from the river, and the bailey or lower court extends westwards to the Kingholm Road. and doubtless it covered what is now the roadway, terminating at the river with a high and precipitous rock-faced bank. The extent of artificial formation cannot now be determined. but at least the vestiges of the great ditch, or dyke, which surrounded the mote, and from which the name of the place is derived, constitute a typical specimen of ancient fortification. The ditch remains open at the south end of the mote, and along one-half the east side, up to the present entrance gate. Northwards the east ditch and the north ditch are marked by a large built and covered drain, sufficiently wide and high to allow a man to walk through it, upright. The ditch can thus be followed on three sides of the mote, partly open and partly closed. On the fourth side, except the north corner, no trace remains.

The open part of the east ditch is excellently preserved and very formidable in apprearance. It measures 60 feet in width at the top and 20 feet and upwards in depth, and its preservation is probably due to the requirements of a small stream of water flowing through it.

FIRST ENGLISH OCCUPATION.

Prior to the death of Alexander III., Scotland was prosperous and peaceful, and during this period history does not record any particular acts of warfare, either defensive or as issuing from the castle gate. Of its civil use there is a glimpse. About the year 1259 inquisition was held in the Castle, Richard, son of Robert, son of Elsa, being arraigned for the murder of Adam, the miller. The two had met in St. Michael's Cemetery on a Sunday, when Adam defamed Richard, calling him "galuvet" (considered equivalent to thief). On the following Thursday, in a scuffle on the street, Adam was mortally wounded, Richard alleged by accident. He said at the time, "I have not killed thee, thou thyself didst it." The barons jurors concur "in omnibus" with the burgesses jurors. They all say that Richard was faithful, but Adam was a thief and a defamer.

Not long after the King's death war broke out as appears by the following extract from John Baliol's Pleas for the Crown:-"The seventh reason is that when the Bishops and great men of Scotland had sworn to defend and preserve the kingdom of Scotland for their Lady, the daughter of the King of Norway, and that they would do fealty to her as their liege Lady, and keep the peace of her land. But the aforesaid Sir Robert de Brus and the Earl of of Karrick, his son, dared to take by force of arms with banners displayed the aforesaid Lady of Scotlands castle of Dumfries, against her peace. And thence the aforesaid Sir Robert advanced to the castle of Botil, and there he caused one Patrick M'Cuffok within the bailey of the same castle to proclaim that all the — should immediately depart from the land. (The document is here illegible.) The Earl of Karrick with the assent and power of his father took the aforesaid Lady's Castle of Wigton, in Galloway, and killed many of her men there."

In the year 1288 the watchman and gatekeeper were paid, as a gratuity, £1 12s, on account of extra watching by reason of the war raised after the death of the King. The castle had been

THE DITCH, LOOKING FAST. WEST.



repaired, or enlarged, a few years earlier. In 1265 one Master Peter, a mason, was paid £20 forward at the Castle of Dumfries. It may be noted also that the Friars' Minors are mentioned in the accounts of this same year.

But Alexander III. is dead, and Margaret, the child queen, the golden age of peace is ended, and our castle stands revealed in military guise in the custody, for the first time, of English wardens.

> "Quhen Alysander oure King was dede That Scotland led in love and le, Away was sons of Ale and Brede, Of wyne and wax, of gamyn and glee, Oure gold was changed into lede. Chryst, born into Virgynte, Succor Scotland and remede, That stad is in perplexeyte."

Edward I., desirous of effecting a union of England and Scotland, betrothed his son Prince Edward, with the consent of the Scottish Guardians, to the Princess Margaret, heir to the Crown of Scotland, but the death of the young queen frustrated this peace-promoting arrangement. The King, resolutely adhering to his purpose, preferred a claim to the Crown of Scotland, when he should chose to assume it, and meantime caused himself to be recognised Lord Paramount of the Kingdom. Assuming to adjudicate between the several claimants of the vacant throne, the English King demanded the surrender to him of all the Castles of Scotland, pending his decision; and on the 11th June, 1291, transfer was made accordingly. Next year, on the 19th November, Baliol having been adjudged the rightful heir, the Governors of Castles, in obedience to orders, surrendered to the new King.

During this interval of nearly eighteen months, the Castle of Dumfries, grouped with those of Kirkcudbright and Wigtown, was in the custody of English Wardens.

Relative to this period of the affairs of the Castle, we have certain writs and receipts dealing with the wages of the wardens. The usual wage of the warden was a mark a day; frequently payment was in arrear, and consequently the receipts do not follow in the order of the periods of office of the several custodians.

Sir William de Boyville, first in the list of wardens, was an Englishman. His name occurs in an Inquisition held at Car-

lisle in September, 1280, regarding the law of "Handwarcelle" on the Border. About two years later the Knights and good men of the County of Cumberland, under the King's mandate, elected him sheriff, and Constable of Carlisle Castle, but the King having adopted other views immediately revoked the election, and committed the Sheriffdom and the custody of the Castle to Robert de Brus, Earl of Carrick. Sir William was, on 12th July, 1291, jointly with William de St. Clair, commissioned to take the fealty to Edward of the Bishop of Whithorn and of all Galloway, and thereafter he had the custody of the Dumfries group of Castles.

Sir William acknowledged on 15th August, 1291, having received from the Chamberlain of Scotland 40 marks, wages of 40 days' custody of the Castles, £20 on 5th November, in part payment, and £60 in part payment on the 29th of the same month. On the same 29th day of November he also acknowledged having received the sum of £8 from the Burgh of Dumfries by the hands of Robert de Nam, a burgess of the Burgh.

The following certificate by Brian Fitz Allan, one of the Governors of Scotland, in favour of Henry de Boyville, makes it appear that Sir William died at his post, and was succeeded by Henry de Boyville, presumably a relative.

"March 2, 1292.—To all who will see or hear this letter, Brian Fitz Alan, one of the Guardians of the Kingdom of Scotland, wishes health in the Lord. Know that by the tenor of the present letter we give evidence that the Chamberlain of Scotland and Robert de Forde associated with the same by the Lord King of England, had in command from all the Guardians of the Kingdom of Scotland to pay Henry de Boyville and his comrades as much as is owed to them for the custody of the Castles of Dumfries, Kirkcudbright, and Wigton, of the rest of their wages after the death of Sir William de Boyville. In evidence of which thing we have placed our seals to the present letter. Given at Edinburgh on the Lord's day next after the feast of St. Matthew the apostle, in the year of Grace 1291."

Henry de Boyville's first receipt for £28 sterling in part payment of his own wages and those of his comrades for the custody of the Castles is dated 1st March, 1292, and the second and last bears date the 12th of the same month.

"To all the faithful in Christ who will see or hear this letter,

Henry de Boyville wishes health in the Lord. Know that I at Dumfries on St. Gregory's day in the year of Grace 1291 received from Sir William Comyn of Kirkintilloch and Maurice de Stubhill 17 marks by the hand of Walter de Crumnistone, their baileff, for the farm of Cyplaunde, in part payment of my wages and those of my comrades for the custody of the castles of Dumfries, Wigton, and Kirkcudbright, by order of Sir Alexander de Balliol, Chamberlain of the Kingdom of Scotland, and Master Robert Heron, rector of the church of Forde, associated with the said Lord Alexander by the most illustrous Prince, lord Edward King of England, and superior lord of the kingdom of Scotland, and by their letters patent directed to the said Sir William Comyn and Maurice Stubbill, which letters patent, together with this letter patent, I have handed to the aforesaid Walter. And because my seal is unknown in these parts, I have procured that the seal of William de Seyncler, under Sheriff of Dumfries, at my request and that of my comrades, be affixed together with my own seal. These being witnesses-Thomas, called the clerk of Dalswinton, and John of the Stone House."

Endorsed, against Henry de Boyville, £11 6s 8d.

January 20th, 1292.—The King and superior lord of Scotland greets the Guardians of the same. We notify you by the present that the commission which you lately made to our dear and faithful servant, Walter de Curry, of the Castle of Dumfries, Wigton, and Kirkcudbright, until our arrival in those parts is ratified."

By the writ following of 28th February, the guardians of Scotland directed the Chamberlain to pay the expenses of those who had hitherto had the custody of the Castles, and to make payment to Sir Walter of 40 marks from the day of his entry to office.

"W and R by Divine permission bishops of St. Andrews and Glasgow, John Cumyn, James Seneschal, and Brian Fitz Alan, guardians of the Kingdom of Scotland, appointed by the most serene prince, lord Edward by God's Grace the illustrious King of England, to Sir Alexander de Balliol, chamberlain of the same Kingdom of Scotland wish health. Because according to the command of our lord the king above said, we have already caused the custody of the Castles of Wigton, Kirkcudbright, and Dumfries to be delivered to Sir Walter de Curry, we command

and order you in the name of our said lord and king by the present letter to pay their expenses who have hitherto had the custody of the said castles from the day of their entrance until the day when the said Sir Walter received the custody above said, according to the arranagement of our lord the King before named. But from the day when the said Sir Walter undertook the aforesaid custody, pay to the same 40 marks sterling for the payment of his expenses, according to the arrangement of the same our Lord the King. Receiving from the same their letters of receipt for the money paid to them, and we shall make it to be fully allocated to you in your accounts. In evidence of which thing (because the common seal was shut at the time of making the present letter) we have each of us placed to the present our own seals, one after the other. Given at Stirling on Thursday next after the feast of St. Mathias the apostle, in the year of our Lord 1291,"

Sir Walter's tenure of office was short. On 28th February, 1292, Robert Heron acknowledged having received from the chamberlain 24 shillings and 5 pence in repayment of an advance he had made to Sir Walter for the custody of the Castles. 28th of the same month Sir Walter acknowledged the receipt of £10 sterling in part payment of his wages granted to him for the custody of the Castles of Dumfries, Wigton, and Kirkcudbright, beginning to reckon of the first quarter on the 4th day of March, 1292. On 14th May, 1292, Robert Heron, rector of the church of Forde, received from Sir Alexander de Balliol, Chamberlain of Scotland, 24 shillings and 7 pence in payment of another advance to Sir Walter. And Sir Walter on the 28th June, 1292, acknowledged having received from the Chamberlain 5 marks sterling for the arrears of his wages granted to him by the King for the custody of the said Castles.

The last of the Wardens at this period, whose name has come down, is Sir Richard Siward, a mandate for the payment of whose wages for the custody of the Castles of Galloway and Nithsdale was given by the guardians of Scotland on the 24th March, 1292.

Sir Richard acknowledged the receipt on April 26th of 40 marks sterling from the chamberlain of Scotland for 40 days, granted to him for the custody of the said Castles by the lord King of England, beginning to reckon the said 40 days from the

Monday next after the feast of St. Cuthbert the Confessor (24 March) in the year of the Lord 1292.

Another acknowledgment for wages paid for the custody of these castles at this period, dated 25th June, 1292, runs:—"To all who will see or hear this letter Richard Suard, Knight, wishes health in the Lord. Let all know that I at Berwick on Wednesday the morrow of the birth of St. John the Baptist in the year of the Lord 1292, received from Sir Alexander de Balliol chamberlain of the Kingdom of Scotland and Robert Heron associated to him by the lord King of England, head lord of Scotland, an account of my wages for the custody of the Castles of Dumfries, Kirkcudbright, and Wigton, of the rest of my said wages until the feast of the Holy Trinity (1 June) £18 13s 4d. In evidence of which thing I have given to the same this my letter patent. Given at Berwick the day and year above said."

Sir Richard continued in office in Edward's service until the 18th November. On that day the King by letter from Berwick directed him to hand over the Castles to John de Balliol, to whom the King had granted seizin of the Kingdom of Scotland. ended the first English occupation, extending over one year and four or five months. Balliol was now King of Scotland, but Edward, apparently without much regard to the change of circumstances, gave instructions for the collection of certain arrears of customs in that kingdom. In regard to Dumfries, the English King wrote from Roxburgh, 10th December, 1292:-"The King and Superior lord of the Kingdom of Scotland to his beloved John de Twynholm farmer of the Burgh of Dumfries. health. Know that those 18 pounds in which you are indebted to us, for arrears of your account from the farm of the aforesaid burgh, we have granted to our beloved Ralph de Handen to be received through your hands this year of the Lord 1292, on the day which may be arranged between you and him, for the 18 pounds which he used to receive annually by the grant of Alexander of good memory, the last King of Scotland, deceased, in return for certain losses which he sustained on the March of the Kingdom of England and Scotland, as he says. And therefore we command you to pay the aforesaid 18 pounds to the aforesaid in the form aforesaid, and we wish you to allocate them in the arrears. Moreover we order our beloved and faithful John, the illustrious King of Scotland, to allow you to raise and collect freely and without hindrance the arrears of the aforesaid farm at the next term of St. Martin, wherein you were bound in your aforesaid agreement." And a month later:—Newcastle, 12 January, 1293. By letters patent, and closed, the burgesses of Dumfries are ordered to pay the arrears owed to the King, to Nicholas de Colle, Merchant of Luca, his assign, for the farm of the Burgh of Dumfries, the sum of eleven shillings and five pence.

Little is recorded of the affairs of the Castle during the short reign of King John. The Scottish King in course of time alleged against Edward, that he had possessed himself of his, the Scottish Castles, by violence. Whether the Castle of Dumfries passed in this way we do not know, but Balliol resigned the realm and people of Scotland on 7th July, 1296, and went into captivity, and in the following month of August, Robert de Joneby held office as Sheriff of Dumfries for the English King.

In the beginning of June of the following year, the King appointed Sir Henry de Percy and Sir Robert de Clifford to arrest, imprison, and "justify" all disturbers of the peace of Scotland or their reseters, and commanded the Sheriff and others of Dumfries to render them effectual aid. At this time Scotland, deserted by her natural leaders, bowed before the English power. But not for long. The patriot Wallace on September 11th of the same year (1297) overpowered the English at Stirling Bridge, and cleared the country of the invaders. This great achievement was, according to Henry the Minstrel, consummated at Dumfries, and the accuracy with which the Minstrel threads the intricate route, traversed by Wallace in pursuit of his foes, goes far to establish the trustworthiness of the story. Henry relates how Wallace, with a company of three hundred chosen men mounted on picked horses lightly harnessed, rode in pursuit, through Durisdeer, Morton, and Closeburn, to Dalswinton, where, in the woods, deadly strokes were dealt, and continuing the chase, passed near Lochar Moss and Lochmaben, to a place in the neighbourhood of Cockpool, where was fierce fighting. Some of the English were drowned, some slain upon the sand; who escaped in England fled away.

Wallace, after resting a night at Caerlaverock, blithely journeyed next morning to Dumfries, where he received the people

to his peace, ordered reward to true Scots, and granted remission to such as were in fault.

"The Sotheroun fled off Scotland on ilk sid Be sey and land without langer abaid, Off Castellys, towyns, than Wallace chyftanys maid Rewlyt the land, and put it to the rest With trew keparys; the quhilk be traistyt best."

ENGLISH OCCUPATION RESUMED.

Again, in 1298, a great army, led by the King in person, entered Scotland, and meeting the Scots, under Wallace. defeated them, 22nd July, near Falkirk. A few months later occupation of the Castle of Dumfries had been resumed by the English, and Edward continued in possession for the next seven years, when Bruce effected its capture.

On the re-occupation, Sir Robert de Clifford had charge, and the Castle, no longer grouped with those of Galloway, was frequently associated with the Castle of Lochmaben.

In the order of the war, the King usually entered into indentures or written agreements by which his officers should provide certain men-at-arms and others, and serve with them in a specified capacity, in return for wages and stated quantities of provisions for their support. In regard to the horses of the men-at-arms the animals were valued by a jury of twelve experts, and in case of being lost in the service of the King, the ascertained price was allowed by him to the owner. In the rolls many hundreds of horses are described in some such form as the following short extract:—"Sir Robert de Clifford has a white dappled charger, value 45 marks; Sir Symond de Clifford, his knight, a dun horse with a star on the forehead, £20; Sir Roger de Kirkpatrick, his knight, has a brown bay horse, value £10." These were powerful animals, which in action were covered with mail armour; they contributed to the display so much prized in mediaval warfare, but proved less serviceable than usual on broken ground common in Scotland. On this account and the scarcity consequent on the drain through the war, small light unarmoured horses were introduced from Ireland; the horse was called a hobby, the rider a hobbler. Some of the duties of the hobbler were scouting and spying. Thus Sir Robert de Clifford, warden of Lochmaben Castle and the valley of Annan, requests Master Richard de

Abyndon "to pay either in money or victuals, the wages of Richard de Bret, an Irish hobbler retained to spy the passings and haunts of the enemy by night and by day, who has been on duty for 6 weeks and 3 days; lest he take himself off for want of sustenance." Galloway also contributed light horses.

In an agreement or indenture of 20th November, 1298, the King gave minute directions in respect to the garrison and munitions of the Castle. "Be it remembered," he says, "that the King has appointed that in the Castle of Dumfries there should remain twelve men with armed horses, who shall have among them all twenty-four foot soldiers by the appointment of Sir Robert de Clifford. Also the twenty crossbow-men who were at Berwick, who were appointed to the said Sir Robert de Clifford at Durham, and the six crossbow-men whom the said Sir Robert de Clifford shall place there, whom he took from the Castle of Lochmaben, and 4 foot-men of his own, whom he also shall provide. Also a master engineer and 4 carpenters. Also one smith and his lad; one Engineer and 2 masons, whereof the amount shall be 76 persons.

"For whose support the provisions underwritten are appointed from 20th November next coming, at the beginning of the 27th year of the reign of our Lord the King aforesaid, until the last day of the month of June (the first day and the last being reckoned) for 223 days, that is to say for 32 weeks:—by the day 3 bushels of wheat, 120 Quarters of wheat, of wine 10 tuns, of Malt or Barley to make malt for beer, 160 Quarters, of beans and peas, 20 Quarters, of oats for provender for the horses, 100 Quarters, of oxen 50 carcases, of herrings 10,000, of dried fish 500, of salt 20 Quarters, of iron and steel as much as will be necessary, of cords and hides for engines. . . . of money 10 marks, which shall be delivered to the Constable of the Castle for small necessaries. And be it remembered that Mr Richard de Abingdon (to whom the King by his letters has given directions regarding these things) shall see that all these things above written, shall arrive by land in the company of the said Sir Robert, or by sea, at the said Castle as he more fully is directed in the aforesaid letters of the King. Also the said Sir Robert shall place in the Castle 2 engines, 2 springalds, 2 Crossbows with winches, and 2 Crossbows of 2 feet. Also the Bishop of Carlisle,

one Crossbow with a winch, 2 Crossbows of 2 feet and as many quarrels as possible."

In the beginning of the year 1300 Sir Robert de Clifford was transferred to the Company of Sir John de St. John, the Captain and Lieutenant of the Marches, at Lochmaben, and Sir John de la Doline, an expert in the manufacture of war engines, who in the autumn of 1299 had been engaged at Carlisle in directing the making of the engines Berfray, Maltone, and Cat, and others, succeeded him in the Wardenship of the Castle of Dumfries. These are the terms of his investment. "The King to all whom, etc., health, know that we have granted to our beloved and faithful John de la Doline, our Castle of Dumfries with its pertinances, to guard so long as it pleases us. To whose, etc. Witness the King at Westminster, the 24th day of March, 1300. By the King himself, J. de Benstede announcing it."

THE AFFAIRS OF THE CASTLE IN THE YEAR 1300.

The 28th year is notable in the affairs of the Castle. It became the base for forays by the English against the Scots of Galloway, and for the siege of Carlaverock; and in the autumn extensive structural works, designed to strengthen the fortress, were initiated by the King, who manifested particular and personal interest in the operations, remaining ten days at Dumfries at the end of October supervising and hastening their completion.

We have for this year also a special source of information, the Wardrobe Account, already mentioned. It sets out in minute detail the wages of the men-at-arms and others dwelling in the fortification of the Castle, and within the fortification of the Peel after its construction. From it we become acquainted with the names of the chief officers, the description and computed value of horses of the men-at-arms, and the description and price of most of the articles provided for the support of the garrison; also the wages of the workers employed in strengthening the Castle and raising the Peel, and generally the entries are illustrative of many of the conditions of warfare and of labour existing six hundred years ago.

THE KING'S MOVEMENTS ABOUT DUMFRIES.

The accounts disclose many of the King's movements at Dumfries and the neighbourhood. The Minor Friars of Dum-

fries were paid 6 shillings for the King's support for three days on his arrival there in the month of June, by the hands of Lord Henry, the almoner. On 10th July the King made an oblation of 7 shillings at the great altar of the church of the Minor Friars of Dumfries. On the 12th he made a similar offering in his own chapel at Carlaverock, in honour of St. Thomas; on the 14th he remained at Carlaverock. (These two dates, the 12th and 14th July probably coincide with the siege of Carlaverock). On the 16th the King made another offering in the church of the Minor Friars at Dumfries. On the 24th October the King made his oblation of 7 shillings in his own chapel at Dumfries, for the good report which he heard from the parts of Galloway. At the same place on the 28th, being the feast of the apostles Simeon and Jude, he made his oblation of 7 shillings in the church of the Minor Friars. On 1st November, the feast of all saints' mass was celebrated in the presence of the King and of Lord Edward the King's son, in the church of the Minor Friars of Dumfries, when he made his usual offering of 6 shillings. On the same day the Minor Friars were paid 5 shillings and 4 pence for the King's board for 4 days of his stay there in the month of October, by the hands of William of Annan. And on 3rd November the King made his usual offering in his own chapel at Caerlaverock. Other places in the neighbourhood were honoured by the King's presence, as Applegarth, Tinwald, Lochrutton, (Lochroiton), Kirkcudbright, Twynholm, and Girthon.

The Queen and the Court arrived at Dumfries on the 17th October, and remained until the end of the month. They journeyed in the company of a squadron of foot soldiers, leaving Carlisle on Saturday, 15th October, on which day sight of Dumfries was first seen, and arrived as before stated on the 17th.

THE COMPANY DWELLING IN THE CASTLE.

A treaty having been concluded between England and France, without reference to the Scots, Edward resolved to prosecute his grand purpose, the conquest of the Kingdom of Scotland. He entered Scotland at the head of a numerous and well appointed army, consisting of the flower of the English nobility, and led by the most experienced generals of the age. Consequently, the dwellers in the Castle were numerous and illustrious. Some of them had come prior to, and were present at, the seige

of Caerlaverock. Others arrived after the operations were completed—notables, many of them, whose stories adorn the meterical narrative of that celebrated siege.

Sir John de St. John, who at this time was Warden of the Marches about Dumfries, and who as the oldest and most experienced of Edward's officers, was entrusted with the guidance and care of the Prince of Wales, nominal commander of the fourth squadron of the besieging army, elicits the commendation of the poet.

"The brave John de St. John
Was everywhere with him (the Prince),
Who on all his white caparisons
Had upon a red chief two gold mulletts.

The St. John, the Latimer,
Were associated to him the first
Who were to array his squadron,
As those who best understood that;
For it would not be wise to seek elsewhere
Two more valiant or two more excellent men."

And of Sir Robert de Clifford, who was much in evidence about the Castle of Dumfries, the poet says:—

"Robert the lord of Clifford, To whom reason gives consolation To overcome his enemies. Every time he calls to memory The fame of his noble lineage. He calls Scotland to bear witness, That he begins well and nobly, As one who is of the race Of the noble Earl Marshal, Who beyond Constantinople Fought with the unicorn. And struck him dead beneath him. From him he is descended through his mother. The good Roger, his father's father. Was considered equal to him; But he had no merit which does not appear To be revived in his grandson; Wherefore I well know that I have given him no Praise of which he is not worthy. For he exhibits as good proofs Of wisdom and prudence as any I see. The King his good lord knows

His much honoured banner, Chequered with gold and azue, With a vermilion fess. If I were a young maiden, I would give him my heart and person, So great is his fame.'' *

Sir Richard Siward, one of the most celebrated men of his day, who more than once held the custody of the Castle of Dumfries, had a career characteristic of the age. A Scotsman, and from an early age, a man of influence. For some reason he was made prisoner by Henry III. of England in 1236, and suspicion arose that the capture was procured by Siward himself, and followed by an agreement between the King of England and him inconsistent with the fealty due to his sovereign Alexander III. King of Scots. Henry addressed Alexander intimating to him that Siward did not do so, that the King only caused him to be seized to secure the peace of the Kingdom; and neither before nor after nor at any other time did Siward make any agreement with the King against his fealty to Alexander. We have seen that Sir Richard Siward held the Castle of Dumfries for the English King in 1292, and had the honour of handing it over to King John, on his accession to the throne of Scotland. In 1294-95 Sir Richard was still in Edward's service, but so far, it does not appear that he had been active against his countrymen the Scots. Before the end of 1295 Sir Richard had returned to Scotland, and seems shortly afterwards to have taken service under the Government of King John. He and his son Richard, being arrayed with the Scots, were captured by the English at the battle of Dunbar, 16th May, 1296. Sir Richard was imprisoned in the Tower of London, and his son was put in fetters and lodged in Bristol Castle. After enduring imprisonment for a year Siward was liberated, and had his forfeited lands restored to him on condition of serving Edward beyond the seas and elsewhere. Deprived of his lands and means of livelihood, and in prison, it might be for life; his son Richard fettered and in prison; his son John also in prison, a hostage; and English friends, who had become sureties for him, liable to claims on his account, there seemed no entanglements of escape from the cast around him this other than surrender. In such wavs the as

^{*} Wright's Roll of Karlaverock.

astute Edward entrap into his service many loyal Scots. Passing to the Continent, Sir Richard gained the King's commendation, who commanded the Constable of Bristol Castle to free Richard Siward, junior, of his fetters, give him a chamber with a privy chamber, and deal leniently with him on account of the good services of Sir Richard, his father in Flanders. Sir Richard returned to Scotland, was present at the battle of Falkirk, where he had for his own riding a horse gifted to him by the English King. He again became Edward's Warden of Nithsdale, and owner of Tibbers Castle, which he repaired or rebuilt, the King ordering payment of £100 due to him so as the work should not be hindered. Sir Richard held from time to time many high offices, and since his imprisonment he remained during a long and arduous life faithful to Edward and his son. He was Sheriff of Dumfries and Warden of the Castle when it was wrested from the English by Bruce. His name appears in the Roll of Carlaverock. He had "a black banner painted with a white cross, flowered at the ends." Later we find Sir Richard's son John adhering to the Scots.

The names of officers, with a variety of detail more or less interesting, are revealed in the wages account:—"To Sir James de Dalelegh (the king's receiver) agreed for wages of horsemen and footmen dwelling within the fortifications of the castles of Dumfries and Lochmaben, to be paid for the wages of Sir Roger Kirkpatrick, made constable of the Castle of Lochmaben by Sir John de St. John, captain of the march of Cumberland, and of the vale of Annan, . . . for the wages of Sirs Humphrey de Bosco, Hugh Mauleverer, Thomas de Torthorwald, Humphrey de Garding, and William de Heriz, Knights, their twelve esquires, and 3 valets, with covered horses, dwelling within the same fortifications from the 8th day of July until the 19th day of November at the end of the present year. . . . For the wages of banerets, knights, and esquires below written, sent by the king for Caerlaverock in the company of the said Sir John, to dwell in the aforesaid fortifications, both for the protection of the same parts, and for an expedition to be made upon the Scots, after the return of the King with his army from the parts of Galloway, between the 30th day of August and the 19th day of November, namely, for the wages of Sir Richard Siward, baneret, of 2 knights and their 7 esquires, from the said 30th day of August

until the 7th day of November. . . . And for the wages of Sir Arnold William de Pugyes, and his 4 esquires, from the 2nd day of September until the day on which he was at the King's table within the castle of Dumfries as constable of the said castle, until the said 19th day of November. For the wages of John de Cruce and his 4 comrades, esquires, with covered horses, dwelling within the fortification of the Castle of Dumfries, from the 19th day of October until the day on which they were at the king's table within the same fortification, until the 6th day of November. . . . For the wages of Godfrey de Massenby and 28 esquires, his comrades, with covered horses, assigned to dwell within the fortification of the Peel of Dumfries after the construction of the same Peel, from the 2nd of November, on which day the King retired from the same parts towards Carlisle, until the 5th day of the same month. For the wages of one priest for conducting worship, one ordinary priest, one gatekeeper, one watchman, 4 engineers, 5 workmen, one smith, and various foot soldiers, both artillerymen and archers, dwelling within the fortifications of the same Castle, between the 26th day of August and the 19th day of November."

"To Sir William de Felton for his own wages, and those of 3 esquires, from the 17th day of September, until the 3rd day of November, on which day the King retired to Carlisle from the parts of Dumfries, after the proclamation of the truce entered into with the Scots."

The garrisons were constantly undergoing change according as circumstances might require, and the King's command.

By an indenture of 9th November between the King and Council, and Sir John de St. John, the latter was appointed captain, warden, and lieutenant of Galloway, the Castle and county of Dumfries, the Castle of Lochmaben, of the valley of the Annan, and the Marches towards Roxburgh, from this date until Pentecost next, with 40 men-at-arms for his retinue, and drawing for them and said ward 700 marks, and making no claim for replacement of horses during the truce with the Scots. Besides, continues the agreement, "there shall be within the Castles and Peels of Dumfries and Lochmaben, at the King's wages, 40 men-at-arms, 200 footmen, 50 of whom to be crossbow-men, and 150 archers. Each man-at-arms at the usual pay, each crossbow-man 3 pence, and each archer 2 pence; also a bowyer and a

groom at 5 pence, a carpenter at 4 pence, and a watchman at 3 pence."

The men-at-arms in the King's pay, above spoken of, were Sir Montesin de Noilan, with 6 barbed horses, Sir Arnold William de Pugyes with 4 barbed horses, Sir Gallard de Brignak with 2 barbed horses, William de Sowe with 4 barbed horses, and Bernard de Bignoles with 4 barbed horses. The king reserved to himself to increase or lessen the number of men-at-arms and foot at pleasure. Of the horsemen, knights had a wage of 2 shillings a day, and esquires were paid one shilling a day.

DUMFRIES A RENDEZVOUS.

Dumfries was a rendezvous for soldiers journeying to serve in Galloway, Cumnock, and as far as Ayr. When the Queen and the Court joined the King at Dumfries on 17th October, they had come escorted by a squadron of soldiers, mostly foot, about 1000 strong. Leaving Carlisle on the Saturday, 15th October, they came in sight of Dumfries the same day, and arrived at their destination on the 17th. Other squadrons followed, each covering the journey in 2 days. The barons contributed their quota of men. John de Derle, servant of Lord Ingleram de Gynes, led 40 footmen archers, of the men of the same lord, 9 foot soldiers of Lord Thomas de Pykering, 8 foot soldiers of the men of the Friars of Leyburn, 10 foot soldiers of the men of lord Michael de Hertecla, and 8 foot soldiers of the men of lord Robert de Askeby.

Thomas de Preston valet of Sir Gilbert de Corewenne led the men of the same lord, of Sir Robert de Bruyn, and of Sir William Dacore. There were men of the baron of Greystok, of Sir Hugh de Molton, Sir Robert de Tyllol, men of Kendal, men of Sir Robert de Clifford, of the Earl of Lancaster, of the Bishop of Durham, men of Sir Thomas de Derwentwater, Sir Alexander de Bastelthweyt, Sir Thomas de Lucy, Sir Thomas de Ireby, and others.

The quota of the powerful and astute churchman, the Bishop of Durham, numbered at least 120 men. His character as portrayed in the Roll of Karlaverock is too interesting to be omitted:

"Both in company and affection, With them were joined the followers Of the noble Bishop of Durham, The most worthy clerk in the kingdom; And indeed of Christendom, If I should tell you the truth of him. Because if you will listen to me, He was wise, and eloquent, Temperate, just, and chaste. Never did you approach a rich man Who regulated his life better. Pride, coveteousness, and envy, He had entirely cast away; Nevertheless he had a lofty heart To defend his rights, So that he failed not to overcome His enemies by patience. For by a just conscience So strongly was he influenced, That everyone wondered. In all the King's wars He had appeared in noble array, With a great retinue, and at great cost. In consequence of I know not what wrong, For which a process was entered, He was detained in England, So that he did not then come to Scotland; Notwithstanding he so well kept in mind The King's expedition, That he sent him of his people One hundred and sixty men-at-arms. Arthur never with all his spells, Had so fine a present from Merlin. And he sent there his ensign, which was gules With a fer de moulin of ermine."

VICTUALLING THE CASTLE.

The victualling of the Castle was frequently a matter of difficulty, and want, if not famine, was a not uncommon experience. The neighbouring country, by reason of the war, being waste, it was necessary to obtain supplies from England, Ireland, and elsewhere. Copious, and as usual, minutely detailed accounts, are to hand of such munitions, showing of what they consist, where got, how transported, and the prices paid, severally.

The fare seems to have been substantial and generous, but without luxury. Cows and their produce, oxen, sheep, pork, poultry, and fish are staple supplies. The fish is various, as great fish, herrings, in great numbers, and hard fish called hakes.

Of grain in various forms, oats, dried oats, wheat, wheat meal, and wheat flour, barley, and malt, were in use; also beans and peas; salt was brought from the salt pits of Skimburness. The drink bills would alarm the temperance men of the present day. Wine and beer of various qualities were in demand.

Carlisle was the chief centre for the supply of the castles and army of the district. The stores were in charge of the Receiver and Distributor of the King's victuals between whom and the constables of the castles and others a system of accounting was in operation. That it was strict we at once discover. Sir John de la Doline constable of Dumfries having omitted a few trifles in his account required to make good their value, for which the following receipt was granted to him by the Receiver:—

"Received from Sir John de la Doline, constable of the castle of Dumfries, for a half quarter of one ox, one quarter of a sheep, 2 bushels of oats, 9 hides of oxen and cows, 14 skins of sheep, and proceeds of same, which remained in arrears upon his account of the present 28th year, 15s 1d. From the same for 2 carts and 6 horses delivered to him by Master Richard de Abingdon for seeking victuals as far as the castle of Dumfries, of which he makes no mention in his account of the present year, 40s. Total, £2 15s 1d."

With reference to the above 2 carts and 6 horses, and others, the receiver makes the following precise entry:—

"Master Richard de Abington receiver of the King's victuals at Carlisle, renders account of 9 carts and 31 horses remaining at the end of his account for the year 27, as is evident upon the third folio preceding. Total 9 carts and 31 horses, of which he computes delivered to Sir John de la Doline, constable of the Castle of Dumfries, for carrying victuals and other necessaries to the same place, for the munition of the same Castle, 2 carts, 6 horses; and he computes delivered to Sir James de Dalilegh staying—to receive the victuals in the same place after the departure of the said Richard, 2 carts, 5 horses; and by deaths by old age and hard labour 8 horses; and by the sale with which the keeper is charged in the receipt of the present year 3 carts, 5 horses, total 9 carts and 31 horses, and so the account is balanced."

The supplies were carried both by water and by land. Various vessels were engaged, and some, probably owing to the river, did not reach further than Caerlaverock,

as we learn from the following account:—"To Richard de Geyton, master of the ship which is called the Nicholas of Geyton, taking in his same ship 20 carcases of oxen as far as Caerlaverock, for the supply of the men dwelling in the fortification of the castle of Dumfries, for his own wages and those of 5 sailors his comrades in the same ship, for 8 days, 14 shillings." A sailor of the name of John le Skyrmysure with his "galie" also was specially retained to carry victuals for the Castle of Dumfries. In a case of carriage by land, of 2 carts and 6 horses, destined for Lochmaben Castle and a like number for the Castle of Dumfries, those for Lochmaben were captured by the Scots at the passage of the Solway, while the Dumfries portion escaped and reached their destination.

The following extracts and others illustrate the victualling of the Castle:—

"To Sir John de la Doline constable of the Castle of Dumfries for money paid by him for 9 oxen and cows, 14 sheep, 70 quarters of oats, 70 large flagons of wine, bread, beer, fish, poultry, and various sorts of other small necessaries, bought by the same, for his own expenses and those of certain men-at-arms and others dwelling in his company in the fortifications of the aforesaid Castle, from the 7th day of March in the present 28th year, until the 30th day of July in the same year."

"To Master Richard de Abingdon, receiver, and distributor of the King's victuals, coming to Carlisle and Skimburness, from divers parts of England and Wales, and from parts of Ireland, etc., in connection with victuals for the Castles. . . . From which account delivered to Robert de Felton, constable of the Castle of Lochmaben, for the support of the munition of the same Castle, 65 quarters of oats, 30 casks of flour, 6 quarters of dried oats, 20 carcases of oxen, 4 quarters and a half bushel of salt in one cask, and 3 bars of iron; and to Sir John de la Doline, constable of the Castle of Dumfries, for the munition of the same Castle, 2 casks of flour, 2 casks of wine, and to the same for making engines for the castle of Caerlaverock, 29 bars, and 10 pieces of iron; and to Sir Robert de Cantilupe for the munition of the said Castle of Lochmaben in the time in which he was constable of the same, one quarter of oats and 5 casks of wine; and to Sir Arnold William de Podio, constable of the Castle of Dumfries, for the munition of the same Castle, 7 casks of flour and 8 casks of wine, 30 fat hogs, 6 quarters of dried oats, 9500 herrings, 18 quarters of oats, and 4 quarters and a half bushel of salt."

"To Sir James de Dalilegh, clerk, for divers outlays and expenses incurred by the same about the victuals bought by himself and also the victuals sent to the parts of Carlisle by the care of divers persons, namely, for the carriage of divers victuals from the salt pits of Skimburness to Carlisle, and the Abbey of Holm, by water in vessels, and by land by horses and wagons, from the same places to Lochmaben and Dumfries, for the munition of the castles there, for the portage, loading, and discharge of the same vicutals through divers places, for the cleaning and repairing of the houses in which the same victuals were deposited, for the pay of coopers binding casks of flour and wine, the wages of clerks and others receiving the same victuals, guarding, delivering, throwing, turning, and measuring them, under the same Sir James, between the 5th day of June and the 19th day of November in the present year ending, together with the wages of the same Sir James, within the said time, and for hemp, tanned hides, ropes, clamps, nails, and other binders, bought by the same for the aforesaid castles, within the same time, £175 5s $2\frac{1}{2}$ d.''

A RE-SALE.

When a change of constables took place at the Castle there was a stock-taking and accounting, between the out-going and incoming officers, and this principle was also carried into larger transactions, as in the case of the stores at Carlisle. Richard de Abingdon having been succeeded there by Sir James de Dalilegh as Receiver and Distributor of the King's victuals, the question seems to have arisen how best to arrange the transfer. To take stock and make up a valuation would be laborious and tedious, and as some of the stores had been long kept their value could not be estimated with certainty. While not stated in so many words, it is to be inferred from what took place that the conclusion reached was to carry out a process similar to that now known as a re-sale, by which to dispose of the entire stock, so as the in-coming Receiver should be able to commence his accounts on a clean slate. The sale took place, the castles and the army in the vicinity were the chief purchasers, and the sum realised amounted to £800 of the money of the day. 921 quarters 7

bushels wheat, flour, and wheatmeal, were sold to the horse and foot soldiers in the fortifications of Lochmaben and Dumfries, and to divers men of Carlisle; 852 quarters 2 bushels of wheat flour and meal went to Peter of Chichester, clerk of the king's pantry and buttery, by the hands of Walter Waldechef, the king's baker. The Bishop of Carlisle bought certain quantities for the supply of the castle of Carlisle, for the earls, barons, knights, squires, and divers others dwelling in the King's army. Sales were made to various persons for the fortifications of the castles in the same parts, and to the knights, esquires, and others living in these fortifications and in the king's army. Flour was also supplied to divers bakers of the city of Carlisle for baking against the arrival of the King from the parts of Galloway, etc.

Prices ruled as follows: -- Wheat, 10s a quarter, 8s, 6s 8d, and 5s, according to quality; poor wheat flour and meal, 4s a quarter; beans and peas, 4s 6d a quarter; oats, 4s a quarter; poor oats, 1s 6d, and half oats 3s a quarter; dried oats, 5s, 4s, and 3s 4d a quarter. The charge for baking was at the rate of 6s 8d for every quarter of flour used. Fat hogs brought 5s and 4s 6d each. Untrained horses, part of a number coming from Galloway, were in stock; and 900 horse shoes at 10s a hundred, and 2000 nails at 20d a 1000, were disposed of to Walter de Bello Campo, seneschal of the King's household. of wine at 4 marks a cask went to divers magnets and others living in the King's army; 20 casks of beer were sold to various persons connected with the fortifications of the district, at various prices, as 10s, 8s, 7s 6d, and one mark Beer of a higher quality was sold to Sir Robert de Clifford and Sir William de Rithre, at the price of 30s a cask.

ARTILLERY.

"The crakkis of war," which Barbour speaks of as marvellous, had not come into use, but of contrivances designed to assail and defend fortified strongholds, there were many, most of them bearing a family likeness to the military engines of the Romans; ballistæ, springalds, great crossbows with wenches, those named meltone, berfrey, and cat, and others. A berfrey was sent from Lochmaben for the siege of Caerlaverock; so huge and cumbrous was it that the labour of transport involved the employment of 5 carts for 7 days, and 2 carts for 4 days, a road having been pre-

viously made on which the carts might travel. The berfrey is a wooden tower, moving on wheels, which when run up to or near the wall of the invested town or castle, enables the assailants to overlook and command the interior of the place assailed. The design is as old as the time of Augustus Cæsar, when Vitruvius, who had charge of the engines of war, formulated rules for its construction, up to a height of eleven storeys and 200 feet.

That such equipment of the Castle of Dumfries was not overlooked is made evident from the following and other accounts:—

"To lord Henry de Sandwich, chaplain of lord John de Drokensford, for money disbursed by him for 41 engines, 800 quarrels, 3 bandries, 2 pounds of varnish, 4 pounds of feathers with verdigris, 200 pounds of string, 6 pounds of glue, hemp for making cords and baskets, and ropes for packing the same, bought by the said lord John, and sent to Dumfries and Lochmaben for the fortifications of the Castles of those places, in the month of October, together with the pay of 3 carts carrying the same to Dumfries, in the same month, and for the wages of Robert de Ra, artilleryman, going with the same things for 8 days, as is evident by the account of the said lord Henry, £6 6s 3d."

FRENCH AMBASSADORS AT ANNAN.

The accounts contain numerous miscellaneous charges connected with the Castle of Dumfries, such as, for restoring horses of the officers and men-at-arms, for messengers carrying messages, verbal and written, from and to the King at Dumfries; for travelling to obtain money and bring it to the King at Dumfries. Ambassadors from the King of France followed Edward into Scotland, and negotiated a truce between the King and the Scots, and in the end of October Randolph de Manton, the cofferer of the King's Wardrobe, was sent by the King from Dumfries to Carlisle to make a present to the Ambassadors of the King of France on the part of the King himself. The cofferer's expenses for 5 days, together with the expenses of the Ambassadors at Annan, amounted to £2 10s.

The lord treasurer of England, the bishop of Coventry, and Lichfield, attended personally at Dumfries, Lochmaben, and Caerlaverock, in the month of November for the purpose of settling accounts for the fortifications of these castles.

THE REINFORCEMENT OF THE CASTLE.

The King sent the following message to Berwick:—"Henry de Empsingham and John de Karleton, clerks, shall say to Richard de Bramesgrave this message, which the same Richard shall tell, as from the King, to Robert Hastings and his brother, and the other men-at-arms who are in their company at Roxburgh and Jedburgh. And shall also tell the same message to Sir William Latimer and the rest of the garrison at Berwick, namely, that our lord the king has gone to Dumfries to raise his peel and reinforce the Castle. And his son has gone with him, and many other good men-at-arms," etc.

The work of raising the peel and reinforcing the Castle was begun on 5th September, and carried on with diligence, so that by the 2nd of November, when the King left Dumfries for Carlisle, men-at-arms were, as we have seen, dwelling within the fortification of the peel. Its final completion, however, was not accomplished until the 23rd of the month. Of craftsmen employed, there were carpenters, sawyers, smiths, masons, and quarrymen; also ditchers in great numbers. Clerks were assigned the duty of paying the wages of the workmen, and keeping the accounts. Godfrey de Wyndsore had charge of the expenditure for carpenters, and Henry de Brandeston paid the wages of the ditchers. Friar Robert de Ulm was the master carpenter, receiving 9d per day, his lad Alan being paid 4d. Ade de Glasham, the chief foreman, and the other foremen, had a wage of 6d, and other carpenters and sawyers had 4d; carpenters' labourers, pages they are called, received a wage of 2d a day. The ditchers had over them Ade de St. Edmonds, master ditcher. receiving 6d per day, and a number of foremen receiving 4d; the other ditchers were paid 2d a day, and women helpers had a wage of 11d per day. The workmen were brought chiefly from Northumberland and Cumberland, but a number of the ditchers came from parts of Lochmaben. How many hours constituted the working day is not stated, but probably it extended from sunrise to sunset; the toil went on all the seven days of the week.

The ditchers employed numbered sometimes as many as 250, but the time occupied in accomplishing their task did not much exceed a fortnight. The peel was constructed chiefly of timber, and carpentry predominated over all the other sections of the work. As many as 114 men of this craft were engaged on the

work, at one time, and the average numbered about 80. The timber was got at the forest of Inglewood in Cumberland, and the peel which was to be placed around the Castle of Dumfries was chiefly worked and made there. Trees were also cut in a wood near Dumfries, for pales. An axe, which was borrowed for the purpose, not being returned to the owner, he was compensated with a payment of 10d. Other 4 axes used for cutting trees in the same wood cost 1s 1d each. A considerable amount of smith's work was performed at Inglewood, and it is evident that a fabric was in course of construction in the forest. Thomas de Turney was the chief smith, receiving a wage of 6d per day, and he had 7 assistants, some receiving 5d and others 4d a day; and 4100 nails and 62 bolts were bought at Carlisle and elsewhere for smith's work. Master Edward de Appleby was the chief mason. His comrades varied in number up to 15. The work of this craft consisted, partly at least, in repairing stone buildings within the "King's Castle of Dumfries."

That Edward regarded this matter of great importance and urgency is evident. On 17th September he supervised the operations, when he distributed among the workers a gratuity of £2 in addition to their wages. On the 27th the Queen made a similar distribution. Later the carpenters and ditchers had 4 casks of beer for their encouragement. Master Edward de Appleby and his lad had a gratuity of 5 shillings in October. On the 30th of the same month £1 5s 7d was distributed among the ditchers. And in the middle of November £1 3s 4d was by order of the King distributed on two occasions at Dumfries to the carpenters.

We have the King's own estimate of the value in which he held such strongholds as the Castle of Dumfries. Writing to the lord treasurer of England, he says:—"And to our affairs of Scotland be also attentive in such manner that our interests may prosper there, and that the wages be well and promptly paid to our people who remain in those parts; and that you cause the Castles of Scotland to be well surveyed, and the fortresses and the other places which concern us there, and that they may be well stored, so that there be no want, and that the new castles which we are causing to be made there, have all they shall require for the completion of the works. For if they be well stored everywhere, this will be a great security to the whole of our affairs in those parts."

The accounts for the wages of the workers employed in strengthening the castle are too lengthy to be here presented in whole, but a few items, we think, may prove acceptable as indications of their character. We will first take Godfrey de Wyndsore's accounts:--"To Godfrey de Wyndsore, Clerk, assigned for paying the wages of the carpenters, masons, smiths, and other workmen retained to the king's wages for the making and working of the peel of Dumfries, for his own wages and those of 3 foremen and 35 other carpenters and 4 pages, from the 5th day of September until the 11th day of the same month, both being reckoned, for 7 days, to the aforesaid Godfrey and the foremen to each 6d a day, to each carpenter 4d a day, and to each page 2d a day, £5 0s 4d. To the same for the wages of one foreman carpenter and of 14 other carpenters, from the 6th day of September until the 11th day of the same month, both being reckoned, for 6 days, to each foreman and carpenter as before, £1 IIs 0d. To the same for the wages of one foreman carpenter and 18 other carpenters for 5 days, and two carpenters for 3 days, and 2 sawyers, to each 4d a day for 2 days, the said 11th day of September being reckoned the last, £1 15s 10d. To the same for his own wages, those of the foremen Ade de Glasham, and the foremen his comrades and of 74 other carpenters, from the 12th day of September until the 18th day of the same month, both being reckoned, for 7 days, £9 13s 8d. To the same for the wages of four pages waiting on the same carpenters for the same time, 4s 8d. To the same for the wages of 5 carpenters for 2 days, the 17th September being reckoned as the first, 3s 4d. To the same for the wages of a lad of Friar Robert de Ulm, carpenter, receiving 4d a day, for the aforesaid 7 days, 2s 4d. Total, £18 11s 2d."

Passing to the smith's work, the account proceeds:—"To the same for the wages of Thomas de Turney, smith, receiving 6d a day, and of 7 smiths his comrades 2 of whom received each 5d a day, and 5 each 4d a day, being retained to the king's wages for the making of the aforesaid peel, from the 18th day of October until the 20th day of November, both being reckoned, for 34 days, £5 2s 0d.

"To the same Godfrey for 4100 nails of various forms, and 62 bolts, bought by the same both at Carlisle and la Rose, at various prices, for the operations of the same smiths in turn,

together with baskets and cords for packing the same nails, from the aforesaid place to Dumfries, £4 18s 8d."

The mason's account runs:—"To Master Edward de Appleby, mason, for his own wages and those of 11 masons, his comrades, retained to the king's wages for repairing the houses within the king's castle of Dumfries, in the sojourn of the king at that place about the peel of the same, in the months of October and November, for 2 days, the 16th day of October being the last, to the aforesaid Master Edward 6d a day, and to each of the other masons 4d a day, 8s 4d. To the same for his own wages and those of 14 masons his comrades, from the 17th day of October until the 30th day of the same month, both being reckoned, for 14 days, to each as before per day, £3 12s 4d. the same for the wages of one page of the same for 16 days between the 15th day of October and the said 30th day of the same month, both being reckoned, 2d a day, 2s 8d. same for his own wages and those of 15 masons, his comrades, for 3 days, the last day of October being reckoned as the first, 16s 6d. To the wages of one page for the same three days, 6d."

We now come to Henry de Brandeston's account for the wages of ditchers, but one to the sheriff of Northumberland may first be presented. "To Sir Roger Maynot, Sheriff of Northumberland, for money paid by himself for iron and wood bought by the king's command under his private seal, for making of them engines of war, for the vessels and boats, and sent to Carlisle for the operations of the Peel of Dumfries, in the beginning of the month of October, together with the wages of 200 ditchers and 5 smiths, coming from the same country to Dumfries, for the aforesaid operations in the same month, together with the expenses of the bailiff's collecting the said ditchers and hiring them in the same month, as is evident from particulars supplied by the same Sheriff to Sir John de Drokenford at Newcastle upon Tyne, on the 13th day of October, £17 19s 11d; and for the expenses of 12 quarrymen sent to the same place in the same month, for the said operations 10s 6d.—Total, £18 10s 5d."

"To Henry de Brandeston, clerk, assigned for paying the wages of ditchers, smiths, and other workmen coming from the County of Northumberland, for the making of the peel of Dumfries, for the wages of 200 ditchers from the aforesaid county, of whom 10 were foremen, for 4 days, the 17th day of October being

reckoned as the first, to each foreman 4d a day, and each other ditcher 2d, £7 0s 0d. To the same for the wages of one master ditcher, receiving 6d a day, and 198 ditchers, 10 of whom were foremen, from the 21st day of October until the 30th day of the same month, both being reckoned, for 10 days, £17 11s 8d. To the same for the wages of Master Ade de St. Edmond, ditcher, receiving 6d a day, and 24 ditchers from the parts of Lochmaben, without a foreman, for 2 days, the 20th day of October being reckoned as the first, 9s. To the same for the wages of the said Master Ade, and 40 ditchers, one of whom was a foreman, from those parts, for 2 days, the 22 day of October being reckoned as the first, 14/8. Total, £25 15s 4d.

On 24th October 7 women were employed cleaning the ditch. 9 women worked 3 days, ending 27th October; 10 were employed on the 28th October; 14 on the 29th, and 25 on the 30th, for the same purpose. In regard to the transport of the timber from Inglewood forest to the Castle of Dumfries the information furnished by the accounts is meagre. That a considerable part was rafted up the river appears from the following entries:—"To Richard de Sabuts, sailor, of Dartmouth, for ropes bought by the same for collecting, tying, and drawing timber to the peel of Dumfries in the month of October, 3 shillings." "To Robert de Belton for money paid by himself to divers porters carrying timber from the water near Dumfries to the peel of the same place, 4 shillings and 3 pence."

Other lots were carried by the foot soldiers who journeyed as before narrated, from Carlisle to Dumfries in the month of October. 53 soldiers were so employed, 20 being led by Constable Adam de Ward, and 33 by Alan de Midhope, constable. These men, in addition to the soldiers' wage, were paid "of the king's gift and courtesy 2d per day for the labour which they sustained in carrying timber from Inglewood forest to the peel of Dumfries.'

The parts carried by the foot soldiers of the peel, which had been worked and made at Inglewood forest, ready to be put in position, arrived at Dumfries on the 26th October. In an account to Sir Robert de Clifford it is noted that Sir Robert returned to the King at Carlisle on the 18th day of October, on which day, it is said, the same King hurried his march to Dum-

fries to place the peel in position around the castle there. Probably the part transported by water had arrived before the 18th.

The expense connected with the strengthening of the castle and raising the peel of Dumfries, as contained in these accounts, amounts to over £200 of the money of the time, representing a present-day value of at least £4000, and the price of the timber falls to be added for the total value of the structure.

Edward had assigned a garrison to occupy the peel on the 2nd November. The earthworks not being quite finished, 76 ditchers were brought from Northumberland, for one day's work, and with their assistance the ditch was completed by the end of the day mentioned. The carpentry was brought to a close on the 23rd of the same month.

CHIEF FEATURES OF THE CASTLE.

While endeavouring to realise the chief features of the reinforced castle it is well to keep in view the circumstance that the use of timber in such structures as well as in house building, and generally, prevailed at this period in Scotland. The accounts are less helpful for the purpose than could be desired, for while excellent as records of expenditure, the entries allude to the nature of the works only in the most general terms.

One feature, and perhaps the most important in the case of a medæval castle before the introduction of firearms, the principle of which was to oppose a series of obstacles to an attacking force, is clearly enough indicated. The castle consisted of a double fortress, each division being independently fortified so that in case of attack if one were taken the siege had to be begun again under renewed difficulties. The divisions were also separately garrisoned. It will have been noticed that in the accounts mention is made of certain men-at-arms with covered horses dwelling within the Castle of Dumfries, and of others dwelling within the fortification of the peel of Dumfries after the construction of the same peel. The peel as a garrisoned area evidently corresponds with the mote, the castle being the bailey or lower court.

The outer fortifications consisted of a great ditch or dyke and earthen rampart, vestiges of which are yet, as already stated, exhibited in the grounds, and in the rear there was a stout palisading, which served the purpose of a wall. A draw-bridge,

worked with great ropes, controlled the entrance, and within the fortifications there were certain buildings, partly at least, constructed of masonry. A chapel, dedicated to St. Mary, was ministered in by priests appointed for ministering to the garrisons, and there were stables and stores, and probably buildings for divers other purposes. So much we gather from the accounts. The nature of the peel worked at Inglewood forest is more difficult to realise. The palisading, or some of it, was probably constructed of the pales cut in the wood near Dumfries. What came from Inglewood was something more. It was worked and made and much smith's work was wrought for securing the parts. The words used seem to imply that it consisted of a number of framed structures, which might be placed, as stated, "around the castle," at intervals in the palisading, such, for instance, as turrets. This is the sort of combination which would best satisfy the terms used in reference to the peel of Dumfries.

LATER CONSTABLES AND GARRISON.

Having come to the end of the 28th year in which the circumstances of the castle have been illustrated in some detail, we propose now to proceed on more general lines.

Sir Arnold William de Podio followed Sir John de la Doline in the constableship, when a stock-taking and accounting as to the munitions in the castle took place. There were in garrison Sir Arnold, who had 4 barbed horses; James de Bruney and Ferreres de Bruck, with 2 barbed horses; 4 carpenters, a smith and his lad, a bowyer, a baker, a cook, a janitor, a chaplain, a clerk, 2 watchmen, a washerwoman, 4 labourers, 12 grooms of the men-at-arms, and 17 crossbowmen; total, 55.

For these 55 persons sustenance from 31 July till Martinmas was provided, consisting of wheat and flour, ground malt, wine and salt. For 104 nights of 6 barbed horses, 39 quarters of oats are allowed; to make 3 casks of beer 17 quarters of malt; 30 hogs are mentioned, 2900 herrings, and 150 hard fish called "hakes," also 20 carcases of oxen, 15 of beef, and 20 of mutton, etc.

The castle, however, does not seem to have been satisfactorily provisioned. The King, writing from Linlithgow, on 17th November, 1301, says, that having ordered John de St. John to have 120 men-at-arms constantly arrayed to make forays on the

Scots of Galloway, till Easter next, and 10 men-at-arms and 100 foot to garrison Lochmaben, and a like number at Dumfries, commands them to seek a clerk without delay to see to their weekly pay, and also to the proper munition of these castles with dead stock, corn, and wine, and other "vivers," as he hears they are insufficiently provided; and on 13th December a sharp mandate is issued commanding money to be instantly sent to Sir John, who is in great want of it for these garrisons.

PROVISIONING AN ARMY.

On 21st November large orders were given for provisions from Ireland for the use of the Prince of Wales, and there were sent to the Castles of Dumfries and Lochmaben 1300 quarters wheat, 1300 quarters oats, 1300 quarters malt, 3000 quarters great fish, and 15,000 herrings; and on 5th December 200 casks of wine and 20 casks of honey.

With these preparations the King mustered at Berwick an army of 12,000 foot, and the Prince of Wales, now 16, had a separate command, whose forces marched by Dumfries into Galloway. This year's campaign, however, led to nothing, and a truce was arranged from January 26th, 1302, till St. Andrew's Day, that year.

Supplies were sometimes requisitioned and paid for according to valuations made by a jury of twelve. Thus, on January 4, 1303, James de Dalelegh, the King's receiver at Carlisle, bought and received from Richard Bouere, of Dundalk, in the port of Whitehaven, in the county of Cumberland, 64 casks of wine for the castles of Lochmaben and Dumfries, valued by 12 free men of the county in the merchant's presence, at 36s 8d each; total, £177 6s 8d.

In December, 1303, the garrison consisted of 2 banerets, 9 knights, and 71 esquires, 3 hoblers, 26 crossbowmen, and 100 archers.

Later there were 50 men-at-arms, 6 of them knights, 26 crossbowmen, 80 archers, 2 smiths, 2 porters, 2 carpenters, and 2 watchmen. Sir John de St. John had 2 bachelors and 12 esquires, Sir Richard Siward had his bachelors and 8 esquires, and Sir John de Botetourte, justiciar of Galloway, was warden.

On 13th April, 1304, £10 silver was spent for crossbows and quarrels for the king's use for the Castle of Dumfries, Sir

Mathew de Redeman, being sheriff, and in the following year a warrant issued required that certain castles, including that of Dumfries, be provisioned, and their houses and walls repaired.

KING EDWARD'S WARS.

The truce of 1302 being ended, Edward prepared to renew the war. An army of 20,000 men, mostly cavalry, under Sir John de Segrave, advanced towards Edinburgh. The force suffered disastrous defeat at the hands of the Scots, led by Comyn, on 24th February, 1303; but in the following year another great army, led by the King in person, overran the country without opposition, when the Scots, exhausted, made submission; Wallace alone stood out.

About the middle of September, 1305, the King, believing that resistance was at an end, proceeded to the settlement of a plan of government for the conquered country. He appointed sheriffs to the several counties, and Sir Richard Siward, who was well acquainted with the district, again became Sheriff of Dumfries and Constable of the Castle.

CAPTURE OF THE CASTLE BY BRUCE.

All this time from the year 1298 the Castle continued to be held by the English, but a change was impending. The patriot Wallace was ruthlessly put to death on 23rd August, 1305; but within a few months thereafter Scotland was again in arms. On February 10th, 1306, Bruce killed Comyn in the church of the Friars Minors of Dumfries, and seizing, according to Hemingburgh, his (Comyn's) fine horse, he mounted, and his men mounted, and they rode to the castle and took it.

THE MINORITE FRIARY.

The Minorite Friary, which stood at the corner of Friars' Vennel and Castle Street, is said to have been founded by Devorgilla, King John's mother. Mention of the Friars Minors is made in the Exchequer accounts of the year 1265, and the monastery may have been built a little earlier or later.

Not many years ago a massive gable wall, containing a great fireplace, believed to belong to the kitchen, remained standing within a house on the north side of the Vennel at a point about 25 yards westwards of the Castle Street end, and behind

the buildings there are still numbers of shallow burials, indicating the position of the garth. A few stones also have recently been recovered adjacent to the site, which have the characteristics of ecclesiastical work of the period. Of these the most interesting, perhaps, is a fragment of the sedilia which occupied the south wall of the chancel opposite the great altar, where Comyn was slain.

The Friary, founded about the middle of the 13th century, was yet comparatively new, and probably not more than 50 years had elapsed from its erection till the occurrence within its walls of the Comyn tragedy. It has been ascribed that the Friary was deserted after Comyn's slaughter, but that is incorrect, as the Exchequer accounts prove that King Robert Bruce paid the Friars annually in alms the large sum of £13 7s 8d, probably with the view of wiping out the crime committed before the altar of their church.

Bruce made no delay in the consummation of his high purpose:—

And syne to Scone in hy raid he, And wes maid King but langer let, And in the Kingis stole was set; As in that time was the maner.

Edward was much exasperated, as well he might be, at this unexpected turn of events:—

And quhen to King Edweard wes tauld, How at the Brwyss, that wes sa bauld, Had brought the Cumyn till ending, And how he syne had maid him King, Owt off his wyt he went weill ner.

The news reached Edward before 24th February, on which day, writing to Sir James de Dalelegh, he says, that having heard that Sir John Comyn and his uncle, Sir Ribert Comyn, are murdered by some people who are doing their utmost to trouble the peace and quiet of the realm of Scotland, he commands him to see to the peace and quiet of his lieges in his district, to the best of his power, and privately and advisedly warn them that they avoid all converse with the enemy in case of surprise or disgraceful damage. On the same 24th day Sir James and three

^{*} See also Paper by Mr James Lennox in the Dumfries and Galloway
Antiquarian Society Proceedings.

esquires started for Scotland, as is evidenced by the following account:—

"To the same Sir James, for his own wages and those of his three esquires, riding into Scotland immediately after the death of Sir John Comyn, about the recapture of the Castles of Dumfries, Caerlaverock, Tibbers, and Durisdeer, and elsewhere in Scotland, by the order of our lord the king and of the lord bishop of Coventry and Lichfield, the Treasurer, and for collecting and receiving farms and dues in the aforesaid parts and elsewhere in Scotland, and for fortifying the aforesaid castles and for paying the wages both of the men-at-arms and foot soldiers dwelling within the aforesaid fortifications, and to others, from the 24th day of February in the present 34th year, until the 19th day of November, in the same year ending, for 269 days, each day being reckoned, himself receiving for himself and his esquires 5s a day, £67 5s." The terms of this account make it appear that Bruce had possessed himself of several other castles simultaneously, or nearly so, with that of Dumfries, after the slaughter of Comyn, a circumstance which seems to infer premeditation and preparation.

Bruce could hardly, without a large following, and some pre-arrangement, hope to take by storm the Castle of Dumfries, strengthened as it had been by Edward. It is said the justiciary court was sitting. He may have got access as of right, and without challenge, no breath of the deed done having reached the place, which was distant a mile from the church. To succeed in this way a race had to be run against rumour. Bruce seized the fleetest horse, and won the race. An incident in the capture was the taking of Edward's constable, Sir Richard Siward. He was imprisoned in his own castle of Tibbers, then held for Bruce by Sir John de Seton.

Edward had his revenge. The Castle of Dumfries was retaken by Gilbert M'Dowall and men of Galloway on the 3rd day of March, from the men of Robert de Bruce, who had held it for a space of three weeks. Tibbers also fell to the English, and Sir John de Seton was in turn made prisoner. He was indicted by Edward, "as taken in Richard Siward's castle of Tibbers, which he, John, was holding against the king, for Robert de Bruce a traitor, and for aiding the said Robert in killing John Comyn in the church of the Friars Minors of Dumfries, in contempt of God and most Holy Church, and against the king's peace, on Thurs-

day next before Carneprevyum this year; and likewise on same day of the capture of the said Richard's person, then the king's sheriff of the county of Dumfries and constable of the castle, and at the capture of said castle, with said Robert." Sir John was sentenced to be drawn and hanged. The memory of Sir Christopher Seton, who met a similar fate at Edward's hands, has been kept alive at Dumfries by the vestiges of the "Crystol Chapel," on the site on which St. Mary's Church now stands.

These executions followed on orders by the King and Council that all present at the death of John Comyn, or of council or assent thereto, should be drawn and hanged.

Immediately on the recovery of the castle, the following were in garrison there:-Gilbert, son of Sir Dovenald, John de Gavelstone, Duugall de Gavelstone, Walter Duraunt, John Duraunt, William de Percy, William de la Mare, Richard de Colnehathe, John de Urre, John Arkarson, Patrick, son of Gilbert M'Loland, Ade de Eskdale, John de Harop, Ade de Kirkconnel, and Ade de Lochyan, esquires, with covered horses, and 40 archers, infantry. Their wages were reckoned from the 3rd day of March, on which day, as stated in the account, the said castle was retaken from the men of Robert de Bruce after the death of John Comyn. Sir Ade de Swyneburne, Knight, was appointed constable on 9th March, and entered on his duties 1st April. A little later, in May, Sir Thomas de Torthorwald, Sir Richard de Mareschal, Sir Henry de Maundeville, Sir Matthew de Egleles, Sir Matthew de Redeman, Knights, and Sir Henry de Percy, the king's lieutenant in Scotland, are mentioned, with their esquires, also artillerymen, light horsemen, foot archers, and others.

Sir Matthew de Redeman succeeded Sir Ade de Swyneburne in the constableship of the castle, on 2nd August.

The sum of £179 was, it appears by the accounts, paid as compensation for horses killed in the king's service at Dumfries and Lochmaben, from the year 1303. Sir John de Botetourte is stated to have received as compensation for 4 horses, priced for himself and his esquires, the sum of £76 and 1 mark. The executors of Sir John de St. John were paid as compensation for one horse priced for Terrie le Alemaunt, servant of the same Sir John, at Lochmaben, in the month of September in the 31st year, and which died in the king's service at Dumfries in the 32nd year, 8 marks.

On the recapture of the castle a stocktaking of the munitions took place, as was usual when a change took place. Sir James de Dalelegh had an account "for the destruction of 9 casks of wine and 2 casks of honey by the lord Robert de Bruce from the stores in the Castle of Dumfries, at the time in which he took the said castle when lord Comyn had been killed." Another account, which, however, is imperfect, mentions 221 quarters salt, and 182 horse shoes, as part of the "loss and destruction through the lord Robert de Bruce in the time of the killing of lord John Comyn, in the castles of Ayr and Dumfries."

Much activity is now observable in bringing together great quantities of victuals, and otherwise. 2698 quarters of wheat, 77 jars of flour, 2484 quarters of oats, 491 quarters of ground oats, 480 casks of wine, and 16 pipes; 136 carcases of oxen and 2 spaulds, and 33 bacons, were got from Skimburness and Saltcoats, where the said victuals were received as far as Carlisle, the castle of Dumfries, and the Wellhouse and abbey of Holmcoltram; 58 quarters 7 bushels of wheat, 79 quarters 2 bushels of ground oats, and 28 casks of wine, and 7 barrels of wine hooped with iron, were forwarded from Carlisle to the castle of Dumfries, for the munition of the same castle, both by land and by water. Payments were made for the wages of various messengers carrying letters to our lord the king and other magnates of the council of the king himself, containing the state of the land of Scotland, and of the king's enemies, etc.; for money paid for one great rope bought for drawing the bridge of the castle of Dumfries, for hemp bought for cables, great ropes for the engines, and for making ropes for the tounges; for making of the same cables and ropes from the aforesaid hemp, and for the carriage of the same from Carlisle to Dumfries; and for feathers and grease bought for the quarrels and sent to the aforesaid castle of Dumfries, etc.

On 3 May, 1307, Sir James de Dalelegh or his clerks or lieutenants at Skimburness is commanded on the king's behalf, with the utmost haste to send from the king's stores, or buy corn for the purpose, to the castle of Dumfries, 20 casks of wine, 100 quarters of malt, or barley, to make malt, and in the quickest manner possible to have the whole ground at Dumfries, by day and night, so that the flour and the malt also may be ready when needed.

Dumfries had become a centre from which supplies were dis-

tributed to the surrounding country as far as Carrick and Ayr, and victuals, and especially wine, were given out in considerable quantities from the stores. On 12th April the king's household in company of Sir John de Botetoute had 7 toneaux and a hooped barrel of wine, and about the same time a tonel was distributed to others; on 16th May the Knights, esquires, and sergeants, who were going to the foray, had 2 tons to divide among them; on the 17th 2 iron hooped barrels were distributed to Sir Henry de Percy; on the 18th Sir Ingram de Umfraville and Sir William de Felton received a tonel; and on 24th July Sir Ingram de Umfraville and Sir Alexander de Baliol were supplied at the instance of Amyer de Valence, with a tonel of the king's wine that they may better do the king's business on the enemy."

King Edward had on April 5th appointed Amyer de Valence, Earl of Pembroke and Henry de Percy his lieutenants and captains to put down the rebellion of Robert de Bruce, and Sir Robert de Clifford to assist the latter at Dumfries and elsewhere. On 24th May the king, writing to Amyer de Valence, says he is pleased to hear that the Earl was on the point of making an expedition against the enemy, and as to his request for money, he has ordered the Treasurer to advise with the chamberlain of Scotland and provide, "God Willing," what is necessary. He (the King) is sending Edward his son to Scotland with a strong force, and will himself follow as soon as possible. On 22nd May the Prince of Wales and numerous noble youths were knighted when a magnificent feast followed, at which two swans covered with nets of gold being set on the table by the minstrels, the king rose and made a solemn vow to God and the swans, that he would avenge the death of Comyn and punish the perfidy of the Scottish rebels. The Prince set out with a strong force for Scotland, and Edward himself followed, but being advanced in years and infirm he required to travel in a litter by slow journeys. He was detained at Lanercost by serious illness, but, disregarding his unfitness, proceeded to Carlisle, and after a slow and most painful journey ultimately reached the village of Burgh-upon-Sands within sight of Scotland resolute in purpose, but on the following morning, 7th July, he died in his 69th year and 35th of his reign. Edward II., a weak and indolent Prince, found it incumbent

Edward II., a weak and indolent Prince, found it incumbent that he should at least make some show of advancing the great scheme of conquest which his late father had so much at heart. Accordingly, about a month after his accession to the throne, the King set out with an army for Ayrshire. He passed through Dumfries, and journeyed as far as Cumnock, but at this point turning round he made his way back to England without having accomplished anything.

The Castle of Dumfries continued in the hands of the English. Robert de Clifford was keeper in 1309, thereafter Henry de Beaumont, and Dougal M'Dowall, of Galloway, followed in 1311. M'Dowall, it appears, was unpopular with the community about him, and in consequence of this state of matters he desired that the King should provide a residence for his family somewhere else. The King ordered accordingly. "For," the order runs, "the laudable service of his liege Dougal M'Dowall of Scotland, to his late father, and since his death to himself, whereby he has become hated by the enemy, and his wife and children need provision, gives them the manor of Temple-Couton in York, for their residence to the extent of £40.

M'Dowall seems to have stood well with the King, for he had a present of £212 9s 6d from the wardrobe in the year 1311, and later, in 1316, the King, for his loyal services, granted him an annuity of £20. It is no way surprising considering the vacillations of the time to find his son some time later adhering to the Scots.

MUNITIONING THE CASTLE IN M'DOWALL'S TIME.

22nd April, 1312.—The king commands Gilbert de Colvenue and Thomas de Lowther to pay the receiver at Carlisle 20 marks to victual the castle of Dumfries; and on the 29th May the bailiffs of Sourby and Werk in Tynedale are ordered to pay to the receiver £100 to fortify the castles of Carlisle and Dumfries at the seight of John de Weston and Dougal M'Dowall, their constables.

The accounts of the receiver at Carlisle for the year from 8th July, 1311, till 7th July, 1312, proceeds: "Sir Dougal M'Dowall Sheriff of Dumfries and constable of the castle for the munition of the same by the hands of Fergus M'Dowall his brother, receiver at Holm, and John de Monrethe, his clerk, receiver at Dumfries (during the year), 194 quarters 6 bushels oatmeal, 219 quarters 6 bushels oats, 1 cask 54 quarters, 1 bushel

salt, 108 stock fish, 80 casks wine, 5 bands of iron, 18 gadds, 64 bacons."

On 23rd July, 1312, M'Dowall attested receipt by the hands of John Monrethe, his clerk, from the keeper of the king's stores at Carlisle, for the munition of his castle between 9th and 20th days of July current, of 70 quarters wheat and 7 casks wine; and similar receipts by the constable for provisions were granted on 24th September and 19th November.

The Constable being dissatisfied with the munitioning of his castle complained to the king, who on 8th August commands the keeper of the stores at Carlisle to supply victuals to the garrison of Dumfries, as Sir Dougal has complained of his negligence in aiding them, whereby many of his men have deserted.

At this stage someone, writing to the king from Dumfries, says:—"That Sir Robert de Bruce intended to send Sir Edward his brother with the greater part of his forces into England, while he himself attacks the castles of Dumfries, Buittle, and Carlaverock, remaining there, and sending his light troops to plunder the north, for their support."

BRUCE AGAIN IN POSSESSION.

Whether M'Dowall was unable to hold the castle through want of munitions and consequent desertions of his men, we do not know, but as noted on the account book of the receiver at Carlisle, the Castle of Dumfries was surrendered on 7th February of this 6th year (1313) to Sir Robert de Bruce by Sir Dougal M'Dowall.

In the year 1334, 12th June, Edward Balliol, the English King's minor, conveyed by charter to Edward III. the Town, Castle, and County of Dumfries, to be incorporated in the kingdom of England: and on the 15th of the same month Peter de Tilliol was appointed Sheriff of the County and Keeper of the Castle.

STATE OF THE COUNTRY AFTER BRUCE.

Shortly after the death of Bruce anarchy prevailed over Scotland, while the English were again under a strong and forceful King, Edward III. Dumfries in the year 1335 is still under English rule. Sir Eustace de Maxwell, who styles himself holder of the barony of Caerlaverock, is sheriff, and

his accounts make it appear that the castle was waste. To the Sheriff, the King writes:—"The King to his beloved and faithful Eustace de Maxwell, our sheriff of Dumfries, in Scotland, Greeting; Since we have intrusted you with the keeping of our aforesaid county and the pertinents thereof, so that you may answer concerning the revenues accruing to us at our Exchequer of Berwick, as in our letters patent made thereupon is more fully contained, and have learned that the accounts which we hold you to be bound to render to us of your receipts of the said revenues from the time when you had the said charge, as yet remain to be rendered, at which we are much surprised; We therefore command you, firmly enjoining that, whenever you are forewarned by our beloved Thomas de Burgh, our chamberlain at Berwick, to render your said account at the aforesaid Exchequer, you, without making any excuse whatever, go and there render that account, as is customary, and according to the tenor of your commission above said; For we have commanded the foresaid chamberlain to hear that account and do further what the nature of the account requires in this part.

"The King being Witness; at the town of St. Johnstone, 13th day of August (1336); By the King himself."

Sir Eustace's accounts for the rents and dues of his sheriffdom discover how greatly the district had suffered through the war.

From many of the holdings both in town and country there was no return, because of their being waste, or for the reason that their holders had been ejected. The revenue suffered from this cause and also through the king granting lands to the sheriff and others on conditions terminating the dues to the crown. A few extracts will serve the present purpose.

This is the heading:—"Accounts of Eustace de Maxwell, sheriff of Dumfries, of the dues of the same county from the 15th day of October in the ninth year of king Edward the Third after the Conquest, up to the feast of St. Michael next following."

"The same renders account of £6 received from the term of St. Michael in the 9th year, from the Ward of the Castle of Dumfries, and not more, because the same sheriff will be able to raise nothing thence from the barony of Staplegorton, which was wont to render 20 shillings a year for the same ward, nor from the barony of Mallayknok, which was wont to render

20 shillings a year to the said ward, etc. Of the dues from the Burgh of Kirkcudbright in Galloway, from the said 15th day of October in the 9th year, up to the 8th day of November next following, on which day the king granted to John Mareschal to be had and to be held by himself and his heirs until the same king shall have provided for him elsewhere within the kingdom of Scotland 20 marks of land, to be had by him and his heirs by brief, there is no reply, because the said burgh was waste at the time of this account. Of the Mote of the Castle, and certain demesne lands called Kingsholm, at Dumfries, which were wont to be worth 60 shillings a year, there is no reply, from the foresaid cause, etc."

"From the barony of Kirkmichael, which belonged to Philip de Moubray, deceased, who held it in capite of the King of Scotland on paying to the Ward of the Castle of Dumfries 10 shillings a year, and was wont to be worth 100 marks a year, from the 1st day of October in the 10th year, on which day the barony was taken into the king's hand, until the rights of the same barony is settled. . . . up to the feast of St. Michael next following, there is no reply, because it is waste. From the barony of Tinwald, which belonged to Peter de Middleton, deceased, who held of the king in capite for the service of paying 10 shillings to the ward of the king's castle of Dumfries, and which was wont to be worth £20 a year, from the 20th day of October until the feast of St. Michael next following, and remaining in the king's hands through the minority of the heir of the same Peter, there is no reply, for the reason foresaid, etc. The sum of the whole received, £17 18s 4d, and in wages of one man guarding payments in the same place receiving 1d a day during the time of this account, for 350 days, 29 shillings, 2 pence, and so he owes £16 9s 2d, which he has paid, and is satisfied."

The following relates to the Burgh:-

"Account of Gervase Avenel and William Malkynson, John Smerles and John de Lang, bailiffs of the burgh of Dumfries, from the said 15th day of October until the feast of St. Michael next following."

"The same renders account from the farm of the burgh of Dumfries from the terms of St. Martin and Whitsuntide last past, of £9 16s 8d, and 2 shillings due from the burgage of William Malkynson in the said burgh, being in the king's hand, through

the ejection of John, son of Laghlan, and John Mounville through the time aforesaid. Of 16 pence of annual rent due from a certain holding of William Malkynson in the aforesaid burgh, remaining in the king's hand through the ejection of Gilbert de la Haye, and 8 pence of rent due from the holding of Gilbert le Smith in the same burgh, remaining in the King's hand through the ejection of the same Gilbert, there are no replies, because the two holdings lay waste at the time of this account. From one holding in the same burgh remaining in the king's hand through the ejection of Earl Patrick (who was also ejected from the lands of Glencairn) there is no reply, because the said holding was waste during the time of this account. The sum of the whole received £10 1s 0d, which they paid up on their account, and are satisfied."

The same bailiffs, William Malkynson and John Smerles, collectors, of the new customs, of Dumfries, accounted for 7 shillings and 11 pence received, which they paid at Berwick on the 12th day of September in the 10th year without acquittance, and are satisfied.

Famine was rife in the country. The English garrisons of Berwick and Jedburgh, driven from want of food to become bands of robbers, plundered friends and foes alike, and the men-at-arms, the foot soldiers, said seized the dead horses, leaving nothing for their sustenance. William de Dacre, writing to John bishop of Winchester, the Chancellor, "Tells the news of the march where he is, viz., that the vale of Annan is so utterly wasted and burned that from Lochmaben to Carlisle, on the Scottish side, there is neither man nor beast left."

CONCLUDING REMARKS.

We have endeavoured to recover something of the form and character of the Castle of Dumfries, and its relation to the distressful war so long carried on between the realms of England and Scotland.

The natural advantages of the situation, the formidable nature of the fortifications which we have seen, were cast about it by King Edward, and the vestiges which remain attest it to have been, according to the requirements of the time, a stronghold of no mean order; and it with Lochmaben and Caerlaverock commanded one of the gates of Scotland, and it served as a centre

for military operations over a wide area of country around. One of the greatest of England's monarchs, Edward the First, reared its defences under his personal supervision; it was taken and retaken by a Scottish King, no less famous, Robert de Bruce; and with associations so interesting we submit that the vestiges of the ancient Edwardian Dyke at Dumfries is not less worthy of preservation than is the fragment of the wall of Berwick, which is now to be cared for and saved from further waste.

We may add that locally the castle was an important institution. Dumfries being the royal castle of the county constituted Dumfries a royal burgh, and the castle the headquarters of the sheriff as the royal authority over the shire. The baronies of the shire in a number of cases, as has been seen, were held by tenure of ward of the castle, which was also the head place or caput of the county within the old bounds, including Galloway on this side of Cree. Thus, as Dr George Neilson has shown, Archibald the Grim by charter provision of 1367, for his lordship of Galloway, was to pay a white rose of blench form yearly at our Castle of Dumfries.

5th January, 1906.

Chairman-Mr Robert Murray, V.P.

New Members.—Mrs Arnott, Sunnymead, Maxwelltown; Miss Chrystie, Irving Street; and Rev. J. Murphy, Park Road.

Notes on Southern Nigeria. By James Watt, M.A. (Summarised by the Author.)

The Protectorate of Southern Nigeria was formed in 1900 by the amalgamation of the Niger Coast Protectorate with that part of the Royal Niger Company's Territory which lay to the south of Idah, on the River Niger. The High Commissioner of Southern Nigeria was made Governor and Commander-in-Chief of Lagos in 1904. The remaining portions of the Royal Niger Company's territories form the Protectorate of Northern Nigeria.

The estimated area of Southern Nigeria is 65,000 square

miles; the native population is estimated at about three and a half millions.

The imports for 1904 were valued at £1,792,000; the exports at £1,718,000.

Forcados, the principal port, is about eighteen days' voyage from Liverpool. Steamers call at the Canary Islands, Sierra Leone, Monrovia, the Gold Coast, and Lagos.

The River Niger flows north and south through the Protectorate, and issues through many mouths connected by a network of creeks into the Gulf of Guinea. The Cross river forms a similar estuary in the east.

The region intersected by the creeks and outlets of these estuaries is swampy, and has few native settlements.

Beyond this lies the most fertile region of the Protectorate, rich in palm trees and well cultivated. It has low, rolling hills.

This extends as far as Ungwana, on the Cross River, and Onitsha, on the River Niger, where the true African continent may be said to begin. Beyond these points we have rock scenery.

In the Eastern part of the Protectorate is an interesting region of igneous rock formation, with granite, gneiss, and similar rocks. Here there are mountains forming part of the Kamerun system. Generally speaking, the rock formation of the remainder of the Protectorate is of sedimentary origin.

The principal exports are palm oil and palm kernels. Timber is a great and increasingly important article of trade. The cultivation of cotton is experimentally undertaken.

The oil palm grows in profusion in all parts of the Protectorate. Palm nuts grow in clusters of two or three feet in height. Oil is expressed from the fleshy, outer covering of the nuts. This leaves the hard nut, which, when cracked, yields the palm kernel.

Formerly the palm oil trade was largely in the hands of native middlemen, who collected the oil in the up-country markets and brought it to the European traders. Now the up-country traders are learning to bring their own produce direct to the European trading stations.

Trading firms at the present day have large establishments upon land. Formerly hulks were used. When trade was first established ships went round the various trading towns and gave credit to native traders. After completing their circuit, they went round again to collect the produce gathered by them.

The oil trade was the staple trade, which took the place of the slave trade, which did so much injury to the native races of West Africa and to the reputation of the European races which took part in it.

The Government has undertaken the charge of the forests, and prevents the deforestation of the country and the destruction of the rubber trees. Nurseries and plantations of rubber are established in the principal villages.

The British Cotton Growing Association has established two experimental plantations, and the natives are being encouraged in the cultivation of cotton.

Southern Nigeria is inhabited by a great variety of native races. The only great native State was Benin, whose people are superior in intelligence to the other races of the Protectorate.

Much good work is done by the various missions: that of the United Free Church at Calabar and those of the Church Missionary Society and the Roman Catholic Church upon the River Niger.

THE CHRYSANTHEMUM SPORT EXHIBITED AT LAST MEETING. By the SECRETARY.

On the table at last meeting there was a specimen taken from a Chrysanthemum grown in the garden of Mr J. Bryce Duncan of Newlands, Kirkmahoe. Those who observed it will, perhaps, recollect that some of the flowers were of a canary yellow, others of an orange red shade, and another had one-half of the flower of either colour. The variety whence this was obtained is named Lizzie Adcock, which is itself a sport from one called Source d'Or. This sport at Newlands is remarkable as one which is derived from a variety hitherto giving the only recorded instance of a sport in which the flower head is composed of two equal divisions of colour, one not yet recorded in the family of Chrystanthemums save in the case of the variety Source d'Or and its sports. The typical Chrysanthemum called Source d'Or has bright orange-red flowers shaded with gold, but a sport of it is recorded which has given not only two colours but two different forms of florets on the one flower-head. This sport had half of the flower-head

composed of spreading, flat, canary-yellow ray-florets, and the other half was composed of recurved dark golden bronze florets with revolute edges. The variety Lizzie Adcock, from which the Newlands flower originated, is a bright golden yellow flower. The Newlands sport showed a reversion in some of the flowers to almost the typical Source d'Or, but more bronzy than that variety, but others were more of a canary yellow than the parent, Lizzie Adcock. The other flower, which had half of its flower-head bronze and the other half canary yellow, had also the bronze coloured florets larger, broader, and possessing more substance than the others. The cause of these sports is difficult to account for, but I dealt incidentally with the subject in a paper I read to this society some time ago, and which is to be found in the Society's "Transactions," Vol. XVII.

Since writing that paper I have discovered an article dealing with the whole question of Chrysanthemum sports in the Journal of the Royal Horticultural Society, and contributed by Professor Henslow. It is too lengthy to be given here, but after an exhaustive analysis of the various sports, Professor Henslow discusses the question of the cause which produced these. In my own paper the general conclusion was that anything which tended to alter the conditions of growth increased the sporting tendency of the plant. Practically, Professor Henslow's conclusions are the same, climatic influences being apparently the most highly favoured by that able botanist. He also, however, speaks of nutrition as likely to have its effects, and recently some investigations made by Sir Sydney H. Vines, and referred to at some length in his presidential address to the Linnean Society of London, lead one to think that probably it is to the powers of nutrition that many variations are due. Popularly described, the investigations of Sir Sydney Vines and others show that plants possess much the same digestive secretions as ourselves and other animals, and that these are used to convert the stores of proteid they have built up, and which would otherwise be insoluble, into the materials they require by means of digestion into mobile matter. Probably we shall eventually discover how to influence these juices (to use a common expression) so as to modify the forms and colours of plants in a way hitherto impossible.

26th January, 1906.

Chairman—The PRESIDENT.

NEW MEMBERS.—Mr and Mrs T. A. Halliday, Dumfries.

The Weather of 1905. By Rev. William Andson.

The past year has been in some respects remarkable in point of weather. On the whole it has been a favourable year as far as temperature and sunshine are concerned, but marked by a deficiency of rainfall, which entitles it to be described as the driest of the last twenty years or more.

To begin with the barometrical pressure, on the variations of which the state of the weather so much depends, I find that the highest reading of the year occurred on the 12th December, when it rose to 30.890 in., and the lowest on the 15th March, when it fell to 28.365 in., thus giving an annual range of no less than 2.545 in. It is worthy of note that not only in December, but also in January, there was an exceedingly high reading, viz., of 30.856 in, on the 28th of that month. These are both abnormally high readings, occurring but rarely in many years. And taking the year as a whole, there were no fewer than six months in which the mean pressure (reduced to 32 degs. and sea-level) exceeded 30 inches. These months were January, February, May, June, July, and December; and they were all very favourable months in point of weather; while those which had the lowest mean pressure, viz., March, with a mean of 29.570 in., and November, with a mean of 29.601 in., were the most unfavourable. The mean pressure for the whole year was 29,933 in., which is a little above average. Low readings falling below 29 in. occurred in January, February, March, and November, which for the most part were accompanied by strong winds and heavy rains. But these cyclonic disturbances were on the whole less numerous than usual. One of the worst was about the middle of March, when a good deal of damage was done both by sea and land; and others occurred in the end of November and first part of December.

Temperature in the shade, 4 feet above the grass. The highest readings of the year were recorded on the 23rd June and the 9th July, when the s.r. thermometer registered 84.5 deg. The lowest reading was on the 19th November, when a minimum

Report of Meteorological Observations taken at Dumfries during the year 1905.

	Relative Humidity. Sat. = 100.			98	83	84	7.9	73	73	7.3	2.6	83	80	84	98	80
Lat., 55° 4' N.: Long., 3° 36' W.; Elevation above sea level, 60 feet; Distance from the sea, 9 miles. Rain Guage, 70 feet; Diameter of Kain Guage, 5 inches; Height of Rim above Ground, 10 inches.	Temperature of Dew Point.		Deg.	35.8	35-2	38.3	37.5	42.2	-09	2.19	49.6	8.09	37.3	36.2	38.9	41.7
	HYGRO. METER.	Mean Wet Bulb.	Deg.	38.3	-88	40.0	40.9	8.44	54.5	2.99	53.4	9.09	41.1	39.1	41.3	45.2
		Mean Dry Bulb.	Deg.	40.	40.5	43.	43.8	52-	58.8	9.19	57.2	53.2	43.6	41.1	43.	48.1
	RAINFALL.	Days on Which it fell.		21	15	24	19	12	9	14	14	16	12	21	19	194
		Amount for Month.	ij	1.22	1.94	4.06	3.42	2.01	1.82	2.33	2.95	1.86	2.23	3.86	1.83	30.57
		Heaviest in Month.	In.	0.43	0.58	0.48	9.0	1:37	0 59	1.06	0.51	0.52	0.63	22.0	0.49	1.37
	SR. THERMOMETER. In Shade, 4 feet above grass.	Mean temper. of Month.	Deg.	39 7	40.	44.	44.3	1.19	6.89	.29	57.1	53.6	14.1	40.3	43.4	48.2
		Mean Minimim.	Deg.	34.7	35.4	37.2	37.	45.6	49.1	53.1	49.1	46.1	36 5	35.1	40.	41.3
		Mean Maximum.	Deg.	44.7	8.94	2.09	9.19	60.5	9.89	8.02	.99	1.19	51.6	45.2	47.	55.3
		Monthly Range.	Deg.	-53	29-7	35.	37.7	41.5	8.94	43.2	36.5	38.	38.5	33.5	24.	63.5
		Lowest in Month.	Deg.	25.	25.8	.62	25.3	31.8	38.7	413	39.3	33.	24.2	.61	28.	-61
		Highest in Month.	Deg.	54.	55.5	.19	.29	73.	84.5	84.5	2.92	71.	.89	52.5	52.	84.5
	BAROMETER.	Mean for Month at 82° and Sea Level.	In.	30.158	30.016	29.570	29.803	30.115	30.028	30.036	29.852	29-933	29-997	29.601	30.091	29-933
		Mange. Mange.	In.	1.915	2.010	1.895	1.090	1.398	0.820	0.644	1.119	1.074	1.547	1.551	1.519	2.545
		Lowest in	In.	28.941	28.650	28.365	29.130	29.075	29.700	59.659	29.181	29.273	29.003	28.670	29.371	28.365
		Highest in Alonch.	In.	30.856	30.060	30-260	30.550	30.473	30.220	30-273	30.300	30.347	30.220	30.221	30.890	30.890
	1905.	Months.		Jan.	Feb.	Mar.	April	May	June	$_{\mathrm{July}}$	Ang.	Sept.	Oct.	Nov.	Dec.	Year
				7.7	Ŧ											

WIND—											
N.	N.E.	E.	S.E.	s.	S.W.	w.	N.W.	Var.			
161	$36\frac{1}{2}$	29	46	20	$86\frac{1}{2}$	$59\frac{1}{5}$	$53\frac{1}{2}$	$18\frac{1}{2}$			

of 19 deg. was recorded. The annual range was thus 63.5 deg., and the mean temperature of the year was 48.2 deg. The annual means since I began to take observations in 1887 have varied from 46 deg. in 1892 to 49.5 deg. in 1898; the mean of nineteen years being 47.6 deg., so that the mean temperature of the past year was fully half-a-degree above the average. The warmest month of the year was July, with a mean of 62 deg., being two and a half degrees above the average; and the next warmest June, with a mean of 58.9 deg., which was also more than one degree above the average of 57.7 deg. And these were both extremely favourable months, with an amount of sunshine considerably in excess of the mean, and a larger proportion of really warm days than what is usual. June, for example, had five days with maxima exceeding 80 deg. and eight days with maxima of over 70 deg.; while July had sixteen days with maxima of 70 deg. to 80 deg., and two of them above 80 deg. The coldest month was January, with a mean of 39.7 deg., and the next coldest November, with a mean of 40.3 deg. The average mean temperature of November is 43 deg.; and the considerable deficiency which marked the November of 1905 was due to a cold snap which occurred between the 17th and the 21st in connection with a northerly type of weather, during which the lowest reading of the year was recorded, and it may also be noted that October had a similar experience of northerly, north-easterly, and northwesterly winds for about a week after the middle of the month, with night frosts of considerable severity, which lowered the mean temperature of the month from 47.6 deg., which is the average, to 44 deg., and for the particular week referred to after the 16th to 39.6 deg. The other winter months were characterised by extremely moderate weather, December, for example, showing a mean temperature of 43 deg., not less than 5 deg. above average, and January and February means of 2 deg. above average. It is a remarkable fact, which should not be passed over without notice, that there was a week in the beginning of December which had a temperature little more than one degree below that of the corresponding week in June, the one being 50.5 deg., and the other no more than 51.7 deg. This mildness of the winter months continued into March, which, though boisterous and unsettled, as it usually is, had a mean temperature three degrees above average, and was remarkably

free from the northerly and easterly winds which commonly prevail at that season. But April brought a change, with a temperature scarcely higher than that of March, a snowstorm in the end of the first week, and an amount of frost in first half of the month which made it much liker a winter than a spring month. aggregate degrees of frost were 16.4 deg., occurring in six nights, and exceeding that experienced in December. But this was more than compensated by the more auspicious weather of May and the summer months which followed, which were hailed as a happy return to the sunshine and warmth which are not infrequently conspicuous by their absence. The result was that, although the unfavourable weather of April, which was both cold and wet, awakened fears of a late harvest like that of 1903, it turned out to be earlier than usual, except in the far north, which was subjected to rainier conditions, and proved to be both abundant in quantity and excellent in quality.

I now pass on to the rainfall, in the deficiency of which we find the special characteristic of the weather of 1905, which distinguishes it from that of many previous years. The whole amount for the year was 30.57 in., with 194 days on which it fell. I have not noticed in this account the days in which snow fell and the amount separately from rain. But I find on looking over the record that there were only four days on which this occurred, two in January, one in February, and one in April, and that the amount when melted and measured was only 0.49 in. average annual amount over nineteen years is 37.31 in., so that the deficiency for the past year was nearly seven inches, which is equivalent to almost seven hundred tons of water per acre. This deficiency was spread over the greatest part of the year. were nine months in which the amount was less than the average, viz., January, February, May, June, July, August, September, October, and December; and only three in which it was above, viz., March, April, and November. The wettest month was March, with a record of 4.06 in., which is an inch and a half more than the mean, and the driest was January, which is nearly the same amount less than the mean. One peculiarity of the past year was the dryness of the winter months, January, February, and December; but it was likewise characteristic of the late spring and summer months, May, June, and July, during which the comparative absence of cloudy skies and frequent showers resulted in

a proportionate increase of the sunshine and warmth which are so important at that season of the year; while August also, although marked by greater rainfall than the preceding months, was also comparatively dry and warm; and September, so important as a harvest month, was dry and cool. The following note will bring out the dryness of these months:—In May there was a period of 16 days, from the 7th to the 23rd, during which only 0.01 in. of rain fell. In June there were 11 days from the 6th to the 16th, which were rainless, and again from the 21st to the 30th, and this was continued into July for ten days, so that from the 21st June to the 10th July there was a rainless period of no less than 20 days. Once more in September there was no rain from the 15th to the 27th, a period of 12 days. In respect of rainfall, 1905 was the antithesis of 1903, for, while the latter was the wettest of all the years over which my observations have extended, with a record of 50.45 in., 1905 was absolutely the driest. The only approach to its record of 30.57 in. was in 1902 and 1887, which registered 30.90 and 30.99 in. The result of this unusual dryness was that in many parts of the country there was a scarcity in the water supply for domestic and industrial purposes, which caused no small amount of inconvenience. this was more felt in the eastern side of the country, where the normal rainfall is considerably less than in our own south-western district. And perhaps it will not be considered out of place that I should take notice of its effect upon the river Nith and upon the salmon fishing carried on during the netting season. So low was the river during the greater part of that season, and so rarely was it flooded, that the conditions were very unfavourable for the ascent of the fish to the upper reaches; and the fishing was in consequence exceedingly unproductive, so unproductive, as Mr Turner informed me, as to be insufficient to pay the expense of working it. Both these facts tend to show that while a dry season may have its pleasures and advantages it has also its drawbacks and disadvantages. To this account of the state of the river during the past year I may add that there was one occasion on which the tide rose to so great a height as to overtop the caul or weir, and to cause the most extensive flooding of the Sands. This was not due in any degree to the river, for there had been but little rainfall immediately before, but solely to an extraordinarily high tide on the second day after the full moon in

March, and during the prevalence of strong southerly and south-westerly winds. I believe this is not an altogether unprecedented phenomenon, but it is at least exceedingly rare, so rare that I do not myself remember of having observed it during the nearly twenty years to which my observations extend.

With regard to the hygrometrical observations, I have only to add that the mean reading of the dry bulb thermometer for the year was 48.1 deg., almost exactly the same as the annual mean temperature, which is 48.2 deg. And the mean reading of the wet bulb was 45.2 deg.—from which the temperature of the dew-point was calculated as 41.7 deg., and the relative humidity at 80 (saturation being equal to 100). This is lower than the average by 3, the annual mean over a series of years being fully 83, and corresponds with the comparative dryness of the year. With regard to wind direction, the most prevalent, as usual, was S.W., which blew on $86\frac{1}{2}$ days; the next, W., with $59\frac{1}{2}$ days, and N.W., with $53\frac{1}{2}$. South blew on 20 days, S.E. on 46; N.E. on $36\frac{1}{2}$; E. on 29; N. on $16\frac{1}{2}$; and calm or variable was $18\frac{1}{2}$. The sum of those with a southerly and westerly direction was 206, and of those with a northerly and easterly was 135.

The Chairman asked how Mr Andson accounted for the extraordinary rainfall of 150 inches on the Cumberland hills, and also what was the general track of storms visiting the country.

Mr Andson said that the great rainfall mentioned by the president was recorded at a station in the Cumberland hills situated four or five hundred feet above sea level, and it was the situation in the midst of the Cumberland mountains that accounted for the rainfall, as also did the elevation of some parts in the midst of the Galloway hills, where the fall was 50 or 60 inches. At the approach of a depression the wind usually backed to the south-east, and then veered to the south, south-west, and west.

Dr Maxwell Ross moved a cordial vote of thanks to Mr Andson for his valuable contribution. It was specially interesting in relation to the state of water supplies and to the river Nith. He was much interested to observe that, although in the case of the Dumfries observation station the rainfall for 1905 had been the lowest that Mr Andson had recorded, yet it was not the lowest at some of the other stations. For example, in the case of the

stations at Lochmaben and Ericstane, the rainfall for the year was slightly in excess of that of 1902; and Dr Hugh Robert Mill, in his preliminary communication to the "Times" the other day, indicated that, while last year was certainly a dry year, we had to go back to 1889 to get a year in which there was less rainfall. With reference to the reputation for heavy rainfalls in the west of Scotland, it was noticeable that the increase in the rainfall last vear was recorded not in the west, but in the east of Scotland-Aberdeenshire and at stations south of the Moray Firth. the rainfall was somewhat in excess of the normal. Taking the British Isles altogether, the average loss for the year would be about five and one-tenth inches. That represented a considerable reduction in the rainfall, and it explained why it had happened that so many towns had experienced a deficiency in their water supply. There had been numerous complaints of such deficiencies in this district, all largely due to the low rainfall. Dr Ross mentioned that from reports sent to him from such stations as Castle Milk, Lochmaben, Ericstane, and Ewes, he gathered that the average rainfall for Dumfriesshire was about 39 inches for the year. At Cargen it was lower than it had been for a number of years, being 34 inches. The rainfall there was always greater than it was at Dumfries, because of the situation of the place.

Excavations at Holywood. By Dr J. W. Martin.

Dr Martin related the results of certain excavations in connection with the extension of the churchyard at Holywood. These, he said, revealed the presence of a very solid and lasting building, which there could be no doubt was nothing less than the ancient walls of the old abbey of Holywood. A great stone wall of masonry had been encountered beneath the surface, running east and west, and extending from the roadway about 45 feet. The wall was made up of large freestone blocks in front, large whinstone blocks behind, with a solid packing of lime and masonry. The breadth of the whole was about six feet, and at one part as much as 7 feet 3 inches; while the height was about 5 feet 6 inches. A number of curious moulded stones had also been found. Dr Martin supplemented his description of the ruins by the production of a number of human bones found on

the scene, and he also showed coins (one of them of the period of Henry II.) found in graves in the churchyard.

Mr Barbour observed that the ruins that had been excavated were certainly part of the ancient abbey buildings, but whether they were part of the ancient abbey itself or not was another question. Personally, he would not go the length of saying so, though there were certain evidences to support the theory. had not seen any positive evidence of ecclesiastical buildings at the churchyard, however, and he did not think they should go beyond what they could actually prove. A great many interesting mouldings had been found, and it was to be learned from these that the period was generally early English. He produced a slate that had been unearthed, and which he supposed must at one time have been taken from a quarry at Routin' Bridge, where such slate was to be found. He also produced a very curious carved stone, the character of which showed that the original sculptors must have possessed a good deal of humour.* Barbour added that he was informed the heritors of Holywood had agreed to the preservation of the excavated wall.

2nd February, 1906.

Chairman-Mr James Barbour, V.P.

Extracts from the Records of the Burgh of Lochmaden. By E. B. Rae, Town Clerk.

Lochmaben may justly claim to be considered one of the oldest burghs in Scotland, having been the capital of the Western Marches and ancient shire or Stewartry of Annandale. Various conjectures, more ingenious than correct, have been made as to the origin of the name of the burgh. The Gaelic loch-maol-ben signifies the Lake of the Bald or Smooth eminences, hence Lochmaben. The father of the present laird of Rammerscales, who was an authority on the subject, considered that Malben or Maben was simply a contraction for Magdalen, the patron saint of the burgh, hence Loch Malben or Maben. It was also supposed

^{*} A plan of the wall is preserved in the Society's Portfolio,

to be called Loch-ma-ban, meaning "The Lake in the White Plain," in allusion, it is presumed, to the white mists that prevailed at certain seasons of the year. The most probable conjecture is that Mabon, meaning a warrior, gave the name to the burgh, which in ancient times was no doubt the birthplace of heroes and warriors. In this connection it is curious to note that the name Mabon is conferred upon a well-known Welsh member of Parliament.

The existing Charter of the Burgh was granted by King James VI., and is dated 16th July, 1612. The narrative clause is as follows: "Be it known, Because, understanding that our most noble Progenitors of most worthy memory, and beyond the memory of man, erected and called the town of Lochmaben, lying in the Western Marches of our Kingdom of Scotland, within our Stewartry of Annandale, into a free Royal Burgh, with all and sundry the privileges and immunities of a free burgh; and also gave and granted to the free Burgesses and Inhabitants of the same, and their successors, divers and various lands, fishings, farms, profits, and possessions of the same; And that the said Burgesses and free Inhabitants of the said Burgh of Lochmaben and their predecessors, beyond the memory of men, were in possession of the said lands with the pertinents lying within the bounds above mentioned, as their own proper lands without any impediment and obstacles; and on account of the by-past great tumults, disturbances and wars, and incursions of foreign enemies, which were at that time in Scotland, the said Burgh of Lochmaben was often and at divers times burnt and spoiled, with all the ancient Charters, Infeftments, Evidents, and Erections of the said Burgh given and granted by our most noble progenitors, all which being within the said Burgh at the time were lost, burned, and destroyed." It will be seen from the terms of the narrative clause that this is not the original charter of the burgh. Tradition says that Lochmaben was created a royal burgh by King Robert the Bruce; and the Reddendo clause of the charter shows that it was a royal burgh in the year 1447, for the burgh maill of 40s is declared to be "the ancient duty formerly paid by the Provost and Bailies of the said burgh according to an account rendered by them in our Exchequer in the year 1447." As the burgh had its Provost and Bailies in the year 1447, and paid burgh maill like other burghs, it is very probable that it had existed as a royal burgh for at least a century before, and owed its origin to King Robert the Bruce.

The original burgh charter, believed to have been granted by Robert the Bruce, is said to have been destroyed in 1463, when the town of Lochmaben was burnt in a raid made by the Earl of Warwick. The early records of the burgh have disappeared in some mysterious way, and no trace of them can be found. The minute books of the burgh are also defective, and do not go further back than 1718. The first minute is dated 29th September, 1718, when the annual election of the Provost, Magistrates, and Councillors was held, William, Marquis of Annandale, being elected provost. As shewing the free and easy customs indulged in by the inhabitants, it is recorded that complaints having been made to the Town Council that the streets were obstructed by some of the inhabitants of the burgh being in the habit of building peat stacks and laying down middens in the streets, a committee was appointed to deal with the matter, and a penalty of 10 pounds Scots imposed upon any inhabitant continuing the practice thereafter. On 24th September, 1720, the Town Council, "taking under their consideration the great loss which the community is at through the want of a tolbooth, they unanimously resolved that whatever money shall be found in the treasurer's hands or due to the town shall be applied towards the building of a Tolbooth, and seeing that the town will not of themselves be able to promote and accomplish so good and useful a work they request John Shand to make application at the next annual convention for help that way, also to apply to the Marquis of Annandale, late Provost and Steward of the Stewartry, for assistance towards the building thereof." In the following year the subject was again considered by the Town Council, and, as it was reported to them that many to the burgh were willing to contribute well-wishers building of a Tolbooth provided generosity was not misconstrued, the Council resolved, 'to accept of what any person pleases to contribute or give that way upon this express provision, that the person that is the giver declares by a writ under his hand that it is not in view of the elections of the burgh, but given as a free gratuity, and the person or persons giving are to be recorded in the town's books with the sums given by them, and the Magistrates and Council hereby promise and declare faithfully that they shall not on account of anything that

may be given that way promise votes to any person or persons in the future elections.''' The Marquis of Annandale contributed 750 merks Scots towards the building, in addition to 400 merks Scots previously subscribed by him. On 29th September, 1722, the first reference to the town clerk is made, where it is stated that Captain John Henderson of Broadholm, who had been appointed in 1702 town clerk for life, "for giving out extracts of the Acts of Council to those that had not agreement or interest, but only designed to subvert the constitution of the Burgh, and to disturb the peace of the burgh by pretended reductions of the late elections to the injury of the public good thereof, the said Mr Henderson being an abettor and promotor of these disturbances," the Town Council annulled and made void the Acts of Council under which he had been appointed, and dismissed him from office, and appointed Captain John Hounslow as town clerk in his place. In the minute of 27th August, 1723, it is noted that the Bailies and other members of the Town Council appeared before two ministers appointed by the Presbytery of Lochmaben, and declared a call in favour of the Rev. Edward Banockle as minister of Lochmaben. The following entry, on 8th November, 1728, speaks for itself:—"The which day the Magistrates and Council of the Burgh being assembled in common council, and having under their consideration the several and repeated complaints made to them on account of several of the heritors within the burgh setting houses to persons who could not give any account of themselves, and wanting certificates of their last abode, and also considering a petition given into them this day by the minister and elders, complaining that the persons therein mentioned and others now living within the burgh without certificates of their former abodes, and recommended to the Magistrates to exercise their power against such persons, who cannot give an account of themselves, and likewise having under their consideration that several persons come to reside within the burgh and exercise their employments such as merchant traders, sellers of all kinds, keepers of public-houses, and others exercising their trade as mechanics without so much as acknowledging the magistrates or recognising their freedom to exercise their said employments according to the custom and laws of Royal Burghs; therefore the Magistrates and Council, in order to prevent such practices, doth enact and hereby enacts that for hereafter no

heritor within the Burgh shall set any house to any persons whatsomever without first they advise the magistrates that they may
know the character of the persons, and that under the penalty of
four pounds Scots for each failure, and that each heritor shall
enact themselves that any such houses shall in no manner of way
be hurtful or burdensome to the burgh, and it is likewise hereby
enacted that no persons whatsomever that shall happen to come
and reside within the Burgh shall exercise any employment or
trade within the same without first applying to the Magistrates for
their freedom under the pains contained in the Act of Burghs, and
practised by the burghs, and the Burgh Officer is hereby ordered
to make out a list betwixt now and the next meeting of the Council
of those persons in the Burgh that have exercised their employments or trade within these three years past and have not applied
to the Magistrates, that justice may be done."

The Common Good of the Burgh in 1730 was so small in amount that Provost Sir James Johnstone intimated to the Council at their annual election meeting that he would pay his own expenses in attending the Convention of Royal Burghs as the Council's representative, and at the same time would discharge the burgh for all past expenses incurred by his late father in representing the burgh.

In the Charter of the Burgh power is given to hold a market weekly on Sunday, along with two free fairs in the year, viz., on St. Magdalene's and St. Michael's Days, and continuing the same for the space of eight days. By minute of meeting of 14th June, 1731, the Magistrates appointed Bailie Henderson "to get printed advertisements for the Saint Magdalene Fair of Lochmaben, to be holden on the last Thursday of July, customs free for all horses, sheep, lambs, kye, and merchant ware, and for the encouragement of those that bring lambs and get them not sold to get liberty for them to be grassed till the Thursday after, being Lockerbie market." Some of the subscribers to the building of the Tolbooth not having paid their subscriptions, the Council, by minute on 13th October, 1732, ordained the clerk to make out a list from the Town Book of such gentlemen as subscribed, and were deficient, and ordained that the deficients be spoke with to pay up to the extent of their obligations, and if they declined they were to be sued for payment in the jurisdiction wherein they lived. On the same date the Council appointed the Burgh

Marches to be ridden upon the 30th day of October next. This entry is interesting as being the first intimation in the existing burgh records of this ancient ceremony being carried out. It does not appear to have been made an annual event in Lochmaben, as is the case in a few other burghs, but was revived at intervals of a few years. In the minute of 18th August, 1733, Lord Hope's resignation as a Councillor is inserted as follows:-"I, Lord John Hope, one of the Town Council of the Burgh of Lochmaben, considering that I cannot attend the consultations about the affairs of the said burgh or the elections thereof, therefore I hereby resign and renounce my place and office as one of the Council of the town of Lochmaben with all the privileges thereto belonging, and that in the hands of the Magistrates and Town Council of the said Burgh of Lochmaben, with power to them to elect and choose another Councillor in my place with the same privileges that belonged to me."

At a meeting held on 17th May following, in reply to a protest made by Sir James Johnstone of Westerhall as to certain illegalities at the meeting which accepted of Lord Hope's resignation, it is mentioned that the Council "shall be extremely glad that all culpable and underhand dealing be brought to light before a competent judge that it may appear who were the authors and promoters of them."

In explanation of the following minute it may be stated that under the Scottish Parliament the burgh returned one member elected by the Council. From the Union to 1832 the Town Councils of each burgh chose a delegate, with whom the election rested. The election of a delegate often gave rise to scenes of riot and disorder, as we shall afterwards see, as the Lochmaben representative was understood to have the casting vote and considerable responsibility was attached to the appointment.

"25th April, 1735.—The which day the Provost, Magistrates, and Council of the Burgh being met in common council assembled there, Mr William Kirkpatrick of Ellisland, advocate, one of the present Council, proposed to the Council that he was willing to serve the Burgh with the other Burghs of this district as their Burgess in the present current Parliament of Great Britain if they should think fit to judge him a fit person for that purpose, and then he withdrew: which proposition being considered by the Magistrates and Council, they do unanimously accept of the pro-

position made by the said Mr William Kirkpatrick, and intreat the Provost in name of the Council to give Mr Kirkpatrick their thanks for his kind offer, and do hereby unanimously declare that it is their opinion that the said Mr William Kirkpatrick is a very fit person to represent them and the other burghs of this class or district of burghs to serve as their burgess in this present current Parliament of Great Britain, and in testimony of our sincerity we have hereunto set our hands and subscriptions, and Mr Kirkpatrick being called up this was read to him, who thereafter made his compliments to the Council testifying his acceptance, and by the unanimous appointment of the Council this declaration was recorded as above, and ordered a just copy, signed as aforesaid by the Magistrates and Council, to be delivered into the hands of the said Mr William Kirkpatrick."

The Town Council were frequently called upon to interfere in matters which at the present day would be determined by the civil law, as the following minute, dated 20th August, 1735, shows:-"The Magistrates and Council having had several complaints made to them of the damage sustained by many of the inhabitants through some persons allowing their beasts loose on the crofts and entering their neighbour's young stubble and grass, to prevent which for the future, and that in justice every person may enjoy his own right, the Magistrates and Council do hereby forbid and discharge all persons within the burgh or territories thereof from feeding their beasts upon any stubble or grass save what belongs to themselves allenarly, and no ways to incroach upon their neighbours from and after this day until Hallowday next under the penalty of half a merk Scots for each transgression, and any person poinding the transgressor's beasts from off his ground shall entitle him to the above penalties, and this to be a standing order in all time coming, and appoints the town officer to proclaim this by beat of drum that none pretend ignorance."

An offer from the Marquis of Annandale in 1741 of the sum of £150 towards the building of a Town House and Steeple, "which his lordship from a regard to the burgh had made them a present of," was gratefully accepted by the Council.

The following address, presented by the Town Council on 10th March, 1742, to Lord John Johnstone, M.P. for the Dumfries Burghs, must have been very gratifying to him. The "critical juncture" mentioned in the address no doubt referred to the war

with Spain, which Walpole, very unwillingly, was driven into in 1739 by the clamours of the nation. The war was carried on by him in a half-hearted way, and disaster succeeded disaster. He was bitterly attacked in Parliament, and early in 1742 he was defeated in the House of Commons and forced to resign. George II. was King at this period. The address is as follows:- "To the honourable Lord John Johnstone, Member of Parliament for the District of Burghs of Dumfries, Kirkcudbright, Annan, Lochmaben, and Sanguhar.—This court as one of the five burghs of the districts you represent in Parliament, take this public occasion to acknowledge a grateful sense of and return you our hearty thanks for your wise and prudent conduct so agreeable to the inclinations of your constituents at this critical juncture; and as we are firmly persuaded that the honour and dignity of His Majesty and Royal Family and the true interest and welfare of the nation are what you always have in view, we with great cheerfulness and unanimity take this occasion to recommend to you at this juncture that you will contribute as much as in your power to a strict inquiry into the sources of all the complications that for some time past the nation has laboured under, and that you will thoroughly promote all Bills for such salutary laws that shall be proposed in the House of Commons in order to these ends, and the restoring and preserving the constitutions and happiness of the nations from all attempts of open or secret corruption of any kind whatsoever."

It is disappointing to find that there is no record of the affairs of the burgh from June, 1743, to March, 1750, the leaves of the Minute Book embracing that period having been presumably torn out. This loss is to be regretted the more because the period in question included the Jacobite rebellion and the stirring events which ensued upon the crossing of the Border by the Jacobite army. It is very probable that reference would be made to such an important incident in the records of the burgh.

23rd August, 1761.—The Magistrates and Town Council, considering the low state of the burgh and the small trade carried on in it, and also considering the spirit of improving of common grounds now universal in the country, resolved to feu out a portion of the burgh's community in accordance with a plan ordered to be prepared, and appointed the town clerk to advertise the public roup of same in the "Edinburgh Courant" and the

burgh officers to advertise the same in the burgh by tuck of drum and placard it in the Cross and Church dours.

At the annual meeting for the election of Magistrates and Councillors, held on 29th September, 1762, Francis Carruthers of Dormont was proposed as a councillor, but he was objected to by ex-Provost Dickson on the ground that he was not a heritor in the burgh or a resident burgess, and the rather strong statement was made that his being proposed as a councillor had been brought about by undue influence, deceit, and perjury. answer to the above objection, "no regard ought to be had to it, as it has been the continual practice of this burgh to admit councillors who were not heritors within the burgh, and as to the ill-natured objection thrown out that he was brought in by undue influence, deceit, and perjury, the same is denied, and leaves the proposer to make good his objection." In the result Mr Carruthers was elected a councillor; but the dispute, unfortunately for the Town Clerk, did not end with his election. Six months afterwards, on 19th February, at a meeting held on that date, it is minuted that "the Magistrates and Council, taking into their consideration the conduct of John Dickson, their clerk, at the last annual election of Magistrates and Councillors in his having most injuriously and impudently insinuated privately, and in having expressed publicly, that the bringing in Mr Carruthers of Dormont into the Council proceeded from fraud, deceit, and perjury, and by ingrossing these words into the minutes of election in a clandestine way, with a manifest intention to throw a base imputation upon the conduct and character of the Magistrates and Council, and the Council being conscious that their conduct in the whole measures that were pursued at the last election followed from a conviction in their own minds that they were acting upon just and honourable principles and for the public good of the burgh, and considering that such ill-natured and scurillous assertions must have proceeded from wicked motives in the said John Dickson, who is their servant, and ought to be severely censured, therefore the Magistrates and Council do hereby not only unanimously declare their consciousness of the injustice of the imputation made by the said John Dickson, but also ordain him to be summoned to the Council to answer to his conduct at that time; they therefore appoint one of the officers to summons him to appear upon Monday, the 21st curt, at 6 o'clock at night.

Mr Dickson ten days afterwards appeared before the Council and tendered an apology for his conduct, having been, he stated, in a passion when he uttered the expressions complained of.

An entry in the minutes of 10th June, 1784, is of interest to

An entry in the minutes of 10th June, 1784, is of interest to Freemasons, the Magistrates on that date having agreed to feu to the Freemasons of St. Magdalen a piece of ground for the erection of an "ornamental" lodge at the south end of the High Street, where the Parish Church now stands, the feu duty to be one penny yearly if asked only, Dr Robert Clapperton, the R.W.M. of the Lodge, to hold the feu in name of the grantees. It may be noted in passing that the Dr Clapperton here referred to was the father of the famous African traveller, Captain Hugh Clapperton.

The year 1790 proved to be an eventful year in the history of the burgh. Party feeling ran very high, and for a time mob law held sway. A meeting of the Magistrates and Town Council was convened for 8th July, 1790, for the purpose of electing a Commissioner or Delegate to represent the Burgh of Lochmaben at the ensuing election for choosing a Burgess to serve in Parlia-The minute of meeting bears that eight members of the Council met on the above date in the dwelling-house of Bailie Dickson prior to attending a meeting of the whole Council in the Town House, when a riotous, tumultuous, and outrageous mob assembled within the burgh, and having not only assaulted and attacked the Magistrates and Councillors who were assembled in the dwelling-house, but forcibly and violently broke into the house and carried off Bailie John Bryden by open force and violence, and the mob having also again returned to Bailie Dickson's house with the declared intention of seizing and carrying off from the election another of the councillors, the other Magistrates and Councillors present were not only so much intimidated by the threats and outrages of the mob, that they were under the necessity of flying from the burgh for the safety of their lives. The other Councillors who were not present, of their lives. but intended to be at the meeting, were prevented by the threats and outrages of the mob from entering the town, although they attempted to do so. They ultimately all met at Townfoot of Mouswald, "finding that to be the first and only place of safety where they had hitherto been able to meet for freely and

indifferently electing a Delegate." In the absence of the Town Clerk, Mr Lindsay (who will be heard of again), the meeting appointed Thomas Dickson, late writer in Lochmaben, and residing in Mouswald, and Francis Shortt, writer in Dumfries, conjunct and common clerks of the burgh. The seal of the burgh, being in the hands of the late clerk, could not be appended to the commission in favour of the delegate appointed, and the difficulty was got over by adopting as the seal of the burgh the private seal of Mr Francis Shortt until the common seal could be recovered. The election of a Delegate thereafter duly took place, in terms of the precept addressed to them by the Sheriff.

On 29th September, in the same year, another violent disturbance took place in the burgh on the occasion of the annual election of the Magistrates and Town Council. Eight members of the Council having met in Bailie Dickson's house prior to the meeting, they proceeded at the ringing of the town bell to leave for the Council House. When near the foot of the stair leading thereto they were obstructed and interrupted by a numerous and outrageous mob, who seized Bailie John Bryden and violently thrust him into a post chaise, in defiance of every resistance that could be made at the time, and carried him off to Annan. The Magistrates and Councillors were compelled by the violence of the mob to return to Bailie Dickson's house, where they waited until Bailie Bryden joined them after regaining his liberty, and thereafter proceeded to the election of Magistrates and Councillors in due form, Bailie Dickson being appointed Provost. Whilst this election was taking place an opposition meeting under the protection of the mob was being held in the Council House, also for the purpose of electing a new Town Council, and the result was that two sets of Magistrates and Councillors were elected. To complete this remarkable state of matters, Mr Francis Shortt was elected Town Clerk at the meeting held in the Provost's house and Mr John Lindsay was elected Clerk at the meeting held in the Council House. Both sides presented petitions and complaints to the Court of Session, and at a meeting of Council, held on 12th August, 1791, Provost Dickson reported that the Court of Session had decided that the election which took place in his house on 29th September, 1790, was the only legal and valid election of the Magistrates and Councillors of the Burgh of Lochmaben, and that those elected had the only good and undoubted right to take the government and administration of the burgh till Michaelmas next; the Court had, therefore, dismissed the complaint in name of Robert Maxwell (who had been elected Provost) and others, and found them jointly and severally liable to Provost Dickson and the other complainers in expenses, which they modified to the sum of three hundred pounds sterling, besides the fees of extract, which amounted to £82 11s 0d.

Closely associated with the lawless proceedings before narrated, a notable trial took place in the High Court of Justiciary at Edinburgh in January, 1797, when eight men were charged with the masterful seizing, carrying off by violence, and detaining William Walls, a councillor of the Burgh of Lochmaben, with a view to influence the election of the member of Parliament there. The names of the accused persons were as follows: John Lindsay, writer and messenger at arms in Lochmaben; Duncan Henderson, residenter in Dumfries; John Henderson, his son; William Steedman, lately returned from America, and then residing at Lochmaben; John Dobie, son of John Dobie, late of Tundergarth; John Lockerbie, residenter in Lochmaben; Peter Forrester, joiner in Lochmaben; and James Thorburn, mason in Blackrig, near Lochmaben. Councillor Walls at the trial deponed that, being entitled to vote for a delegate from that burgh, he had, previous to the election. announced his intention of supporting Mr Millar's interest, in opposition to that of Sir James Johnstone; that Mr Lindsay, one of the accused, and who acted as agent for Sir James, had offered him £200 if he would take a walk with him on the day of election, which he rejected in the strongest terms, declaring that £2000 should not tempt him. It was then a common rumour in the burgh that Sir James's friends had hinted if every other source failed them they were determined to carry off one of the voters of the other party. Knowing this, Walls took every precaution to prevent the contemplated outrage, and for greater security slept at the house of his son-in-law, William Neilson. On a Sunday afternoon following he was asked by his son-in-law to accompany him to a field near the town where they had some cattle. They accordingly went to the field, accompanied by William Graham, another councillor and voter in Lochmaben. When there a chaise made its appearance, and the driver came into the field and called to William Walls that a gentleman in

the chaise wished to speak with him. Becoming alarmed, Walls and those who were with him ran off, with a view to escaping, but were pursued by a party of men armed with pistols, swords, bludgeons, etc., who seized Walls and carried him by force to the chaise, and Steedman, Dobie, and Thorburn having also got in, it immediately drove off. At some distance on the road a coat was put into the chaise for Walls, who had thrown off his own in endeavouring to escape. They proceeded to Ecclefechan, where an additional pair of horses were procured; from thence they went to Gretnahall; and so on to Carlisle, where Thorburn left them, and Walls went on to London with Steedman and Dobie. He was detained in London for some days, and afterwards conveyed to Leatherhead, in Surrey, where he was ultimately released upon the arrival of Mr George Williamson, and immediately proceeded to Scotland, his captors for the time being making good their escape. The defence was that Walls was carried off with his own consent, and a large number of witnesses were examined on behalf of the accused. One of these witnesses, described as a waiter at the inn at Lochmaben, having stated that he had left Walls at a late hour in his own house on the night before his capture, was committed to prison for perjury. as it was clearly proved that Walls had slept in the house of his son-in-law. The reporter of the case, with righteous indignation, remarks: "The whole of the evidence presented a picture of burgh politics degrading to human nature, and we are afraid not peculiar to the Burgh of Lochmaben." The Lord Justice Clerk, in summing up, said that the case was one of the most important trials that had come before the Court in his time. Having gone over the principal evidence, he concluded with an eulogium on the flourishing state of the country, which he attributed in great measure to our right of electing our representatives, the exercise of which should be kept as pure and undefiled as possible. The jury returned a verdict of guilty against Lindsay, Lockerbie, Forrest, and Thorburn. The Court in passing sentence observed that the crime of which they were convicted was of an enormous nature, and deserved exemplary punishment. Lord Eskgrove, however, was inclined to mitigate that punishment in the present case, as it was one of those crimes which the common people did not think would be attended with such fatal consequences. The Lord Justice Clerk said that the

offence was rebellion against the Constitution, and if it was a vulgar error that the crime was of a trivial nature, the punishment ought to be the greater, that that mistaken notion might be The sentence of the Court was that Lockerbie, Forrest, and Thorburn be whipt through the streets of Edinburgh on Wednesday, 23rd January, to be then set at liberty, and to be allowed three weeks to settle their affairs, thereafter to banish themselves furth of Scotland for seven years; Lindsay (the writer and messenger-at-arms) to be fined £50 sterling, to be delivered to the Clerk of Court, to be imprisoned three months in the tolbooth of Canongate, and thereafter till payment of the above sum, after his liberation to be allowed three months to settle his affairs, and then to banish himself furth of Scotland for seven vears.

A great grand-daughter of Mr Lindsay, who resides in Lochmaben, informs me that the sentence in his case was not carried out, powerful influence having been brought to bear upon the Government of the day to have the penalty remitted. He married a sister of Miss Jeffray, the lady who is immortalised as "the Blue-eyed Lassie" in Burns's song of that name, and who was a daughter of the minister of Lochmaben.

At a meeting of Council, held on 14th August, 1797, the Magistrates represented to the meeting that a number of complaints had of late been made to them by different people who had suffered great loss by swine being allowed to go at liberty in the crofts and streets of the burgh, the meeting taking it into their consideration, do hereby resolve and enact that if any person within the burgh shall allow their swine to go at liberty betwixt the 1st day of March and the 1st day of November in all time coming, for the first offence they shall pay a fine of five shillings, and the next offence doubled, the one-half of the fine to be given to the poor of the parish and other half to be disposed of as the Magistrates shall think proper.

On 10th March, 1799, the Magistrates and Council being met and taking into their consideration that there are only two burgh officers who have the usual salary of six shillings and eightpence sterling each per annum, and they being of opinion that it would be necessary to appoint two more, we do hereby nominate and appoint William Carruthers and Richard Beattie, both in Lochmaben, burgh officers, without any salary annexed to it,

and they, being present, accepted of the same and gave their oaths *de fideli* in common form, appointment to be during our pleasure.

The salary of 6s 8d, above referred to, is still paid to the burgh officer, who, however, is remunerated for other duties, and that amount until recent years was also the fixed salary of the Town Clerk.

The ancient ceremony of Riding the Marches, referred to in minute of meeting of 13th October, 1732, was in 1799 again revived, the Provost at a meeting held on 30th July in that year having brought the subject before the Council. runs as follows: "The Provost represented that in former years it was the practice of the burgh that the Magistrates, Council, and community should ride the marches, as described in the Charter of the Burgh, and that as this practice had been omitted for some years it would be highly expedient to bring it again into use, in order that the present Magistrates, Council, and community should know and be acquainted with the marches and boundaries of the Royalty, the more especially as there are several old persons now living who have seen the marches rode in former years, and who are thereby well acquainted with the same. therefore moved that a day should be appointed, and public notice given thereof, and the motion having been unanimously approved of, they appointed Friday, 9th August, 1799, for perambulating and riding the marches and territories of the burgh as described in the Charter, and the inhabitants and all persons who have any interest therein were invited to attend after due notice had been given by the Provost.

On the day appointed over 60 persons attended, and they perambulated the ancient marches and boundaries of the territories of the burgh, and a copy of the Charter granted by King James the Sixth was read publicly by the Town Clerk at the different places described therein as the boundaries of the burgh, and no person having appeared to obstruct or dispute any part of the boundaries so perambulated pointed out by the persons present and described in the Charter, the Provost took instruments thereupon in the hands of the Clerk.

On 16th March, 1802.—At a meeting, held on this date, it was enacted that no person shall carry on any public trade or merchandising or any business in the way of traffic until he or she

shall first become a burgess by purchasing from the Magistrates a burgess ticket, at the rates hereafter mentioned, that is to say, every person who is the son of a Burgess or married to the daughter of a Burgess shall pay the sum of ten shillings and sixpence, and every other person shall pay the sum of £1 10s sterling, besides sixpence for each ticket for the dues of registration, but always reserving liberty to advance the rate of tickets as the Council may judge right.

On 22nd February, 1806.—The Town Council resolved to revise the customs of the burgh for the following reasons: Considering that the Customs of Burgh have been for a long time by-past collected upon the principle that was formerly laid down by our predecessors in office, when the value of money at that time was of a greater value than now, therefore the said Council, being moved with sundry good intentions, and especially with a view of advancing the revenue of the burgh and preserving the ancient powers granted to it, do hereby resolve to advance the rates of customs upon certain commodities, and to continue the rates of customs in others.

11th November, 1809.—An entry in similar terms to the following occurs each year in the minutes recording the rouping of the Burgh Customs: Same day the seat in the Church was also exposed to roup, when George Burgess in Boglehole was preferred at the rent of twelve shillings and sixpence sterling, from Martinmas, 1809, till Martinmas, 1810 years

In explanation of this entry the Town Council in 1731 agreed to erect a seat or loft in the Parish Church for the accommodation of the Magistrates and Town Council, and the surplus seats were let each year to the highest bidder, who by sub-letting would no doubt recoup himself for the rent paid by him.

As evidence of the extent of the pork markets formerly held in the burgh, it may be noted that in 1812 the dues arising from the weighing of the swine for one year, being put up to public roup, were let for the sum of £2 2s.

2nd January, 1817.—The meeting, taking into consideration the trouble and expense the Bailies have sustained in going to Edinburgh by order of the Court of Session to answer for an error they committed in delaying for twenty hours in taking the oath of Captain James Brown, a pensioner in the Tolbooth, under a process of cessio bonorum, the Court having found expenses due

to Captain Brown to the amount of £23 15s, which, with £6, the expense of the said Bailies' journey to Edinburgh, the meeting agreed to instruct the Treasurer to pay the sum of £29 15s as above stated.

Coming events cast their shadows before. On 16th November, 1821, the Magistrates, in accordance with previous instructions, gave in a report to the Council showing the total indebtedness of the burgh to be £2023. They stated that the whole of the debts specified were borrowed upon the credit of the revenues of the town, and faithfully applied for the town's use and behoof in the payment of the town's former debts, with interest and other charges to which the town was subjected. They unanimously declared the whole of the sums reported to be debts due by the burgh, and payable out of the properties and revenues thereof.

At a meeting held on 11th January, 1822, the Provost reported that he and other acceptors of a bill due by the burgh to the Affectionate Society of Lochmaben had been served with a Charge of Horning following upon a Durett, and also that a summons had been served upon them at the instance of other creditors. It was resolved in these circumstances to call together the burgh's creditors and lay a statement of affairs before them.

16th April, 1822.—The Magistrates and Council, taking into consideration that the burgh has been led into many embarrassments from the Town Clerk not residing within the burgh, it was agreed that he should be informed by the Depute Clerk that unless he choose to reside within the burgh and afford his professional aid to the Magistrates and Council on all occasions and emergencies, he shall forthwith be superseded and some other efficient professional person nominated to supply his place.

A meeting of creditors of the burgh was held on 2nd May, 1822, but owing to the absence of important books and documents, said to be in the possession of former Provosts and Town Clerks, nothing definite was resolved upon, the Council in the meantime instructing legal proceedings to be taken for their recovery.

On 30th May, 1822, the minute runs that "the Magistrates and Council took into consideration the embarrassed state of the burgh's affairs, and as their case is of a novel kind, they therefore agreed that John Thomson, writer in Lockerbie, should be

authorised to lay a complete state of the burgh's affairs before eminent counsel in Edinburgh, leaving no stone unturned, and to ascertain whether the Magistrates and Councillors, past or present, in office or dominant burgesses, are liable for the burgh's debts.

A meeting of the burgh's creditors was held on 23rd January, 1824, when a proposal was made that a trust deed should be granted by the Town Council, but the same was rejected by the meeting. The Council authorised an application to be made to the Court of Session for the appointment of a Judicial Factor, several summonses having been served upon the Provost for the debts of the burgh and arrestments used in the hands of the feuars. The debts of the burgh amounted at this date to the sum of £2300. Mr John Graham, tenant in Newbigging, was appointed Judicial Factor by the Court.

At a meeting of the Council held on 3rd July, 1826, the following gentlemen were presented with the freedom of the burgh:—Sir Thomas Kirkpatrick of Closeburn, Baronet; Jas. M'Alpine Leny, Esq. of Dalswinton; John D. Murray, Esq. of Murraythwaite; Captain William Hope Johnstone, R.N.; and

John James Hope Johnstone, Esq. of Annandale.

On 16th December, 1834, the following loyal address was presented to King William:—"We, the Provost, Magistrates, and Town Council of the Royal Burgh of Lochmaben, in Council assembled, beg to approach your Majesty at the present crisis of public affairs to express our loyalty and allegiance to your Majesty's person and our unshaken attachment to and veneration for the civil and religious establishments of our country. humbly convey to your Majesty the expression of our thanks for the firmness evinced by your Majesty in the exercise of your Royal prerogative of choosing the Ministers of the Crown, and we deprecate every attempt at interference therewith, declaring your Majesty's right to be one of the most effectual safeguards of our privileges and a fundamental principle of the Constitution. humbly convey to your Majesty the assurance of our devoted support in the free and uncontrolled exercise of your Majesty's prerogative, trusting that when the Ministerial arrangements are completed such salutory measures will be adopted as shall best promote the happiness and prosperity of all classes of your Majesty's subjects,"

The Provost was requested to forward the address to the Duke of Wellington for presentation to His Majesty.

These notes may now fittingly be brought to a close. Ruled, as the burgh has been in the past, by men of wealth and position, we would naturally have expected that they would have done their utmost to have preserved intact its extensive possessions, and handed them down to their successors undiminished, in extent or value. The contrary, as we have seen, has been the case, and from being a burgh possessed of a tract of territory of nearly 2000 acres in extent, it has been reduced to the necessity of applying to the courts to be saved from its creditors. The lessons of the past, however, have not been lost upon its existing rulers, and though the present indebtedness of the burgh is exactly double the amount of its liabilities in 1824, we have something to show for our expenditure, which in the not far distant future will help to dispel the sadness which clouds the history of a burgh claiming to be the birthplace of Scotland's greatest hero.

In reply to a question, Mr Rae said he believed this was the first time that these old records had been examined from the earliest period up to the present time. He had not brought the history down later than the bankruptcy of the burgh, but he had stated that a judicial factor was appointed, and that was a gentleman who took everything he could lay his hands on. wanted to take the right of fishing and other rights in the lochs round about the castle and other lochs, and litigation followed. The courts, however, decided that these rights could not be taken away from the inhabitants of Lochmaben, having been conferred upon them by charter. The only other thing the judicial factor did not take was the customs or fees paid at that time for carts entering the burgh, but, of course, they had not these now. Everything was appropriated. About £150 a year was got from feu duties, and these were all sold. Their common good was of a very small amount, and consisted of some feu duties which they got back and amounting to £5 a year. The Town Council was doing all it could for the burgh. They looked after what property they had, and with the generosity of Provost Halliday and two or three others, he had no doubt that Lochmaben would hold its head up again.

A number of antiquities of the burgh were exhibited by permission of the Town Council of Lochmaben. These included a

minute book of the Town Council of date 1718, the halberd of the burgh officer, supposed to be an old battle axe; four hundred silver coins found last year during the excavations in connection with the sewage operations, jougs used on those sentenced to "durance vile" in the old days, and articles made from black oak found in the Castle Loch. Some conversation took place with regard to the finding of the black oak. The Chairman stated that he believed there was a crannog, but the matter had never been really gone into, though it was deserving of being investigated. Bailie Lennox said he had taken soundings of the loch, and had drawn stabs out of the part where there was believed to have been a straight way at one time. Some of the wood was only two feet below the surface of the water, at a point half-way between the landing stage and the castle on the shore side. Mr Service said there was no doubt that there was a pathway such as had been referred to, and he believed that it was of the same character as the other crannogs in the district.

THE VENDACE. By ROBERT SERVICE, M.B.O.U.

The only member of our Vertebrate Fauna that we can claim as our very own is the interesting fish that is the subject of this short communication. The Natter Jack Toad is not quite so familiar as one of our local institutions though we have it here fairly commonly, but then we have to share it with some other, few and far between, localities in Great Britain. For nearly a whole century we had one absolutely unique local species that had never been found anywhere else. This was the Coluber Dumfriesiensis, or "The Dumfries Snake," of which a specimen was said to have been taken somewhere in our neighbourhood by a Mr T. W. Simmons, and described by Sowerby as a new species. So it remained, no other specimens turned up, and the identity of the "Dumfries Snake" was becoming more than questionable, when Mr Boulenger, of the British Museum of Natural History, discovered that after all there had been some curious blunder, or transposition of specimens, and that the "Dumfries Snake" was a Central American species.

This, however, is a digression. We have no Vertebrate that is absolutely confined to our own faunal area. The Vendace comes marvellously near to the desired "parochialism," how-

ever, for it is confined to the Lochmaben group of lochs and their water system, with the exception that it is also native to Windermere and Bassenthwaite. (See meeting at Lockerbie in Febr. 24).

So far as I know the Vendace is first noted from the scientific point of view by Sir Robt. Sibbald in his "Scotia Illustrata," published in 1688. It was called by him Vandesius and Geoandesius, these being Latinised expressions of the names then current Pennant, in that interesting old sketch of Caledonian Zoology, which he wrote in 1773, and prefixed to Lightfoot's "Flora Scotica," treated the Vendace as identical with the Gwyniad of the Welsh lakes, and with the Powan of Loch Lomond, an error which held the field for a very long period, although Stewart in his "Elements of Natural History, lished in 1817, gives the "Juvangis" as distinct from the Gwyniad and the Powan, treating the two latter as a single species, which they really are. So far as a correct scientific diagnosis is concerned we have to admit that Sir William Jardine was the first to differentiate the Vendace as a species from all others, though Stewart is also entitled, as I have already said, to some credit; but he identified the Vendace with the Sik of Lake Wener, in Sweden. Jardine's paper was published in the "Edinburgh Journal of Natural and Geographical Science " for 1830. I need not discuss in the present connection how this famous fish has had its specific name altered from time to time from "Marænula" to "Willughbii," and then again to "Vandesius," which last was given to it by a great naturalist and explorer, Sir John Richardson, son of a Provost of Dumfries.

The Vendace is one of the Coregonidæ, a genus comprising nearly 50 species, which are found exclusively along the northern parts of Europe, Asia, and America. The great majority are lacustrine species, a few of them are subject to periodical migrations to the sea, and one of the Continental species, C. oxyrhyncus, is almost as much a marine as a fresh water species. In many instances their distribution is as local as is our own Vendace. In some cases three or more species are found in the same loch. Their headquarters are undoubtedly along the northern parts of North America, where they abound in every lake and river.

In Great Britain we have three species of the genus Core-

gonus, viz., (I) the Gwyniad (c. clupeoides), which occurs in Lake Bala, in Wales, in Ullswater, and some other of the Cumberland and Westmoreland lakes, where it is known as the "Schelly," and in Loch Lomond under the more familiar name of "Powan;" (2) the Pollan (C. pollan), which is found in some of the loughs of Ireland, notably that of Lough Neagh. The cry of "Fresh Pollan" is said to be quite a familiar sound in the streets of Belfast at certain seasons. The third species is the Vendace. Not one of our three British species has been found elsewhere outside of our islands, nor is ever likely to be. present the distribution of this genus and its component species as a puzzle in evolution. How did our three British species originate and how may their present distribution be accounted for? Once that problem has been solved the exotic species may be Some of them live isolated in remote sheets of investigated. water, and at depths so great that when chased to the surface by other fish, or brought there by accident, they die at once owing to the pressure of the expanded air in the blood vessels, or by the reduction of atmospheric pressure so inflating the body as to burst the abdominal walls. Let me now leave its congeners and discuss for a little the Vendace itself.

This remarkable fish is found in several of the Lochmaben lochs. Just what are its precise limits of distribution I have never been able to gather definite information upon. The Castle Loch is, of course, its main habitat. One of the many popular, but totally inexact, beliefs in regard to the Vendace, is that it breeds only in the Mill Loch, whence the young fry find their way to the Castle and Broomhill Lochs. I have seen young of the species in the Castle Loch, where it is impossible they could have come from the Mill Loch, so the popular idea is, so far, incorrect. Odd fish have been seen and taken in the Annan, but they do not thrive there, and probably all that thus stray die, or become the prey of other fish. Opinions seem to differ very materially as to the relative numbers of the Vendace now as compared with former times. I am inclined to give weight to the opinion that it has decreased considerably these twenty years past. Eels are larger and more numerous, and so the spawn of the Vendace will suffer, while I am informed that pike have greatly increased. Therefore the adults must have suffered diminution. But, after all, the difficulty of arriving at an estimation, not to say a census, of an under-water population, is rather baffling.

In general habits the Vendace resembles pretty much those of the other members of the family to which it belongs. a social species, keeping together in shoals. In summer they remain in the lowest depths, during the warmer weather, but on dull or cold days, or rather in the evenings of such days they will rise higher in the water. The spawning period varies a little with the temperature, but is generally at the end of November or early December. Dr Knox, nearly a century ago, made the observation that the females are larger and more numerous than the males. I have often asked if modern observation confirms this, but no one seems to have studied the point. The food of the Vendace has been very well ascertained, and I have been able from time to time to confirm older observations of their feeding preferences by examining their stomachs, although they very seldom contain anything at all. Such as there is has been found to comprise the Micro Crustacea and Entomostraca almost exclusively. The largest specimens do not seem ever to exceed a foot in length.

One very curious specimen was submitted to me for examination some years ago, which was a union from the shoulders downwards of two fish. There were two vertebral columns and a couple of tails. When newly taken from the water, the Vendace is a very beautiful fish in its clear, pearly iridescence. The upper part is of palest olive, with a slight tint of pink on the pectoral fins and some specks of the same above the lateral line. The most remarkable aspect is the transparence of the skull, through which the entire brain work can be easily seen. The whole appearance of the fish is extremely delicate, and it may be added that the delicacy which it presents to sight is equal to that which the palate claims from the fish when served at table, where its flavour and aroma fully entitle it the character of a luxury.

Most of us remember the Vendace Club, an association of gentlemen who met annually at the lochs in July or August, when the net was drawn, and the fish taken were prepared for dinner in the evening. This club has long ceased to exist, and so also has the St. Magdalene's Vendace Club, an association formed on much more democratic lines than the other. As many as 2000

people assembled at its annual fishing, and athletic sports were engaged in after the fishing was over for the day.

This article would be incomplete were I to omit mention of the curious legends that linger about Lochmaben in reference to the early history of the Vendace. There are three main stories presented in numerous forms:—(1) That the fish was introduced from the continent by those belonging to some of the monastic or religious establishments of the neighbourhood; (2) that Queen Mary's courtiers brought it with them from France; (3) an introduction by King Robert Bruce, or, as occasionally stated, by one of the James's. All of these stories may be dismissed. The Vendace does not occur on the continent, and so could not have been brought. The name Vendace is undoubtedly French, and as our old Scottish Court was much Frenchified, especially in Queen Mary's time, there may have been a demand for the fish for table on great occasions.

16th February, 1906.

Chairman-Mr Robert Murray, V.P.

THE KIRK-SESSION RECORDS OF IRONGRAY, 1691-1700. By the Rev. Samuel Dunlop, B.D., Minister of the Parish.

I am sorry to say we have no records of the heroic age of Irongray, when the redoubtable John Welsh was minister of the parish (1661-1681). The times did not lend themselves to such superfluities. It was with swords and pistols and the terrible word of his mouth that John Welsh and his elders wrote parish history, and made it glorious in the annals of the Covenant. If the two curates who succeeded him kept records, they are lost. Perhaps they perished in the rabbling which followed the revolution, or perhaps their successors did not consider such prelatical documents worthy of preservation. From our records we learn that in the neighbouring parish of Lochrutton they were not kept in "the time of the prelacy," as there was "no public record or evidence" of Janet Crokat having given satisfaction for her faults and scandals.

Our records begin soon after the Revolution Settlement, when Presbyterianism became the doctrine and discipline of the Church of Scotland by law established. They run without a break nearly through the whole of the last decade of the 17th century, from June 11, 1691, till January 7, 1700. They deal with the whole ministry of Mr John Sinclair (1691-1693) and the opening years of the ministry of Mr James Guthrie.

From Scott's "Fasti" we learn that Sinclair was the son of the minister of Ormiston, and afterwards of Delft, in Holland. He was of a melancholy disposition, and given to mathematical studies. From the minutes I can add another piece of information—he wrote a most illegible hand. Perhaps Scott included that too when he mentioned he was a mathematician. At first sight his records look not unlike algebraical problems. During his ministry, in addition to the ordinary cases of discipline, such as uncleanness, swearing, Sabbath-breaking, etc., we have two peculiar sorts of cases before the session—(1) accusations of witchcraft, and (2) confessions of apostasy during the persecution.

WITCHCRAFT.

It is said sometimes that ministers and elders encouraged such accusations, but the Irongray records rather point the other way. Most of our cases are either non-proven or not guilty. They only occur in Mr Sinclair's time. Perhaps Mr Sinclair had a taste for investigating psychical phenomena, and Mr Guthrie had not. Perhaps the people found it was not a fly to which the session of Irongray rose readily. Mr Sinclair was hardly a month in the parish (July 16, 1691) before a namesake of his, Janet Sinklar, was before the session on the charge of slandering Drumpark's wife with witchcraft.

"1691, September 24.—David Muirhead of Drumpark and his wife, being called before the session and examined anent ane strife betwixt them and Janet Sinklar, submitted themselves to the will of the session. Janet Sinklar also submitted to the will of the session for saying that she doubted Drumpark's wife of murder and witchcraft, and is appointed to receive a pullick rebuke before the congregation."

Simultaneously there was another and more successful accusation before the session.

"1691, August 30.-William Anderson in Hall of Forest,

being called before the session for bringing his child to a smith to be charmed with ane forge hammer, confessed his sin, and received a rebuke before the session."

At the next meeting William Anderson's wife appeared on the same charge, and stated that she had done so "at the instigation of a travelling woman, whose name she knew not." The smith, too, "being called, acknowledged that his threatening the child with an hammer to be a charm, received a rebuke before the session, and promised never to do the like again."

A smith has always been a suspicious character since the days of Wayland Smith, but some folk-lorist might explain what peculiar virtue lies in a hammer.

Next year, 1692, Janet Kirk appears as a suspect.

"November 13—John Charters in Barncleugh, being called before the session as witness nominat by James Wright to prove witchcraft against Janet Kirk, denied that he knew anything of witchcraft in her. Margaret Smyth, wife of John Jonston, being called before the session, declared in her hearing that Janet Kirk, being brought in to Elizabeth Jonston, being grievously tormented with sickness like to distraction, pronounced these words, that 'if God had taken the health from her let Him given it again, and if the devil had taken it from her to give it her again.' On which she was rebuked.''

At the next meeting (November 24) John Charters acknowledged that he had heard Janet Kirk use the words quoted, but gave no opinion as to the witchcraft in them.

An entry on April 16, 1693, promises an even deeper glimpse into Satan's invisible kingdom. "Jean Stot (Ingleston) confessed before the session that she blessed God if Jean Grier's prayings had any pith that they lighted on a kow and not on a person, and did say that Jean Kirkpatrick did gather root grown briers on a Saboth day, and nominat Agnes Patton for a witness."

Here promises to be a witches' Sabbath! Jean Grier's unchancy prayers, Jean Kirkpatrick's root-grown briers gathered on the Sabbath. Surely we have at last a pair of Gallovidian Canidiae. But the sequel proves that the people of Ingleston had been having a neighbourly quarrel. Jean Grier had used rather offensive language about Jean Stot's father David's personal appearance. She had said "he had the face of a devil." The session found "wrath and malice among the

inhabitants of Ingleston," and the minister was sent as peacemaker. "Jean Stot obeyed the minister and forgave Jean Grier, and also required forgiveness of her, which she refused till further advisement."

This ends our accusations of witchcraft, which are not, after all, very terrifying.

THE LAPSI, OR FALLEN.

Though the persecuting times were ended before these records begin, some distant rumblings of the storm may be heard in them. Since the Decian persecutions, the Church, after a period of trouble, has had to deal with those who in the hour of danger "worshipped in the house of Rimmon" or "bowed the knee to Baal." In early church history these were known as the lapsi or fallen. And there were some lapsi in Irongray.

"1693, February 16.—Thomas Fergusson of Hallhill, younger, before his child was baptised, was rebuked before the congregation for his taking the test (i.e., The Test Act, 1681). March 19—William Smith in Killylour voluntarily compeared before the session and gave evidence of his grief for his defections, acknowledging and confessing his baptising of his child with the curate, and taking the oath of abjuration to be a sin."

The oath of abjuration abjured the apologetical declaration of Rich. Cameron (commonly called the Declaration of Sanquhar), by which Cameron deposed Charles Stuart from the throne.

"April 16—John Maxwell of Beoch came voluntarily before the session and acknowledged his defections, and especially his taking the test, and declared his grief for the same. And Janet Maxwell, his wife, came voluntarily also, and confessed her defections and miscarriages before the courts in the time of persecution."

We shall hear later of some other miscarriages of Mrs Maxwell in Beoch.

Five years after this (in Mr Guthrie's time), August 17, 1698, James M'Morn confessed himself guilty of taking the test, for which he was rebuked and exhorted to repentance.

It is surprising to find so few cases of this kind. Maxwell and Fergusson were heritors or the sons of heritors, and had taken the test to save their lands. The test was only administered to

persons of position or property. But the oath of abjuration could be administered to anyone by anyone holding a commission from the Privy Council, and to refuse to take it was a capital offence. Many of the people in Irongray must have sympathised with Cameron: and Grierson of Lagg, was their near neighbour, and he was delighted to come over and administer the oath and carry out the penalty if required. It speaks well for the stout hearts of the men of Irongray that so few took it.

On Friday, August 18, 1693, at three o'clock in the morning, Mr John Sinclair, the minister, died—as the records tell us. After his death the parish had no fixed minister till September 13, 1694—more than a year. The minutes tell us, however, the names of the ministers who officiated during the interregnum.

On September 13, 1694, James Guthrie was ordained minister of Irongray. His ministry lasted for nearly 62 years. He died June 8, 1756. There are in my custody some later minutes of the Kirk-Session, which at some other time I may speak of, but to-night I confine myself to his first six years in Irongray. The minutes are evidently in his handwriting, a beautiful, scholarly hand, very easy to read—a great contrast to that of his predecessor's and the session clerk's during the vacancy, James Grierson. Guthrie divided his parish into seven parts, and over each he placed an elder, who was required to report to the session the needs and the misdeeds of his province. It was with one of his elders, however, that Mr Guthrie's first trouble arose.

A Troubler from Urr.

"November 4, 1694—This day the session, finding that William Welsh of Scar is so frequently absent, notwithstanding his being present at sermon, they appoint John Welsh of Cornlie and William Anderson in Shalloch to speak to him upon the head, and to make report next session."

"November 25—Cornlie makes report that he discoursed Scar according to appointment, and that though he apprehends he is a little tainted with Mr Hebron's errors, yet if the minister would discourse him upon the head and inform him about some thing he might be got of from the way to attend the session as formerly."

The minister did discourse him, but had to report failure on December 27. "He finds William Welsh of Scar averse to sit in

session any more, and gives this reason, that he is most insufficient for such an office, and withal desires liberty for a time to advise, which the minister, in the session's name, granted him."

As far as I can see, Welsh never returned to the session, but he cannot have withdrawn himself altogether from the church, for four years later his daughter Nicolas was baptised by Mr Guthrie.

The interesting person in these extracts was not William Welsh of Scar, but the gentleman of the Scriptural name, Mr Hebron, with whose errors he was tainted. Mr Hebron was the celebrated minister of Urr, John Hepburn, who troubled not only his own and the neighbouring parishes, but the Presbytery of Dumfries, the General Assembly, and the Privy Council of Scotland; and on one occasion made even the valiant burgh of Dumfries tremble within its walls. He was a native of Moray, and had been ordained by an English Presbytery at London. In Episcopal times he had given trouble in Ross-shire--" intruding into the ministry, and thereby debauching weak men and silly women and driving them into rebellion." In 1680 he appeared in Urr, where the curate. John Lyon, was so unpopular that the parishioners broke into the manse and carried off his wife to the hills. In 1689, after the Revolution, he was regularly inducted at Urr, but the wild Hepburn blood did not suit the peaceful times. remember in Sir Walter Scott's "Heart of Mid-Lothian" the faction to which Davie Deans belonged, "that lovely and scattered remnant, brave and worthy champions of the Covenant, who wadna sae muckle as hear a minister speak, be his gifts or graces as they would, that hadna witnessed against the enormities of the day." Hepburn was such a minister, and there were many Davie Deans in Irongray. Hepburn thundered against toleration in Church and State. He intruded himself into other parishes. He married and baptised in spite of the ministers. 1696, the Assembly suspended him, but restored him in 1699 on his promising to confine his ministry to his own parish. promise was disregarded. He was in 1705 imprisoned in Stirling Castle by the order of the Privy Council, and deposed by the General Assembly on the ground of "having neither dispensed the Lord's Supper to others nor partaken thereof himself for sixteen years, and being found guilty of a continuous tract of erroneous, seditious, and diversive doctrines and schismatical courses."

1707 he was restored to his ministry at the earnest petition of the parish. He vehemently opposed the Union, and was deep in the counsels of those discontented Cameronians who purposed joining the Duke of Athol's Highland host and overthrowing the Union by force. Hill Burton says he betrayed his confederates to the Government (His. of Scot., vol. viii., 162). In the Fifteen he was a suspected character, for he raised a force of 300 men in Urr and had them under arms. His hatred of Popery was stronger than his objection to the English Government, and they marched to defend Dumfries against Kenmure. The flag they carried is still in Urr Manse, bearing the title "For the Lord of Hosts."

THE HEPBURNIANS.

The followers of John Hepburn figure so frequently in our session records that this long account of their leader is necessary.

A lady called Janet Welsh is the next troubler of the peace. She was the daughter of John Welsh in Rigghead, probably some relative of William Welsh of Scar. On July 26, 1695, the session was informed "that she not only continually dishaunts ordinances, but hath gone and caused proclaim herself with Alex. Clark in Terregles parish disorderly without so much as informing either minister or elders in this parish or yet the elders in the parish of Terregles." On September 27 she was cited "pro secundo" for "her irregular and clandestine proclamation and other misbehaviours, having gone to Mr Hepburn (who preacheth at Urr and Kirkgunzeon in opposition, not only to the Presbytery, but to the laws of this Church and kingdom), and is married by him without proclamation or testificat, and is now gone to live in the parish of Terregles with Alex. Clark, to whom she is married." The minister gives also an account that he wrote to Mr Hepburn, and first showed him that she was under a process before the session for several irregularities, and, secondly, that she had never been proclaimed, "only a wicked fellow who had no commission from any but herself or else Alex. Clark had called her name and her present husband's at the church door of Terregles, there being no sermon there upon that day; as also that he had used many arguments to dissuade him from marrying her, notwithstanding all which he hath married her as is alleged. She being now out of this parish, the session thought fit to refer the matter entirely to the Presbytery." What the Presbytery did I cannot tell.

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The next Hepburnian was a neighbour of this wilful Miss Welsh, and he gave the session a good run for their money. He was James Richardson of Knockshinnoch, whose grave is one of the curiosities of Irongray Churchyard. His drama opens in a high heroical style.

A DOUBLE OFFENCE.

"1696, March 30—This day also the session being informed of the sinful, scandalous language and gross misbehaviour of James Richardson of Knockshinnoch, Wednesday last, viz., of his being drunk and wishing that the devil might be in the kirk and among the people of Irongray till he came to be a hearer, and that would be at leisure, and some other such atheistical, wicked expressions. The session appoints their officer to cite the foresaid James to appear before them on Sabbath first."

Sabbath came, but brought no James before the session, but after some delay he appeared and "acknowledged that he had uttered some rash expressions for which he was sorry, and that too much drink had occasioned the samine. Whereupon he was removed and his confession considered, it was thought (fit) to refer the matter to the Presbytery for advice. And he being recalled was told that the session was not ripe anent his affair as yet, therefore desired him in the meantime to consider his sin and his offence, and to labour to lay it so to heart as that he might mourn for it before God, that he might obtain pardon; and that he should be advised of the time when they would have him again to attend."

"April 26, 1696—The session received the Presbytery's advice. 'The Presbytery having heard of the affair of James Richardson, and, considering the disaffection of himself and family to the government of the Church as now established, they advised that he should be sessionally rebuked for his misbehaviour, and if he could be got to enact himself in the session book under such a penalty that he should walk more circumspectly in all time coming that it would be convenient.'"

"May 3—He was rebuked for his scandalous behaviour and sinful words, and subscribed the following articles under penalty of 300 pounds (Scots):—1. That in all time coming he shall walk more holily, righteously, and soberly, guarding against all excess in drinking and passions, taking heed to his words, lest he thereby

offend either God or man. 2. That he punctually and conscientiously attend upon the ordinances of God, and that in an orderly manner. 3. That to the utmost of his power he endeavour not only his own reformation, but also the reformation of his whole family, and the bringing of them to attend on Gospel ordinances according to God His appointment, and particularly that he shall endeavour the sober and orderly walk of his wife. 4. That he shall neither bring in nor keep in any in his town or mealing who are extravagant in their principles or disorderly in their walk, neither shall he have any hand, secretly or openly, in bringing in any within the congregation who either despise or misregard God's ordinances as here dispensed."

Perhaps the session managed to get his bond and subscription to these articles so easily because in this year 1696 the Assembly had suspended Hepburn from his ministry. Next year, in spite of promises, in spite of his good money, "the session is informed that James Richardson of Knockshinnoch hath suffered his wife to take a child of his to Edinburgh to Mr Hepburn (who is lying under suspension), to be baptised, as also that his wife, Nicolas Gibson, profanes the Sabbath by idleness and despiseth the public ordinances of God's worship." They were cited three times to appear before the session, but proving contumaceous, the matter was referred to the Presbytery. What was the upshot of it all I cannot tell. The Presbytery minutes may afford some light, but ours are silent. If he forfeited his bond, I am glad to be able to say he could afford it, for his Latin epitaph says he was a man of means.

On that same tomb there is a quaint piece of sculpture—a man defending a woman from two dogs or wolves. A local legend says that it commemorates the killing of the last wolves in Irongray by an ancestor of Richardson's. I am inclined to regard it as symbolical of Richardson's defence of his wife against Kirk-session and Presbytery. Does not Dryden in "The Hind and the Panther" represent Presbyterianism under the similitude of a wolf?

DRINKING ON THE SABBATH.

Next year, 1698, another Hepburnian figures in our records. "August 28—This day was delated William Wallat in Casehead (who is an Hepburnian) for Sabbath-breaking, it being a 'fama clamosa' of his sitting in a change house drinking all the last Lord's Day save one, notwithstanding he had no necessary affair that called him to be there." After three citations—an Hepburnian always took the full limit of the law—he appeared and "acknowledged that he was in the change house that Lord's Day that the sacrament of the Lord's Supper was administrat in this place, he being desired by the change keeper to wait in her house (she being at kirk), but denies drinking any; only three of his acquaintances as they went from the church called for a pint of ale, which he drank with them, and for anything he remembers he sold no more that day. The session having considered his confession, and finding that whatever was reported, there could be nothing proven but that he sold ale on that day, thought fit to call him in and rebuke him sessionally for his contumacy, as also his absenting himself from the ordinances, and to take him engaged to observe them in time coming."

He is the last Hepburnian in the minutes, though probably not the last in Irongray.

A BRUTAL RUFFIAN.

A new member of Parliament, I believe, is troubled with the question, "What will happen if the Speaker names me?" A reader of these records may put a similar question, what happens if after a reference to Presbyterv an accused person should still prove contumacious? Fortunately, I am in a position to throw some light on that matter, though the offender was not an Hepburnian. There was in Cluden a retired soldier called William Walker, a brutal ruffian, who robbed a certain Helen Walker of her honour; and who, after his offence had been remitted back by the Presbytery to the session to be dealt with, told them "there was no session in Scotland nor minister either should ever make him appear publicly before a congregation, and he neither valued our session nor Presbytery." The session recommended the minister to apply to the magistrate of the bounds to make him obey the sentence. Whereupon the magistrate ordered that William Walker should "be incarcorat untill he gave bond and caution to answer and obey the session's sentence;" which he did, and received "a public rebuke for his insolent carriage and appearance next Lord's Day in the public place of repentance." William Walker appears again in the records, and it is satisfactory

to know that a sentence of corporal punishment was passed upon him.

SABBATH-BREAKING.

There are, of course, many cases of Sabbath-breaking and working on a fast day in the records of Irongray, but there are two which deserve some notice, one of Sabbath-breaking on principle, the other Sabbath-breaking by proxy. In 1698 the session tried to find out why Jean Douglas in Ingleston did not attend ordinances. After much enquiry they discovered that "she had made ane oath (when the Presbytery had her before them for abusing Mr Sinclair) that she would never hear one of the Presbytery of Dumfries again. Whereupon the session (though they were fully persuaded of the insufficiency of her plea, the oath undoubtedly being unlawful) delays consideration of the matter."

The other case concerns Mrs Maxwell of Beoch, whose "defections and miscarriages before the courts in the time of persecution" have already been noted. Her servant, Susanna Stewart, was accused of having taken on the Sabbath day a horse to Corswado in Lochrutton " and all the furniture wherewith he had harrowed on Saturday on him." She pleaded that she had done so at her mistress's command. At next meeting of the session Mrs Janet Maxwell denied this, till confronted with her servant, who told the session that her mistress had importuned her to say she had done so in ignorance. "Whereupon Janat broke out in many passionate, foolish, and impertinent speeches, and justified the matter as she was able." It was determined to rebuke her, and "put to the vote rebuke her publicly before the congregation or before the session; it was carried rebuke her before the session in regard that she is a little crack-brained, and if she were made to appear before the congregation probably it would make her worse."

"Quis Custodiet?"

Drunkenness was another frequent offence in Irongray. The session itself was not free from this sin. John Edgar, an elder, had to be rebuked "for his unbecoming carriage, viz., his being given a little in excess to drinking when he goes to Dumfries." They thought fit to call him and lay it home to his conscience, "which being done he acknowledged that through the weakness of his head a little ale would discompose him, but that he never

designed to excess; but because some were offended at him he was resolved in all time coming to be more watchful of himself."

The session was not only careful of the morals of its members, but it defended the honour of its order. In May, 1699, Adam Anderson and his daughter were rebuked for scolding and abusing David Anderson, "one of our number."

THE LORD'S SUPPER.

In our modern session records many entries are concerned with the dispensation of the Lord's Supper, but in these records I can find no trace that it was dispensed at all during Mr Sinclair's ministry, and in Mr Guthrie's six years only twice. In the summer of 1697, new elders having been ordained, a search was ordered "for the cup, tablecloths, and other utensils belonging to the church, because of the sacrament of the Lord's Supper which shortly is to be administrat." The elders reported that after searching for them nothing can be heard of them, only that they were carried away with Mr John Welsh, his plenishing. had probably been used by him in some of his hillside communions, and perhaps lost in a hasty flight when Claverhouse and his dragoons came upon them. The communion cups in Irongrav at present in use were a gift of Mr Guthrie. They are beautiful beaten silver cups, round whose rim is this inscription:— "Thir cups were gifted for the use of the Paroch of Irengray by Mr James Guthrie, who was ordained September 13, 1694, Minr. yr."

Collections.

Before I close my paper a word must be said about what is now-a-days called Christian liberality. Judged by our standard, the church collections were very small, but we must remember that money, always a scarce commodity, was very scarce in Scotland in those days. I believe I have read somewhere (I am sorry I cannot verify my statement) that before the Union there was not half-a-million sterling of money in circulation in Scotland. The largest collection recorded in our book was taken on the sacrament of August, 1697; it amounted to £48 3s Scots (£4 0s 3d sterling), and the lowest was 3s Scots (3d sterling). The ordinary Sabbath collection averaged about £1 10s Scots. The favourite coins appear to have been Irish halfpennies and doits. A rixdollar was once paid as a fine to the poor. The primary use of

the collection was for the poor of the parish. They usually received at the distribution of funds $\pounds 1$ Scots a-piece. I can discover no hard and fast rule regulating either the allowance or its distribution.

Poor strangers received also from the funds of the church, if fortified with a testimonial from their own parish. Testimonials, too, were required for servants who came into the parish.

"On April 26, 1695, the session, finding that several scandalous and irregular persons use to come from other parishes into this, without any testimonials of their behaviour under the minister's hand from whose parishes they come, did and hereby does appoint that no person shall be reset as a servant in this parish without a testimonial, and intimation hereof be made the next Lord's Day by the minister from the pulpit."

This may seem to us rather inquisitorial, but let us not forget that news travelled slowly in those days, and this was a protection for honest and quiet people against rogues and vagabonds. Dr King Hewison, of Rothesay, regards this as an anticipation of a very useful modern Act of Parliament—the Aliens Act.

Many of the poor distressed strangers who applied for help from the session were from Ireland. It was natural they should come from a "distressful country." It is pleasing to note that though in the 17th and 18th centuries England regarded itself as a dumping ground for needy Scots, at least one Englishman received alms from the people of Irongray.

The session, too, paid for the education of poor children. "A poor scholar," an ambiguous phrase, occurs frequently in our records. The Presbytery enacted that 18s were to be paid out of our poor's money every quarter to maintain two bursars at the college for the session. Another entry tells us that the session spent 2s sterling for a Bible for a poor man. Sometimes a special collection was ordered for a parishioner.

"May 31, 1695—This day John Huntar, cotter in Meikle Beoch, gave a petition wherein he showed that his wife having brought forth twins and not being able to nurse them both, he therefore craved help from the session."

The session granted him a day's collection every quarter while the children were a-nursing. It is pleasant to note the

congregation were liberal, and gave him for two quarters at least about £3 Scots.

The charity of Irongray went beyond its own poor and the stranger within its gates. At the request of the Synod they collected £2 16s Scots for one Anna Bailie, a distressed gentlewoman in the Presbytery of Lochmaben. They gave £1 Scots to "ane old minister's daughter," 13s Scots to "Jo. Vandaboll, a broken merchant."

One special collection, made in November, 1695, has a very old-world association connected with it. "Collect for the poor slaves in Turkie, £5 Is." Probably for the victims of the Barbary pirates, who in these times ravaged even the coasts of Ireland. Another collection, taken in 1697, brings us in touch with the greatest of modern philosophic thinkers. In 1697 a petition was presented to the session from the Scots congregation in Konigsberg, backed by the Council of Scotland, for funds to build a church. Elders were appointed to go through the congregation and receive the people's offerings, which amounted to £29 Scots. Twenty-seven years later Immanuel Kant was born at Konigsberg. He is said to have been of Scottish descent, as his name implies, and perhaps some of his forbears belonged to that Scots congregation.

In these dry bones of our old parish annals there is not a little humour, not a little pathos. Even the church accounts contribute a help to the imagination to picture what sort of people lived in Irongray more than two hundred years ago. It is pleasing, too, to find that some parishioners to-day can trace their descent back to some whose names appear in the records. Two of the 17th century elders' names still survive with us, Welsh and M'Burnie. Our session records are very human documents; they show there was a great deal of human nature in men two hundred years ago, that they were very like us both for good and for evil, that progress has not made us so very much better or so very much wiser than our fathers, though like Homer's heroes we boast ourselves to be better than they.

Notes on the Tastes of Bees in Colour.

The Hon. Secretary read a communication which he had received from Mr J. T. Rodda, Eastbourne, referring to the question of the preference of bees for flowers of a particular colour, and asking for the result of any observations on the subject. The question was raised in an article in the "London Magazine" by Lord Avebury, whose observations pointed to the conclusion that the insects preferred blue flowers. He had called on Mr John Ross, Barkerland, a well-known bee expert, and he was very emphatic in saving they had no preference for blue flowers, and was of opinion that they were guided mainly by the odour. Ross had undertaken to come on some future evening and give them the result of various observations on bees—not from the honey-grower's point of view, but on the natural habits of the bees. On the other side of the question Mr Scott-Elliot had kindly written out the results of his observations, which were entirely against his own and very largely in favour of Lord Avebury's. Mr Scott-Elliot's communication (which follows) was to the effect that bees seemed to have a distinct preference for rich red, purple, or blue flowers. Mr R. Service said his observation was that they went indifferently to any flower whatever which contained nectar. Mr Chrystie mentioned their fondness for gooseberry and apple blooms.

By Professor Scott-Elliot.

Judging from my own experience, I think that both hive bees and Bombi have a distinct preference for deep purple (aconite colour), rich, strong red (stachys and red clover), and blues (bugle), but the question is a very difficult one to answer.

There are so many factors which confuse and disturb its solution:—(1) Thus in early spring and late autumn, when there are but very few flowers out, the entire insect force available is concentrated on those few, whatever their colour.

- (2) In a garden, so many flowers are crowded together and such quantities of insects are abroad that it is by no means safe to take any observations made in a garden as generally applicable.
- (3) To understand thoroughly the pollination of any one species, it would be necessary to watch that species in at least ten

different localities for every hour in every month in which it has a flower open. It is needless to say that this has never been done. Anyone who compares different observations of the same flower will at once see how necessary this is. Muller's observations of the same flower in the Alps and in Germany revealed totally different insect visitors.

Willis and Burkill's observations, Muller's, and my own all showed many different visitors. I am quite sure that any observer who attempted to carry out a perfect series of observations on one flower would discover that many insects visit it whose attentions were never suspected.

There is also the fact as I have tried to show by detailed observations, that flies of a high order of intelligence and who are specialised as insect visitors are very much better pollinators than some of the smaller bees. Their colour sense resembles that of the Hive and Humblebee. 61 per cent. of the 13 flowers visited by Rhingia rostrata, e.g., are blue and red. On the other hand, smaller bees do not show anything like this proportion, for Andrena albicans visited red flowers in the proportion of 13 per cent., and Allantus nothi blue and red flowers in the proportion of 21 per cent.

I think there are materials available to work out the insect tastes statistically. This would be done by taking the colours of flowers visited by all Bombus species and Apis, and arranging them in percentage of flowers visited as I have done with a small number of flowers in my paper on Flower-haunting Diptera. Muller's observations in the Alpen Blumen resting as they do on such an enormous number of flowers, can scarcely be upset by any chance observations and conclusions. He there gives for the tastes of the higher bees 36.6 per cent. white and 63.3 per cent. red and blue.

But if any member of the society would take the available data, Muller's and recent observers', and work them out fully, the result would be a very valuable addition to our knowledge of the subject.

I think, however, a very strong personal opinion is always formed if one takes the trouble to examine the visitors of wild flowers patiently and systematically in their natural habitats. It is very striking to notice the difference between the red Geum rivale with its regular Humblebee visitors as compared with the yellow Geum urbanum, which has swarms of miscellaneous insects. When a Ranunculaceous plant becomes highly specialised, like Aconite and Larkspur, then its colour becomes purple or blue and its visitors become select.

It is quite otherwise with orders like Lezuminosæ, which are from the beginning set aside for intelligent insect visitors. Very few others would have sense enough to know that there is anything worth getting in them. One must also remember that negative evidence is of no value in this enquiry. The Mignonette, Willow catkins, Hazel, and Lime are all splendid bee or bumble bee flowers. That does not show that the bees are indifferent to the colour.

Both Mignonette and Lime have abundant honey and very strong scent, and the bee would be attracted to them in spite of the inconspicuous colour. The Willow and Hazel, though not red and blue, are conspicuous at a distance, and what else could a thirsty bee find when they are in bloom?

But most botanists now believe that both flower-haunting insects and flowers have specialised together. As some original open buttercup flower became gradually modified and turned through yellow and red into a rich purple aconite, so its visitors, from being scarcely specialised low grade Hymenoptera, gradually changed into the highly organised, intelligent, and industrious Bumble bees and Hive bees.

I think there can be little doubt that in most natural orders, these species, which are most decidedly and exclusively beeflowers are, if they differ from the rest, either rich red, purple, or blue. This would confirm the general theory that these colours are of a higher grade, that they have been selected and gradually fixed by heredity. I think most authors admit that the original flower colour was green, yellow, or white.

If one accepts Muller's data as well as Willis and Burkill's, and my own, then the whole theory hangs together and is understandable.

The bees, as we think, prefer or find more conspicuous reds and blues, and by their selecting agency, these colours have in a few cases been fixed in the special Bee-flowers.

I have always felt that this question should be again taken up and a new book written about it. I wish some one present would do this. ROOKS' NESTS. By Mrs Thompson, "Inveresk," Castle Street.

[This paper was written in 1903 for a friend in Edinburgh, so it refers to the date of nest building that year. This year, 1906, the birds have been building a nest since about the 26th January.]

Having recently come to reside near a rookery, I have been much interested this spring in watching their building operations, and, in consequence of being confined to my room with a cold, had ample opportunity of so doing. The first nest was begun about the 23rd of February, and I discovered that five birds were occupied upon it. First, I noticed three birds in particular, one much larger than the others; he and one of the others always flew away and returned together, and then this larger bird, which I called the architect, perched near and watched the other two building, flying down every now and then to lend a helping hand, and returning to his perch, waited till one flew from the nest, when he always went too. Being interested in all this, I frequently looked to see how they were getting on. It was then I observed two other birds were always sitting close by, one above the other. They looked what I supposed to be young, they and the builders being much smaller than the architect. I thought these two were engaged in pulling down the nest, but, to my surprise, I saw the upper one break off a twig, pass it on to the lower bird, who passed on to the next. This nest took nearly ten days to finish. Latterly, one of the builders never seemed to leave it whilst I watched. Its head popped up now and then, but I imagined it was lining the nest. I must, however, premise that I only watched them at intervals, and not with any idea that my observations would be of any use. Since I have been here a puzzle has been solved also with regard to bird habits, which may be of interest. Before coming here I lived at the Craigs, and the last spring I was there, for the first time, I saw in a grass field at the top of a steep bank below the wood numbers of little bundles of twigs laid crossways on the grass in a straight line, a short distance apart, and I wondered what game the village children could be playing. This drew my attention to the fact that the path I was on had also little bundles of twigs at intervals, and these went on in another direction to another field. The children were not allowed in the wood, and I thought it beyond their patience almost to do such work, so I simply knocked them all away with my walking stick, and wondered if they were poachers' signals. Now, however, the mystery is partly solved, for a great many of the rooks have been walking about my garden, and a few days ago I saw a bunch of crossed sticks lying on a walk. No one had been in the garden I knew for a fact, but the next morning they were gone. I immediately thought of last spring, and connected them with the rooks and their nests. We had no rookery in the country, but the rooks came after poultry food, or other birds may do this. I know not, but I should be glad to know more about it. This rookery here may be about two miles from my old home, and there is none nearer. I may mention that the twigs were not very small-some, I am sure, two or three feet long in the wood, but as I remember, those in the open field seemed short, but they were all crossed diagonally.

Mr Service observed that the rooks set about repairing and working about their nests in October; then the severe weather stopped their operations, and they were not resumed until off and on after the New-Year, according to the temperature. Rev. Mr Dunlop, referring to the legend that they begin nest-building on the first Sunday of March, said he was glad to think that Mrs Thomson had cleared the character of such a clerical bird as the rook from the charge of Sabbath-breaking. He knew from observation of the Gribton rooks that they were building their nests now. But he believed they robbed each other of the sticks they had collected for their nests.

24th February, 1906.

SPECIAL DISTRICT MEETING AT LOCKERBIE.

A Special District Meeting was held in the Town Hall, Lockerbie, on the above date, and was largely attended.

Chairman—The President.

New Members.—Miss Wilson, Castledykes, Dumfries; Mr D. M'Jerrow, Solicitor, Lockerbie; Provost David Halliday,

Lockerbie; Mr James Scott-Halliday, Lockerbie; Mr Abel Wightman, Lockerbie; Mr E. B. Rae, Town Clerk, Lochmaben; Dr T. Wyld Pairman, Hinemoa, Moffat; Mr John Miller, Elmwood, Moffat; and Mr and Mrs W. A. Mackinnel, The Sheiling, Dumfries.

It was agreed to record in the minutes an expression of regret at the death of Mr William Thomson, Kirkcudbright, an honorary member of the society, who had done much good work in furthering its objects.

THE JAVA BEAN. By G. F. SCOTT-ELLIOT, F.R.G.S., F.L.S.

The plant, "Phaseolus lunatus," is a native of South America. It was probably first cultivated by the ancient Peruvians, for in their graves seeds of it have been discovered. It is cultivated in many parts of the world, and under cultivation has changed very considerably. The important point to remember in dealing with all cultivated plants is that they lose their specific characters and become no longer true to type. Thus, e.g., the bitter almond in cultivation loses its poisonous character and becomes the ordinary sweet almond. That is also the case with the Phaseolus lunatus. It is met with in three forms:—(1) Cultivated and domesticated, with white seeds (Lima or Dapple beans). This seems to be quite harmless; it is not even said to be dangerous. Well-known books of reference give no hint as to any dangerous or poisonous character. 2. Semi-cultivated seeds, light to dark brown, with violet hues or purple patches. called in Mauritius "Pois Amer." It seems also to be the Burmah bean or Rangoon bean or Paigva. These beans contain small quantities of a glucoside phaseolunatin which furnishes prussic acid when crushed and moistened with water. The amount is, however, exceedingly small; not more than .004 per cent. 3. Wild form known in Mauritius as Pois d'Achery, and also Java and Madagascar beans. Seeds are violet, but there appears to be much range in colour, as Mr Dunstan found dark brown, purple, and light brown seeds in two samples from Mauritius. The amount of prussic acid varies from .09 and .08 per cent. in purple and dark brown seeds to .04 in the light brown. This, of course, 1-10 per cent., calculated on the dry beans, is quite sufficient to condemn the use of these Java and Madagascar

beans altogether. In Mauritius, where this question is well understood, though they do grow the wild and half-wild kinds as a green crop to increase the nitrogenous contents of the soil, which duty is performed by the Bacteriæ, they simply plough it in and do not allow their cattle to touch it. They well know its dangerous character. The disappearance of the poison under cultivation is explained by Mr Dunstan, director of the Imperial Institute, as probably due to the stimulated nutrition due to an improved environment. The glucoside alluded to is probably used up in making starches or proteids, or, it may be, is never formed at all. As regards the practical side of the question, the use of the wild bean seems to me foolhardy in the extreme. With the knowledge which we now possess of it, there is absolutely no excuse and no extenuating circumstance to anybody who would now employ it. Experience seems to show that the white varieties are harmless. A difference of opinion is possible with regard to the half-wild Burmah or Rangoon beans. I wrote to the Imperial Institute on this matter, and got their reply:-

"Dear Sir,—I am directed by Professor Dunstan to acknowledge the receipt of your letter of the 2nd February, referring to Burmah beans, and asking (1) whether beans represented by the sample recently sent here by you would be safe to use as a feeding-stuff, and (2) whether there is any simple means by which the dangerous properties of such beans or meal of doubtful origin can be removed.

"In reply I am instructed to say that it is impossible to give

definite answers to either of these questions.

"A large number of samples of Burmah beans has been analysed by the Imperial Institute during the last few years, and

analysed by the Imperial Institute during the last few years, and the amounts of prussic acid obtained from various samples have ranged from 0.003 to 0.018 per cent. Whilst the minimum quantity here mentioned would probably be harmless, it is possible that the maximum quantity would be dangerous, but nothing definite can be said on the subject, because no data derived from actual feeding trials are available. It is only possible, therefore, to repeat the advice already given in the articles in the Bulletin of the Imperial Institute, to which you have been referred, that it would be safer to avoid the use of the coloured Burmah beans as a feeding stuff altogether. An article dealing principally with the so-called

'Java beans,' but also with Burmah beans, is being published in the forthcoming number of the 'Bulletin,' in which this is again

being pointed out.

"With regard to your second question, I am to say that exporters of 'Java beans' appear to be aware of the dangerous nature of the beans, and importers in this country have been told by their Java correspondents that the beans can be rendered innocuous by boiling. It is very doubtful whether this precaution is of any real value. When the beans are boiled for a long time the ferment is rendered inactive, but the glucoside appears to remain intact.

"Such boiled 'Java beans' do not, therefore, when ground and moistened, spontaneously liberate prussic acid, but it is impossible to say that the glucoside would not be decomposed with the liberation of prussic acid by the gastric juice in the stomachs of the animals when the boiled beans are eaten. It is also possible that a ferment similar to that existing naturally in 'Java beans' may also exist in other fodders or feeding-stuffs which might be given to the animals along with the boiled beans. If a fodder containing such a ferment were used in conjunction with boiled 'Java beans,' then the latter would be just as dangerous as before, since the added ferment would decompose the glucoside in the boiled beans, liberating the prussic acid.—I am, yours faithfully,

"THOMAS A. HENRY, Principal Assistant,
"Scientific and Technical Department."

Information may be obtained in following papers, etc.:—
"Bulletin of Imperial Institute," vol. I., pp. 15 and 112, and pp. 16 and 115; Proc. Royal Society, vol. 72, p. 285; Church Foodgrains of India; Watt Economic Dictionary of Products of India. The forthcoming number of the "Bulletin of Imperial Institute" is to contain a further account of the Java beans.

Mr John Maxwell, travelling commissioner, Gold Coast Colony, said he had experience of all the natives of Africa, and he thought there were no persons that he had come across who knew what was good or bad for feeding stuff better than the natives of Java, Madagascar, and Mauritius. If they imported these beans for feeding purposes into this country, they knew perfectly well that they were not good, and it was the Government's duty to stop the importation.

Mr Sanders of Rosebank said this was one of the most important feeding stuffs in this country, and it would be well that farmers should be made aware of the defects of the bean.

THE VENDACE. By R. SERVICE, M.B.O.U.

At a recent meeting of this society he had the privilege of reading a paper upon "The Vendace," in the course of which he had occasion to allude to the fact that the Lochmaben folks had not any monopoly of the vendace as was often supposed, because it was also found in Bassenthwaite and Ullswater. A post or two afterwards brought a copy of a paper, reprinted from the current number of the "Annals and Magazine of Natural History." This was by his friend, Mr C. Tate Regan, one of the staff of the British Museum of Natural History at South Kensington, who had been investigating the vendaces from the Lochmaben lochs and the waters of Lakeland. There were found sufficient structural differences betwixt the vendaces of these separate localities to justify the naming of the English fish as a distinct species, under the specific title of "Coregonus gracilior." On the present occasion he did not propose to discuss the structural characters on which the new species was founded, but he wished to congratulate Provost Halliday and the town clerk, Mr Rae, whom he saw present, on the fact that for the first time they might safely assure the good folks of Lochmaben that no one would now dispute with them the sole possession of at least one species of vendace.

Seasonal Movements of Fishes in the Solway Area. By R. Service, M.B.O.U.

These were in many respects comparable to the migrations of birds, and probably had much in common, although the subject was a very obscure one, upon which little was accurately known. Like the birds, the fishes when migrating moved for the most part in large bodies, and while birds went up to high altitudes to perform their journeys, fish in like manner came from the greater depths to the surface. The reason for this was plain—both the birds and the fishes met with a lessened resistance in the element they respectively moved in. Fishes naturally fell into some four large

classes, so far as those at least of Great Britain were concerned. (1) Those that were exclusively marine and never left the sea; (2) those strictly confined to fresh water; (3) those that bred in fresh water, but spent a large portion of their lives in salt water, otherwise anadromous fishes; and (4) those that bred in the sea, but spent practically their whole lives in fresh water, or catadromous forms. Of the marine fishes many, perhaps all, and certainly all our British species, performed certain movements of more or less extent. These might only be from deep to shallow water, or viceversa, or backwards and forwards from where food was plentiful or the reverse. The mackerel was a well-known species that had a rather complicated series of movements, which were only partially understood. Their principal move shorewards took place in early summer, and it was most interesting to watch the shoals of this beautiful and agile fish out on the sunlit sea of early June, leaping and swimming along just under the dancing wavelets. couple of species of fish of considerable interest to local faunists were the garfish and the saury, both of which were of some scarcity in our waters late in summer. They came in for a week or two and disappeared, and although one could guess, no one could say from actual knowledge whither they came or whither they went. The case of the anchovy was a very peculiar one, of more than usual interest. A good many years ago they were suddenly found in the Solway, off Annan, never having ever been known here before. Within a few days the whole Solway and the adjacent waters were found to be filled with them. Then by-and-bye vouing anchovies were found in abundance, and since then, anchovies have been of annual occurrence. It is difficult to account for the local history of this fish. Herring were rather capricious and uncertain in their movements. It used to be accepted as an article of faith that these most important fish came in vast shoals from the Arctic seas and encirled our shores, but so far as their Arctic origin is concerned we know better now. They breed within our own waters in suitable depths, and when large enough come nearer the surface in the great shoals with which we are all familiar. Most seasons they enter the Solway from the shoal which lies betwixt the Mull and the Isle of Man. within these last few weeks some most unusually large shoals entered Loch Ryan, and kept the fishermen engaged in making big hauls. Cod and haddock had left the Solway to a considerable extent, and were not now seen in the quantities they once exhibited, although these visits were still made late in summer. There was one particular group of fishes that were of much interest to the student of Solway fishes, inasmuch as some of them had occurred on our western British coast, there and nowhere else. This group was composed of species from Mediterranean waters and the Western Morocco coast. They evidently came along with the warm weather and warm water, and were not found until summer was well advanced. The tunny was one of them, and had been taken in the Newbie nets and elsewhere. Both the common bonito and the belted bonito had been secured. The maigre had been added to the list only last summer, and by himself, from a specimen taken at Port Ling. One of the same group was the "John Dory," although much more commonly found than any of the others. And lastly, the swordfish, though a great rarity, was from the same region as the others named.

Of typical fresh water fishes the pike and the perch were familiar examples. These came from the deeper depths of the lochs they frequented to the shallows for spawning purposes at certain seasons. And so also did the vendace, and more especially the charrs of the deep Galloway lochs, which could only be secured in sufficient quantity for potting purposes when they came to the margins of gravel in the autumn months. Of anadromous fishes everyone knew the salmon and the sea trout, and how these fishes ran up the rivers to spawn, and how the young fish had just as irresistible an impulse to seek the sea when they had reached a certain stage of life. But how and where they passed their time in the sea no one had any certain knowledge. Less known forms among the anadromous fishes were the smelt, that little fish with the strange scent of cucumbers or rushes which was so distinctive when they came in the Cree and the Nith and other rivers in autumn. The shad or rock herring was also another of the fish that came into fresh water to spawn. So also was the sturgeon, huge examples of which were annually caught when running riverwards in early summer.

Of the catadromous species the flounder was a familiar species, but the most typical of this group was the common eel, the mystery of whose life-history had now been solved. Once thought to be destitute of sexual organs, the eel was now known with certainty to go down to sea to spawn at great depths. They

went down in late autumn, and never returned, but the young eels ascended our rivers in vast multitudes in May and June, where they remained till the migrating impulse came upon them in later years.

THE KERR OF MOFFAT: A CAER OR CARR? By JOHN T. JOHNSTONE, Moffat.

The name Kerr is the local appellation of the land immediately bordering the River Annan from its march with the glebe, or more properly now, with the Moffat Railway, and down the Annan to where it is joined by Ellerbeck.

When or who first applied the name may never be known, but it has borne that name for 150 years certain, as on a map which purports to be the "first protraction of the town of Moffat as it stood in 1758, by James Tait," the name Kerr is given. The map itself is more concerned with the plan of the town proper, and, therefore, the course of the River Annan and the plan of the fields around the town are not shown, but the ground bounded by the road to Dumfries and the old road to Carlisle is there marked Glebe, Kerr, and Hammerlands, the Kerr being the open ground on each side of the river, and the Hammerlands the fenced meadows adjoining, now part of the Nursery farm. Personally, I have not seen or heard of any mention of the name earlier than the map, but it is evident it must have been applied long anterior to 1758.

The name Kerr itself, more often than otherwise, may be described as a synonym of the Welsh Caer, a fort, and as such the authoress of a book, published a few years ago, "Upper Annandale—Its History and Traditions," draws a very fanciful and imaginative picture of the Moffat "Caer," and suggests that the Ladyknowe was its site. It is hardly possible to utterly obliterate all traces of an old-time fort and its earthworks with ordinary causes. The Ladyknowe and the grounds around show no trace of any of the features presented even at this day by the numerous forts in Upper Annandale. Dr David Christison, Edinburgh, in his paper given before the Antiquarian Society of Scotland, on "Forts, Camps, and Motes of Dumfriesshire," states that 28 forts are contained within a radius of $3\frac{1}{2}$ miles, and 20 within a radius of a little more than two miles round Moffat. The list

given in Dr Christison's paper does not contain the name of the Ladyknowe as a fort or even a fort site, nor one anywhere in close proximity to the town. The late Mr John Brown, editor of the "Moffat Times," who was well versed in all our local antiquities, and who was also the author of "Moffat Past and Present," states in that work:—"There is no vestige of any defensive work at Moffat, nor is it on record that there ever was any work of the kind there." To all appearance the Ladvknowe is a natural mound or hillock of ground, similar to dozens of others which are scattered over our holmlands south of the town, and are our equivalents to the kames and drums of other places, the formation of which are well known and understood. These ancient forts were usually placed on high ground, if not actually on the hill top, the lowlying ground at that time being all undrained, and more or less of a marsh, and it is in this feature of the ground that the key to our problem "caer" or "carr" will be found. Dr Christison in his paper mentions that "car," signifying a fort, is the root of the Welsh caer, but he further states that it has other meanings, and quotes Dr Joyce's car, a rock; and Miss Balfour's Lincolnshire signification, "a swamp bordering a stream." It is a curious coincidence that while writing this paper further confirmation of this Lincolnshire definition was obtained in a story, entitled "Skelf Mary," by Oliver Onions, published in the current "T. P.'s Christmas Weekly." The story deals with the fen country, and the author in his description of the district, mentions "the wreaths and wisps of vapour that crept fantastically over carr and mere," and, in another place, in a conversation with the farmer, this occurs: "Ye'll be a arable man; all's carrs hereabouts," showing that the land described as carr was marshy and unfit for agricultural purposes.

Professor Veitch (Border History and Poetry) gives—"cors, a bog or fen, common in Cornwall," and further states that there is a Gaelic form—"car," meaning a curve or bend. Mr C. E. Moss, in his paper on the peat moors of the Pennines, etc. (Geographical Journal, May, 1904), gives "carr" as a place name on the Pennines for a "morass." Either Miss Balfour's Lincolnshire definition, "swamp bordering a stream," Professor Veitch's car, "a curve or bend," and the "carr," a morass of the Pennines, give a correct topographical definition of the Moffat Kerr.

When I was a boy the Kerr was neither more nor less than a swamp, with deep holes in it, which were known to every boy in Moffat as the "Kerr lakes." The Annan, when in flood, has burst its banks so often during my recollection, and flooded these lakes with gravel, that they are now non-existent. However, we require to go back beyond the recollection of even the oldest inhabitant to understand the full force and aptitude of Professor. Veitch's "curve or bend," and I have had the privilege of inspecting a map prepared about the same time as the one of 1758. This map is to a smaller scale, but it shows the course of the river and all the fields divided somewhat similar to what they are to-day, and from it we see that the Annan, instead of running in a practically straight course past the town till it joined Ellerbeck as it now does (the course was straightened over 80 years ago), was a river of curves and bends, and one might also say loops, so serpentine was its course, and I have no doubt that it was from topographical features of the "swampy ground bordering a stream" and its "curving course" that the first inhabitants of the district who called it "car" derived its expressive name. Local pronunciation, when examined, also favours the term "car." To-day in Moffat the surname Kerr is pronounced with the the E soft, as it is spelt, but the pronunciation is so on account of the great intercourse the inhabitants have had, as residents in a popular watering-place, with strangers having in a great measure destroyed the local twang. My own recollection of the pronunciation of the name by some of our old residenters now departed was Karr, and we require to go no further away than the adjoining parish of Crawford to find this pronunciation of the word in full force and vigour at the present time, and I am informed that in Ayrshire it is the same, spelt Kerr, but pronounced "Karr." Perhaps some of the Society's philological experts may be able to throw some further light on the subject. For the fort theory for the name there is absolutely nothing to go upon except the bare name of Kerr itself, while the evidence from the topographical features of either the marshy ground or curving river seem to be conclusive that it is to these features the Moffat Kerr owes the name it has borne for hundreds of years.

Lockerbie in its Origin. By Thos. R. Henderson.

Lockerbie, although we cannot claim for it the honour of being an ancient burgh, is nevertheless a place of considerable antiquity. When it was first founded, or when it first received the name it now bears, and thenceforth became a place definite, we cannot tell. Its earliest history is shrouded in the impenetrable mists of the past.

There exists neither British nor Roman camp, nor any memorial of a pre-historic age, from which we might conclude that in ancient days its site was occupied as a settlement, at least prior to the time when a slight rift in the dark cloud of the past allows us a momentary glimpse of its early history. Annan, Lochmaben, and Hutton have each their ancient moat hill; Lockerbie has not. In fact, prior to the time of the Bruces we may, with a reasonable degree of accuracy, conclude that the site on which the town now stands was simply a part of the forest which then occupied practically the whole of the valley of the Annan.

We have one indication, however, and only one, of the origin of the burgh, and that is the name it bears. From the word "Lockerbie" we have to learn what we can, and from the fragmentary information which it implies read the unwritten record of the burgh's early history.

In an ancient document, executed in 1198, relating to a dispute between Adam de Karleolo and William de Brus, we find the name spelt "Locardebi." Dr Neilson, in his essay on "Old Annan," mentions that there was a family of the name Locard, which was for a time represented in the Court of the Bruce, and ultimately took root in Clydesdale. No doubt, this family of Locard would, like that of the Bruce, be Norman, and would occupy at the Court of the latter a position both of influence and favour. It is even within the range of probability that they were related to the Bruce himself.

Now we know that in those days, when might was right, the only method of self-preservation was that of co-operation, and that that system of co-operation was universally in vogue. Self-preservation, we are told, is the first law of nature, and our forefathers were as fully alive to that fact as their descendants have been ever since.

Naturally, then, when a man received from the King, as a

token of favour or reward, an extensive tract of land with valuable rights and privileges—as did the Bruce—his first anxiety was as to how he could best preserve not only his newly-acquired possessions but the position of dignity and power to which he had attained. These objects he accomplished by parcelling off portions of his possessions among his relatives and friends, who would then become his vassals, and by undertaking to protect them and their belongings against the attacks and depredations of their common enemies. In return, these lesser landlords, together with their servants and dependents, became bound to rally to the standard of their superior in times of war, as also to build a stronghold and maintain order and peace within their own jurisdictions. Mr Cosmo Innes says:—"The common inductive clause for granting charters in feudal times was, of course, pro scrvicio suo. It is often stated that the grant is in reward of service, but most commonly the gift is for service done and to be done, past and future. Along with service is joined homage and fealty—pro homagio et fidelitate. From the King, therefore, down to his smallest vassal there was created a succession of positions of superior and vassal, each and all bound together by the common ties of self-preservation, mutual aid, and protection.

Consequently, a summons from the King would set the whole feudal machinery of the country in motion. In this connection we may advert in passing to the views expressed by Sir Walter Scott regarding the numerous Abbeys which were founded by David I. He states:—"It seems probable that David, who was a wise as well as a pious monarch, was not moved solely by religious motives to those great acts of munificence to the Church, but annexed political views to his pious generosity. His possessions in Northumberland and Cumberland became precarious after the loss of the Battle of the Standard in 1138; and since the comparatively fertile valley of Teviotdale was likely to become the frontier of his kingdom, it is probable he wished to secure at least a part of these valuable possessions by placing them in the hands of the monks, whose property was for a long time respected, even amidst the rage of a frontier war. In this manner alone had the King some chance of securing protection and security to the cultivators of the soil."

We now come to the affix bi or by, which forms part of the word Lockerbie, and is Danish. The Danes, who had begun

their descent on England in 787, obtained a secure footing in the north about the middle of the ninth century. They ravished Northumbria and East Anglia, drove out the Anglican Kings, and put Norsemen in their place. Fresh invasions of the Danes took place in the tenth and eleventh centuries, and from 1017 till 1042 Danish Kings held the Throne of England. These Danes were absorbed in the English people, and learned to speak their language. The region which they occupied is said to have extended along the coast from Norfolk to Northumberland, and in the interior from Northamptonshire to Yorkshire. A considerable number of them settled also in Dumfriesshire. Over a thousand years have come and gone since these Danes were a distinct aliment in our midst, but to this day we can clearly trace their movements in the names of places which wholly or partly are of Danish origin. For instance, for the word "beck," meaning a burn, we have the local place names of Beckton, Waterbeck, Troutbeck, and Greenbeck. From the "garth," meaning an enclosure, we have Applegarth and Tundergarth. From the affix "by," meaning a town or settlement, we have Sibbaldbie and Lockerbie. Again, the term "by law" originally meant a law enforced in a "by" or settlement. The words "gar," to cause, "greet," to weep, "mun," meaning must, and "tine," to lose, are all Danish, and in local use at the present day. We, therefore, see that in this district immediately prior to the Norman Conquest a considerable part of the community was composed of Danes or of those of Danish extraction. When they settled in a part of the country which had no special name, the first thing that would naturally happen would be that that place would for convenience acquire a name, either descriptive of its natural features or otherwise. When they settled in a place, however, which already had a name, we have no reason to suppose that they changed that name. They would simply—as do our countrymen to-day when settling abroad—adopt the name which the place already bore.

The lights, therefore, which we have to guide us in our search through the dark night of the past for the origin of Lockerbie are — that one of the first things the Bruce would do after receiving a grant of the lands of Annandale would be to subdivide them among his relatives and friends, who in return would be bound with their dependents to serve him in his operations both of offence and defence, as also to build and maintain a sufficient

stronghold; that there were at the Court of the early Bruces a family of the name of Locard; that that family held a position of influence and favour at the Court; that a considerable portion of the community at and prior to the time of the Bruces was Danish; that when these settled in a place the name they gave it was mostly a descriptive one; that the affix "by" is Danish, and means a settlement or town; that it is most improbable the place ever had another name, and consequently that prior to receiving its present name of Lockerbie it was not a place of residence. From these facts and circumstances we infer that Bruce made a grant of the lands round about what is now known as Lockerbie to one Lockard; that Lockard, after selecting a suitable place on an elevated piece of ground lying near the great Roman road and between two lochs—which have long since been drained—built thereon a stronghold sufficient to attract around it for mutual aid and protection numerous less fortunate families who would build for themselves dwellings; that these settlers called the place Lockard's by, meaning Lockard's town or settlement; and that these dwellings which arose around the "by" of Lockard some 700 or 800 years ago, and were occupied in a great measure by Danes, formed the nucleus of this now neat, prosperous, and thriving little town.

Having got thus far, let us now look for a little at the state of civilisation which existed, and the method of husbandry which was followed in those far-off byegone days. In the first place there would be the residence or "bi" or stronghold of Lockard, who would now be installed as Lord of the Manor and the representative in this district of the powerful Bruce. Then there would be the necessary place of defence—this would doubtless be in the form of a peel, which was the type of stronghold then in use. The residence of Lockard would no doubt be within the peel.

The word peel has long been used to signify a tower or stronghold. In fact, the phrase, "Border peel," is more often used to signify a Border tower than the latter phrase itself.

This use of the word Dr Neilson, in his treatise on the word "Peel—its meaning and derivation," shews to be quite erroneous and the outcome of a misconception of its true and original meaning. He states, "The oldest proper examples of the word known to me occur in the accounts of the Scottish Wars of

Edward First. The first peel on record is that of Lochmaben; the next is at Dumfries."

Regarding Lochmaben he states:- "Edward retiring from Scotland after the battle of Falkirk in 1298 had taken possession of the Castle of the Bruces at Lochmaben, referred to as 'castrum' and as a 'chastel.' That winter a considerable addition was made to its defensive strength, as appears from payments made to English labourers, sawyers, and carpenters (ad faciendum pelum ibidem) for making a peel there. The entry as regards the sawvers is (ad sarranda ligna pro constructione peli) for sawing wood for the making of the peel. This leaves little doubt that the peel was essentially a wooden structure. character is further illustrated by an order issued in November, 1299, to provide for the sure keeping of the close outside the castle, strengthened by a palisade—custodis clausi extra castrum de Loghmaban palitio firmati. This passage points with great clearness to the conclusion that the peel was this palisaded or stockaded close, forming an outer rampart extending the bounds and increasing the accommodation of the castle. In 1300 houses had been made in the 'piel,' and in 1301 the 'pele' was unsuccessfully assailed by the Scots. In the writs relative to Lochmaben Castle in subsequent years, very many of them conjoin the peel with the castle, the full name and style of which was castrum et pelum. In 1376 payments were made for planks and to carpenters at the new front called la Pele, and the entry distinctly contrasts with that which follows for 'stanworke' of the castle itself. So late as 1397 English writs refer to the castle and peel. The nature of the peel of Lochmaben is thus tolerably definite "

"At Dumfries, as at Lochmaben, there was a castle before the peel was made by King Edward in the autumn of 1300. In September Friar Robert of Ulm, and with him Adam of Glasham, and many other carpenters, were busy making the peel which was to be set up round about the Castle of Dumfries. The castle appears to have had thrown round it, some little distance out from the walls, a strong palisade or stockade, beyond which again a large fosse was dug. This palisaded and moated enclosure constituted the peel."

We therefore see that the word "peel" was not used originally to signify a tower, but, as Dr Neilson maintains, was the

name given to the palisade or strength of wood which was thrown round the castle at some distance from its walls, and is derived from the Latin *palus*, a stake.

As time wore on and brought in its train an improvement in the art of building, as also in the arts of warfare, the castle itself would grow in strength, whilst the peel would diminish in usefulness. Ultimately the peel would disappear altogether, and what remained would be called the peel tower or simply the peel.

What other buildings would be erected within the peel we cannot exactly say. No doubt there would be others, in which not only the women and children, but also the live stock of the village and other movable possessions, could be sheltered and stored during times of seige. In 1542 we read that some Englishmen "sett fyer in a peyll' on Corrie Water in Annandale, and took away with them 30 oxen and cows, 8 horses, 60 sheep, "with mych other insight of howsholde." No doubt, after the alarm was raised, everything that could possibly be either carried or driven would be stored inside the peel for safety. Unfortunately, however, on this occasion the strength of the peel had proved unavailing.

As has been stated, the house of the superior inside the peel would as time went on become a place of greater strength and security, and gradually supersede the surrounding peel, which, as the arts of war progressed, would become of less use and importance. In course of time the peel would wholly disappear.

There can be little doubt, therefore, that the present peel tower of Lockerbie is the modern representative and occupant of the sight of the primitive home of the Lockard, which at first was surrounded by a peel.

This primitive home would be built of wood and wattles, cemented with mud and clay, roofed with branches and thatch, lighted by windows of skin, and floored, not with luxurious carpets, but mother earth in the form of mud and rushes. If the villagers and their chief had mutual interests, they had also their comforts in common, or, we might rather say, their discomforts in common. However, they knew no better, would be as well off as their neighbours, and doubtless content—at least, let us hope so.

At the time with which we are dealing the wild boar and the

wolf still roamed in the woods around the village, and badgers, wild cats, foxes, and eagles were rife.

The condition of the people under the Bruces, that is, of the masses of the people, was rapidly changing for the better. At one time the poorest of them were known as "villeins," from the fact that they huddled together in vills or villages. They were practically in the position of slaves, bound to serve the owner of the land on which they lived, brought back and punished if they ran away, and changed hands along with the land itself.

The clause in the grant of the lands was "Cum bondis et bondagiis"—with bondmen and their holdings and services. Mr Cosmo Innes in his lecture on Ancient Charters says:—"I cannot pretend to distinguish with any accuracy the bondman from the neyf. It is not improbable that the neyf or serf by descent was distinguished from the bond labourer, but we cannot tell to what extent or in what manner."

After the settling of the Bruce in the district the position of matters appears rapidly to have changed for the better. Instead of their being at the constant call of their owner, their services became first fixed and definite, and then commuted to a payment, sometimes, though rarely, in money, generally by a share of the produce of the ground. From being actual slaves they were, through the kindly influences of the Norman customs and methods, transformed into free farmers or freeholders, giving a fixed and definite return for the land they cultivated to the feudal Lord as also rendering military services when required.

The only means by which the people could live was, of course, by cultivating the soil. Lockerbie, therefore, would not then be a collection of houses so much as of small farms. Each house or booth sat in a little croft or toft, extending to perhaps half-an-acre, which was fenced. The rest of the land, whether arable or pastoral, was unfenced, which necessitated constant herding. The land was cultivated on a system of co-partnership. A plough, which was a cumbersome, unwieldy, wooden instrument, required eight oxen to draw it. Each villager possessed but two. One plough, therefore, called into requisition the stock of four husbandmen.

Mr Cosmo Innes, in his "Early Scottish History" (page 188-189), states:—"We must not judge a plough of the monks by our modern notions, or fill it in fancy with a pair of quick-

stepping horses. The Scotch plough of the thirteenth century (and for three centuries afterwards) was a ponderous machine drawn by twelve oxen, whether all used at once or by two relays, so that for five ploughs they had sixty oxen."

The arable land of each would extend to some 26 acres, which were laid off in rigs. This was known as the runrig system.

The village, no doubt, would possess a brew house, as also a mill, where each would, by the laws of the barony, be compelled to have his corn ground.

A church it would also possess, or at least, there was one in the vicinity. In the year 1124 we know for certain that there existed in Annandale at least three churches—Hoddom, St Mungo, and Dryfesdale. The Church of Dryfesdale was dedicated to St. Cuthbert. The Inquisitis of Earl David in 1116 found that the lands of Dryfesdale belonged to the Episcopate of Glasgow. The Church of Dryfesdale was confirmed to this see by successive bulls of Pope Alexander in 1170 and 1178, Pope Lucias in 1181, and Pope Urban in 1186. The last specifies that the chapel of Hutton belonged to the mother church of Dryfesdale.

There were also numerous chapels belonging to the Knights Templars in the district. One, for instance, stood near what is yet known as the Chapel Well at Beckton, within a mile from the peel. The font of this chapel was, after the suppression of the Order, used as part of the market cross of the town.

Our forefathers in Lockerbie, therefore, even in these far-off days, were not without their spiritual advisers; and, judging from the noble account their children gave of themselves in after years, the seed of the Gospel must not only have been well sown, but sown in rich and fertile soil.

And now my task is finished. I have endeavoured, from what scraps of information I had at my disposal, to give a short account of the condition of things obtaining in our little town when the same was first honoured by Locard—no doubt with the advice of his fair lady—selecting it as the site of their future home.

Border raids and forays, it must be remembered, were as yet unknown. It was not until Edward had besieged Berwick, mercilessly butchered without respect of age or sex some seventeen thousand of its inhabitants and burned the town, traversed the country as far north as Elgin, hoisted the red flag with the three gold leopards on every stronghold, and garrisoned with English every town and castle, that the bitter feelings of enmity and hatred were first inculcated, which were in after years and for centuries to cause such devastation and desolation all along the Borders. After the proud and brutal monarch had gone back to England, poor Scotland lay stunned by the swift and crushing blow which had struck her down. Nearly all the nobles and leading men in the country had been forced to swear allegiance. Wasted by the ravishes of war, the country suffered miserably from famine. Bands of cruel and broken men, bitter of heart and fierce at the abhorred oppression of the Southron, hunted in the forests and mountains living by the chase, and when the chance offered plundering the provision convoys of the English. By thousands of cottage hearths in the dismal winter following brave men in shame and sorrow bemoaned to each other over the untold miseries and the galling scorn which their native land had to endure. It was from this time onwardsand who can blame her?—that Scotland viewed England as her bitterest enemy; and then began between the two countries that system of perpetual robbery and murder which continued unabated for centuries. I simply mention this in passing to recall to you the fact that this system of plunder and reprisal, which ultimately attained such an extraordinary development, did not always exist, and that during the time with which we are dealing the Borders enjoyed for the most part a state of comparative calm and repose. No doubt there were wars between the two countries, but these were infrequent. Abundant warning was given, and the necessary preparations made for the preservation of life and property. During the reign of Lockard, therefore, at least comparatively speaking, the little village flourished and its inhabitants enjoyed prosperity and peace. Money was a commodity scarce, in fact almost unknown, and perhaps it was well. The avaricious passion for accumulating was practically impossible. Each lived by the fruits of his handiwork, and the produce was perishable. If one had too much, rather than waste, his less fortunate neighbour would be welcome to a share. The whole farming operations were carried on on a system of co-operation. Their purpose of living

together was for mutual aid and protection, and we can therefore understand that the inhabitants of the little village would be knit together by these and other ties into the closest relationship, and would become practically as one family.

BONSHAW TOWER. By Colonel J. B. IRVING.

The Irvings originally came from Ayrshire. When Duncan, afterwards King Duncan I., was appointed King or Prince of Cumberland by his grandfather, King Malcolm II., he took with him several of the Scots clans to the Borders to defend them. With him went the clan of the Erevines or Irvings, under Crine Eryvinus's brother. About 1024 they took up their first habitation upon the river Esk, between the White and Black Esk. There they built their first habitation, Castle Irving, below Langholm. The burn and wood do still carry the name of Irving Wood and Irving Burn. The ruins of the castle existed till the close of the seventeenth century. On the same spot now stands Irvine House, belonging to the Duke of Buccleuch, and inhabited by his chamberlain. From this Castle Irving the eldest of the family acquired by marriage the Tower and lands of Bonshaw. In this Bonshaw Tower, on the right bank of the Kirtle Water, ever since has continued to reside the acknowledged head of this powerful Scots Border clan.

The name Bonshaw, Boneschaw, etc., is derived from schaw, the Saxon for wood or woodland, and bon, the Norman for good or fair. It was written in Latin as Bon-boscum. Sometimes the name was written as it was vulgarly pronounced, as Bonshall or Bonshank.

I do not know definitely when the Tower was built, though there are many rumours. But I think we may fairly conclude that there was a Tower on this spot when we got it about 1024, as we made it our principal residence. Bonshaw is of the usual square shape of most of the Border peile towers. The Tower stands on an almost sheer rocky precipice about 100 feet above the Kirtle Water. In front is a terrace, now armed with six old guns; on the right is a steep ravine with a burn flowing through it and a waterfall. In old days it was possible to surround the place with water. The Tower is built of a mixture of red and white sandstone rock quarried in the ravine a little above the Tower.

The walls are six feet through in the thinnest place. Over the old yett (or entrance door) is carved the sacred motto in raised letters.—

SOLI . DEO . HONOR . ET . GLORIA.

The old iron yett is gone. When James VI. came to the throne in 1603 he had all the iron yetts of the Border towers destroyed to put down the power of the Border chieftains. You first enter a small hall about six feet square, communicating with the old stone wheel stair on one side, and with the old retainers' kitchen on the other. From the covert roof of this hall hangs about eighteen inches or two feet an eight-sided stone, like a vast seal. It has on it, in ancient Hebrew raised letters, I.H.S. in monogram. This is called the Crusader's Stone, and, tradition says, was brought from the walls of the old Temple at Jerusalem by one of the Irvings, who was one of the first crusaders (about 1100), was taken to Rome and blessed by the Pope, and then fixed here. It is supposed to bless everyone of Irving blood that passes under it. You pass on into the retainers' kitchen, which has an arched stone with a hole in the centre, covered with a stone, for the passing up of ammunition to the room above. There is also a big iron hook in the apex of the roof; they say for hanging anyone on the laird had no further use for. In one corner in the thickness of the wall is a gloomy dungeon for prisoners. In the centre of each wall is a large firing hole. Along one wall is a large stone bin, probably to hold salt provisions when in siege. The floor, as well as the walls and ceiling, are of solid stone. Passing again through the wee hall, you enter the wheel stair, the stone steps of which are much worn, though it is in perfect preservation. Up these stairs in 1306 passed King Robert the Bruce when flying from Edward Longshanks. This was the first dwelling in Scotland he entered.

On the first floor you enter the grand hall of the Tower, called King Robert the Bruce's room. It is now used as a library, but the plain solid stone walls are undisturbed. An arched recess in one of the walls forms a small altar or, in old Scots, a wumbry. In one of the window recesses are two stone seats, to fire from in time of siege. In other two window recesses are square stone holes or boxes, to hold ammunition. There is a huge fireplace that would hold half-a-dozen men. Going on up

the same wheel stair, you come on the next floor to a similar room, with window recesses, ammunition boxes, etc. In one corner is a door leading into a small room in the thickness of the wall to, they say, the head of an underground passage in the rock leading to Robgill Tower, so that they could get water, food, ammunition, etc., in time of siege. Resuming the ascent of the wheel stair, you come to the top floor, which now is used as a billiard room. Here you see the great brown beams that carry the roof, fastened, as of old, with huge oak pegs driven through before the days of nails. A very few more steps bring you to the battlements, from which is a fine view of the countryside. At one end is the flagstaff and an old bell for ringing in the clan in time of danger. At the other end are the crowsteps, from whence the sentry looked out towards the Solway to give timely warning in time of danger. In the centre of each length of wall are two holes overhanging each firing hole, from which hot lead or boiling oil could be poured on an invader's head. There are sixty steps from the ground to the top.

I will now, to conclude, give two or three incidents connected with the history of the Tower. Of course, I could easily give a great many, but this only purports to be a short sketch. King Robert the Bruce in 1306, when flying from the pursuit of Edward Longshanks, came one stormy night to Bonshaw to take refuge, it being the first dwelling he entered in Scotland. When he left he took one of the laird's younger sons, Sir William de Irwin of Woodhouse, and made him his secretary and armourbearer. He was with him, in all his troubles and prosperities, till his death. The King, when firmly seated on his throne, gave him for his fidelity, in 1323, the castle and lands of Drum, in Aberdeenshire, which the Irvines still have. The original parchment, signed by King Robert the Bruce, is still extant. I saw it when at Drum. Another son of Irving of Bonshaw, Roger de Irwin, was keeper of King Robert's robes.

In 1513, at the battle of Flodden, on 9th September, under James IV., Christopher Irving of Bonshaw commanded the Light Horsemen of the Scottish Army. He fell in the first engagement with all his sons but one, and a very large number of his clansmen. He was succeeded by his son William. Henry VIII. of England, in 1544, sent the Earl of Hereford and Lord Wharton with an army to effect the complete subjugation of Dumfriesshire,

which was looked upon as offering the chief barrier to the conquest of the kingdom of Scotland. The chieftains and proprietors were obliged to submit, as they were overpowered by numbers. Christopher Irving of Bonshaw and Cuthbert Irving of Robgill continued in arms with those who offered patriotic resistance. In order to avoid submitting to the English, and in hopes of saving Bonshaw, which he could not defend successfully, he made it over to his son Edward (Instrument of Sasine in favour of Edward Irving of Bonshaw, dated June 3rd, 1544, deed amongst the family papers). But the English took Bonshaw and plundered and burned it, and devastated all the Irving lands about the Kirtle.

In a letter to council of King Henry VIII., dated 9th September, 1544, Lord Wharton, describing one of these invasions of the year, says that the troops in their return burned Bonshaw, Robgill, etc., and all the peile towers, steds, and corn in their way.

In the way of this burning, I may say that the Tower was several times pillaged and burned, but it simply meant the destruction of the roof and contents of the place, but not the place itself, as in those days they had no means of rapidly destroying a strongly-built stone building. I think it was Jedburgh that in the days of the Bruce they determined to destroy the fortifications to prevent its falling into the hands of the enemy, and it took a large force of men over three years, and then they had not quite completed it.

In February, 1548, was the battle of Dalswinton, where Christopher Irving of Bonshaw commanded the Scottish Light Horsemen. The Light Horsemen defeated the English and charged through them, but a flank attack later on was disastrous, and ended in defeat of the Scots; 600 being slain or drowned in the Nith, and several principal Barons being taken prisoners. Among these prisoners was Christopher Irrewing of Bonshaw.

Christopher Irving of Bonshaw died 1555. His son Edward, to whom he had made over Bonshaw in the time of the English domination, succeeded him. This Edward Irving was a great and successful warrior.

Having made peace with England in 1550, which lasted to the end of the century, the Border clans started their old feuds and fought amongst themselves. An old heredity feud had long existed between the Irvings of Bonshaw and the Bells and Carlyles. But the greatest of their feuds was with the Maxwells, which lasted to the end of the century. Notwithstanding the strong opposition as it would unite two such powerful clans, Christopher Edward Irving's eldest son married Margaret, eldest daughter of the Laird of Johnston. Marriage contract signed 11th September, 1566 (the contract, which is in my possession, is very curious). Bonshaw took Queen Mary's side and suffered accordingly. In 1584-5 Maxwell attacked Johnston with an army and took Lochwood Castle and Lochhouse and burnt them both.

Johnston, thus overpowered, sought refuge with his relations, the Irvings of Bonshaw. Maxwell pursued him there and laid siege to Bonshaw, which, however, was able to hold out till Maxwell, despairing of taking it, agreed to terms of peace, which were settled at Bonshaw.

In 1593 Maxwell, who was again Warden of the Marches, assembled an army to attack and apprehend Johnston. Johnston, who was supported by his allies the Irvings, Grahams, Carlyles, and Scotts, prepared for the encounter. Though young and inexperienced himself he had the experienced assistance of Edward Irving of Bonshaw, a veteran in Border warfare, who with his four sons and clan had come to his aid. Johnston's army was admirably posted on a gentle eminence across the river Dryfe, which Maxwell had to pass, and was commanded with great military skill. On the 7th December, 1593, the armies met at Dryfesands. Johnston's Light Horsemen succeeded in disarranging Maxwell's rank by feint attacks, so that when the main bodies met the Maxwells were encountered at a disadvantage. bloody conflict the Johnston army was victorious. Maxwell and 700 of his men perished in the battle and pursuit. Maxwell's body was found with the hand cut off. This was owing to Maxwell having offered a reward to whoever would bring him the hand or head of Johnston. Johnston retaliated with a like offer.

Lord Herries was appointed Warden, and in 1595 raised an army and again attacked Johnston. Another pitched battle was fought, in which the Johnston faction was again victorious. The King then appointed Johnston Warden of the Marches. In 1608 Maxwell treacherously murdered Johnston, and in 1613 was executed at the High Cross at Edinburgh for it. William Irving of Bonshaw, who succeeded his grandfather Edward in 1605, saw the fall of the power of the Border chieftains through the loss of

their independent military position, by the junction of the two kingdoms.

Bonshaw took strong part with King Charles I., and was always very active against the Covenant. It was Bonshaw who arrested the famous Donald Cargill, who was afterwards burnt at the High Cross of Edinburgh. My great-great-grandfather, William Irving of Woodhouse, had a long lawsuit for the recovery of Bonshaw, which he regained in 1696. He married Amelia, eldest daughter of Lord Rollo. They had fourteen children, of which James, my great-grandfather, was the second that married and had issue.

Gold Mining on the Gold Coast. By John Maxwell, H.M. Travelling Commissioner on the Gold Coast.

Mr Maxwell said that the Gold Colony took its name from the gold which was exported from the country, and we had it on the best authority that in 1551 Captain Thomas Wyndham on one occasion conveyed to England 150 pounds weight of gold dust. This gold dust was almost entirely washed from the sand of the rivers. Neither had this gold industry ceased to exist, for even now the natives lived by extracting it from the rivers. Gold dust on the Gold Coast was to a small extent still the money of the land; a perigum being forty-six dollars, nearly £10; an ounce, £3 12s 5d; and an ackie. 2s 6d to the natives. Even some of the towns, such as Elmina, derived their names from the precious metal, and it was perhaps needless to say that our word guinea was derived from the fact that the first guinea was made from gold from this part of Africa. The natives were born miners, and travellers through the country in some parts experienced great difficulty owing to the multitude of native shafts. These shafts were practically open pit holes along the main roads, and he had personally seen one native falling down one of the shafts, and on one occasion his own dog fell down, and it was with much difficulty that it was rescued. Gold was to be found everywhere in large or small quantities, and there was no native family in the country without its ornaments made of the purest gold, and often of artistic work-Mr Maxwell then described in detail the method of mining used by the natives. He said that the natives in selling gold dust between themselves used little weights. There were

thirty-five weights, each with a distinct value, in use in Ashanti, and the complete set was curious and very complicated, the smaller weights being not larger than tiny seeds. Gold washing was as a rule the work of the women throughout the colony, and each woman was furnished with a small wooden bowl which was filled with the earth. This earth was repeatedly washed with fresh water in the most adept manner, the stones and earth being thrown out by the rapid rotary motion of the bowl, until the gold was cleaned from all the earth. The gold, owing to its weight, sank to the bottom, and the residue was then passed to a smaller bowl, and the process repeated until nothing was left but the grains of gold. Illustrative of his paper, Mr Maxwell exhibited about two hundred gold weights which he collected at various towns and places he visited. He also exhibited the skin of an Adristus, one of the most deadly snakes known, showing the four fangs through which the poison was transmitted. The skins, he said, were sometimes used for making musical instruments, and they were much prized by the Ju-Ju men before the fetish. showed a native lock very like our padlock, with beads attached, and the medicine of a Ju-Ju man on the back. He was informed that the price paid for this lock to the Ju-Ju men was £1. much feared by the natives, and it was believed by them that if the possessor of the lock had an ill-will towards another person, by just turning the lock and mentioning the party's name, he could kill his enemy. He also showed two excellent specimens of Agra beads, and stated that if any of these beads were broken, the Ashanti law required the owner to be paid seven slaves. value of the beads far exceeded their weight in gold.

During an interval in the proceedings, afternoon tea was supplied to the company, through the kindness of Mr and Mrs Sanders of Rosebank.

At the close of the papers, Mr Sanders proposed a very cordial vote of thanks to the gentlemen who had given the papers. That, he said, was the first meeting the society had held in Lockerbie, and he hoped it would by no means be the last.

Rev. R. Neill-Rae, Lochmaben, seconded, and the compliment was warmly awarded.

The Chairman moved a similar compliment to Mr Cormack and the other local members who had taken such an interest in Gypsies. 171

that meeting, and an especially hearty vote of thanks to Mr and Mrs Sanders, for their kindness in entertaining the members.

This was seconded by Mr Arnott, and also heartily awarded. With the kind permission of Mr Johnstone-Douglas, a number of the company paid a visit to the old Tower of Lockerbie, being shown round by Mr John Laidlaw, Arthur's Place, but owing to the late hour at which the meeting broke up, many were unable to avail themselves of Mr Johnstone-Douglas's invitation.

2nd March, 1906.

Chairman-The PRESIDENT.

Gypsies. By A. M'Cormick, Newton-Stewart.

Mr M'Cormick commenced by stating that gypsiologists were all agreed that the gypsies must either have originated from Hindustan, or, at all events, spent many years in that country. Their appearance, similarity to natives of Hindustan, and the preponderance of Hindustani words in Romanes (gypsy language), all conspire to prove that. But he added that there are many gypsiologists who, believing in the testimony of tradition, held that it was quite probable that there might be something in the gypsies' own tradition that they originally hailed from Egypt, and wended their way across Arabia and Persia to Hindustan, where they spent many generations. He explained that, whereas there were earlier references to blacksmiths (or the calderari) than 1417, that is the year on which the first authentic reference is made to Romani-speaking gypsies in Europe.

He described in detail the appearance, manners, customs, and characteristics of these gypsies, and how they acted on their progress throughout Europe, and also how they were received kindly at first and afterwards with undue severity by both municipalities and governments. That part of the lecture was illustrated with slides from Callot's pictures of the gypsies, and also by illustrations showing various types of foreign gypsies.

In a similar manner Mr M'Cormick showed that the first authentic reference to gypsies in Scotland was in 1505, and in 172 GYPSIES.

England in 1529, and briefly summarised their reception, actions, and treatment, pointing out that eventually in both countries many of the gypsies were either banished or hung, merely on account of

their being habit and repute Egyptians.

Illustrations were given to depict the various types of English and Scottish gypsies, and the lecturer gave accounts of various interviews which he had had with gypsies and at gypsy camps. He also stated tentatively that, in his view, there were no Romanispeaking gypsies in Scotland before 1505, but that the tinklers were in this country long before that date; and that when Johnnie Faa petitioned the King in 1540 it gave evidence that a fusion had taken place between the Romani-speaking gypsies and the Faa gang of tinklers. That theory, he believed, explained how the tinkler-gypsies had obtained Scotch names, how some of the Yetholm tribe are of fair appearance, why the nobility took such interest in preventing the ends of justice being meted out to gypsies, the early references to gypsies in such traditions as the "slaying of the blackimore" by Maclellan, of Bombie, and also the tradition held by them that they came into Scotland by way of Ireland.

Mr M'Cormick further showed that if tinklers were "de facto" Romani-speaking gypsies, their language would be the same everywhere, and pointed out that the Irish tinklers spoke a language, shelta, which was allied to the shelta spoken by the Highland Gaelic-speaking tinklers, but which was different from the language spoken by all the other tinklers in Scotland. He illustrated that point by showing on the screen the results of inquiries made at various centres throughout Scotland.

He then dealt at considerable length with the characteristics of gypsies, such as frankness and simplicity with friends, their philosophy of life, peculiar superstitions, peculiar marriage and

divorce customs, fortune telling, and gratitude.

He stated that it had been said that Meg Merrilees was not a typical gypsy, but maintained that she was a typical tinkler-gypsy of a byegone day, although the language put into the mouths of Sir Walter Scott's gypsies was largely that found in the appendix to the life of Bamfylde Moore Carew.

In conclusion, he spoke also of the gypsies of "Aylwin" and "The Coming of Love," by Mr Watts-Dunton, maintaining that in these books Mr Watts-Dunton had succeeded in combining.

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in a way that no other had, the real, the tragic, and the picturesque characteristics of gypsies. The lecture was illustrated with lantern slides, principally from photographs by Mr M'Cormick.

16th March, 1906.

Chairman—Dr J. MAXWELL Ross, Vice-President.

NEW MEMBER. - Mrs M'Lachlan, Dryfemount, Lockerbie.

It was agreed to minute the congratulations of the society to the Duke of Buccleuch, a life member of the society, on the anniversary of the conferment of the first Scottish Peerage to the family, this being the date of the anniversary, and the secretary was requested to send the Duke of Buccleuch an extract of the minute.

THE SCOTO-NORSE PERIOD IN DUMFRIESSHIRE. By Rev. W. L. Stephen.

The forces which have in the past moulded our national life are the natural objects of study in societies such as this. Many of these old world forces have received adequate study. In the case of the Roman occupation, for instance, there has been no lack of eager, careful, exact students. The traces or relics of that period are sufficiently familiar to us; but with the withdrawal of the Roman legions this country was subjected to a force and an influence which have not been, it seems to me, sufficiently investigated. That influence was the Norse, and in using the word Norse I use it as including the Scandinavian and also in certain points the Danish races. You have, first of all, to appreciate the influence of the Norsemen on Europe before one can sufficiently appreciate their influence on Scotland. The bleak and somewhat grim conditions of life in the desolate regions of the North had sent out a race of men who were fitly nursed for fighting under all conditions. Revelling in "the hazard of trackless ways' they wandered over all Europe. One group, passing across to the east of the Baltic, in course of time set their leader upon the throne of a principality which was subsequently to develop into the great Russian empire. Rurik the Norseman laid the foundations of the Russian rule, and his descendants occupied the throne of Russia until the close of the 16th century. Another group made their way along the Mediterranean, actually reaching Constantinople itself, and soon the Eastern capital was face to face with the alternative of a sack or the payment of an enormous indemnity. The association of the Norsemen with the Byzantine capital was to be long continued in the famous Verangian Guard. Returning from the East and glancing at Normandy you find there a settlement of the Northmen, subsequently to be disguised under the name of Normans. to be a fateful settlement for England and for Europe. was soon to spring the Norman conquest. The colonisation of Iceland was achieved, and there is a growing tendency to accept the theory of the discovery of America-Vinland-as historic. East and West in turn they spread. Turning now more especially to Scotland, we find the Norsemen in the Viking age stepping across, first to the Orkneys, then to the mainland in Caithness, where there were Norwegian jarls or earls for fully four centuries. and then passing westward they established an over-lordship of the Western Isles. Ere long they passed southwards to Dublin, and in course of time founded Norse kingdoms on the coast of Ireland. Crossing to the Isle of Man, they quickly set up a kingdom there, and to-day you have the laws of that island once promulgated from the Tynwald Hill, which, of course, is simply a relic from the days when the Norsemen were in occupation. It is the same name to be found in Dingwall and Tinwald, in Dumfriesshire. From the Isle of Man successive expeditions of Norsemen made their way to the south, rayaging the coasts. common conception of these Norsemen is that they were pirates and freebooters. Doubtless there were aspects of their expeditions which justified the description. They themselves looked upon the viking's occupation as the only occupation worthy of a nobleman and gentleman. They called themselves sea kings. Later ages have chosen to stigmatise them as pirates. They themselves in the time-honoured way held they were conveying the blessings of a higher civilisation to less progressive races. The Norsemen, having sown their corn in Norway like quiet, respectable citizens, set out on excursions to Scotland. While

the corn was growing they could put in their time pleasantly and profitably over seas. They promised themselves, in American fashion, "a good time." The Scottish tourist, voyaging gaily to "the land of the midnight sun," is, all unconsciously, reversing history. He can in some degree appreciate the light-hearted attitude with which the Norsemen steered for the open sea. Gradually expeditions became less and less marauding or plundering expeditions, but colonising occupations. That is, they looked forward to settling finally in the country where they landed. But let us return to their occupation of the Isle of Man. From that island their favourite method of excursion was to select a creek or bay into which they might run as carrying them furthest inland. Obviously, such a way of access lay to their ships by the Solway. Soon the dwellers on the banks of the Solway became familiar with the dragon bows of the Norse ships, their streaming raven banners, and their burnished shields hung overside, flashing back again the western rays in lines of dazzling light. It seems to me that the method of the Norse in this invasion was to proceed north and south. I am aware that some of our authorities hold that they settled first in the south. The Lake District of England and Cumberland, of course, is dotted all over with place names of Norse derivation. Whether they settled there first, or whether they settled on the north and south shores of the Solway simultaneously, is a matter of detail. The fact remains that in course of time they found their way into Dumfriesshire. Now, our investigation is so far narrowed down; we began with an outlook upon Europe, then upon Scotland, and now we have traced the Norse to the Solway and Dumfriesshire. What is the evidence on which we may found a well-defined Norse occupation in Dumfriesshire? There remains to attest the Roman occupation—the camp, as in the case of Burrenswark. What remains to attest the Norse occupation? Members of this society are familiar with the remarkable profusion of mounds in this county. Some have been located as British camps, some as moot hills, some have proved very difficult to classify. From that most remarkable of historic documents, the Bayeux tapestry, we learn that the earlier Norman-i.e., Norse---castles were earthen mounds defended by wooden stockading. The stone castle with its characteristic keep, reaching its maximum in a Norham castle, was a much later development. The probabilities are that not a few of the many

Dumfries artificial earth-heights were the strongholds of the early Norse settlers. Tynwald in all likelihood corresponded to the Tingwall of Manx fame, and from that hill the Norse law would go forth for the south of Scotland, after the fashion sung in the sagas. To pass on to another aspect of our subject—the place names—there is really no room for question. You have the Norse termination, "by" and "bie," in such names as Lockerbie, Netherby, Canonbie; the familiar "holm," as in Kirkholm and Twynholm, scattered all over the county. Then follow such other Norse terminations as "gill" in Middlegill or Caplegill; "rigg," as in Buckrigg or Oakrigg; "fell," meaning a hill, sometimes disguised as a suffix, as in Criffel; "hope," as in Blackshope; "beck," as in Craigbeck; and "thwaite," the Norse word for clearing, in Murraythwaite, recalling the Crossthwaite, near All these Norse names are in themselves unmistakeable evidence of a Norse occupation of the district. are familiar with the place names of the Lake district will be struck with the similarity to names there. Take, also, the familiar folk name of Johnstone in Dumfriesshire.

"Within the vale of Annandale
The gentle Johnstones ride;
They ha'e been here a thousand years,
An' a thousand mair they'll bide."

Johnstone is simply the Norse Johansen-to this day the most common name in Iceland, the oldest of the Norse colonies in whose sages we have a perfect mine of wealth in regard to Norse habits and customs. So are Annandale and Iceland curiously linked together. The place-name, Merkland, has a remarkable association. You have there a rather striking relic of the Norse occupation. These Merklands, with their Half Merklands, Two Merklands, Three Merklands, are very significant from a legal point of view. Innes, in his "Scottish Legal Antiquities," in a suggestive passage, emphasises the significance of the Norse system of rental—not classifying by acreage, but classifying by another method of valuation; and he lays it down broadly that the west of Scotland bears the traces of the Norse occupation from this Merk taxation classification, differentiating it from the east coast. That is interesting from another point of view. It means that the Norse were familiar with coinage, that is, they did not wish rent paid in kind or produce. We infer from their familiarity with coinage that they had reached a comparatively advanced state of civilisation. We were all watching the action of Paris just now, and we know that if Paris continues to hoard gold it means war, while if the Stock Exchange quotations show gold is being set free the probabilities are peace. As a fighting race, "soldiers and sailors, too," the Vikings saw that they had the sinews of war fit and ready. They preferred carving their way to paying their way. The sword was fame-giver and land-giver.

Large sea expeditions had, however, to be financed. Their naval bills had to be met. Let us now glance at two departments of lowland life-shepherding and fishing-in which we find Norwegian terms presenting themselves. The shepherd in the lowlands of Scotland has a method of reckoning as to his sheep in which the term "gimmer" is employed, as well as "twinter" and "trinter." These are all Norse words, and the last two bear unmistakable traces of the Norse method of reckoning by winters, "twinter" meaning simply two winters, and "trinter" three winters. The more peaceful colonising aspect of the Norse association is brought out by such pastoral memories. Then, with regard to the fishing industry, you have on the Solway the uncommon haaf net. Now, that word "haaf" is really Norse, and with regard to the term for a salmon spear, a "leister," you have again a word that is almost pure Icelandic. Leaving these well-defined traces of the Norse occupation, we come on another piece of evidence—that relating to the tenure of land for pasture or other purposes. The Norse tenure was what is known as udal tenure, as opposed to feudal tenure. Land passed from father to son practically without document. It was at the opposite pole from the feudal system, and, in fact, the effort by Harold to induce the Norse to accept feudalism led to prolonged conflict. The udal system was in force among the conquerors. The conquered possibly held land as Merkland. In the "kindly tenantry" of Lochmaben you have something that has long interested the legal mind. Its origin is usually ascribed to the days of Bruce, but it is not at all improbable that the "kindly tenantry "tenure of land may be a far off relic of the Norse udal tenure. It suggests a remarkable parallel with the "statemen" of the Cumberland shore. Wanlockhead and Leadhills furnish something analagous. We now extend our survey to the literature of the Borders. One clear, outstanding feature of Border literature is the ballad. That reaches its climax in the group of ballads associated with Varrow—the most remarkable group in Scottish ballad literature. Now, in the ballad of the Borders you have action, daring. It has all the Norse qualities of love of adventure. Dr Nansen has singled out as the two characteristics of Norwegians—love of adventure and love of independence. The ballads of the South, curiously enough, as has been shown by Professor Veitch, can be nearly all paralleled with Norse folk songs. In the ballads of Varrow you have the steady tendency to the place of the duel or the conflict. There has arisen a curious dispute as to who was the far-off unknown singer whose strains first gave the keynote to the music that was to be for ever associated with

"The dowie holms of Yarrow."

Now, the "holm" in Norse history has a peculiar association. The holm was at first an island, and the "holm-gang" was a duel fought on an island. In some cases the combatants were actually tied together, with knives in their hands to fight with, and the last man of "win out." Such were the rude beginnings of trial by The idea of having these combats at first on an island was to prevent interference with the combatants. By-and-bye it became customary to have them beside meadows or rivers with enclosures - the lists-so that onlookers could not get in and the combatants could not get out. It does seem that there is a probability that this mysterious singer might very easily have been a skald celebrating some far-off "holm-gang" or duel, and thus giving the earliest tragic association to "the dowie holms of Yarrow.'' The association of the sister vale of Ettrick with a modern bard is historic enough, as Professor Veitch has pointed out, even in his name a well-defined Scandinavian title. The physical aspect of the Scandinavian is that of a tall, fair-haired, blue-eyed figure—a type that is to be found all over the south of Scotland, so much so, that a Norse writer has said that in travelling in the north of England and Dumfriesshire you meet, at almost every town, men who might pass as Scandinavians. In Hogg vou have many of the characteristics which, for those who take kindly to theories of re-incarnation, might form a possible case for the incarnation of a Norse skald. The mysterious Teribus and teri-odin--chorus of the Hawick Common Riding festival—is a tempting theme in this connection, but we refrain.

I now pass to a group of words to be found in common Scotch speech, and which I take almost at random. They all betray their Norse origin—"smiddy, reek, nieve, nab, hansel, redd." Those who wish to develop that part of the subject will find abundant material in the list furnished by Professor Veitch, of words common to the south of Scotland, and also by that careful student, Mr Anderson, who has gone over the ground of the Lake district. These are the best lists to be studied, because they have been carefully prepared and collated with the Icelandic. We have now glanced at the characteristics associated with the Border ballad, and also at the associations connected with the less literary form—the more common Scots. I think we see that they render intelligible the verdict of an authority on philology, to the effect that, wherever you get Lowland Scots differing from the accepted English pronunciation, you may be very sure you are near the Scandinavian root. I have already indicated in outline the process of the Norse occupation, and it was in the main pastoral, not a military, like the Roman. Although they were a fighting race, the Norse occupation of our country became, in consequence, peaceful. They elected to make their home here in the south of Scotland. In view of all this, the question rises naturally as to whether or not the ties between Scotland and Norway might not have been drawn much closer. At one point it seemed, indeed, as if the destinies of Norway and Scotland were to be linked for good or evil. At that period Thorfin, son of Sigurd, ruled the whole of Galloway and Carrick, and one gets from that fact some idea of the influence of a Norse chief in the south of Scotland. What put an end to their development of power was (1) that their supremacy in Ireland was broken in the great battle of Clontarf, and (2) that there arose, on the Scottish throne the "Tamer of the Ravens," Alexander. An effort was being made by Hago of Norway to emphasise his claims to the over-lordship not only of the western isles but of other parts of Scotland. That precipitated a long due conflict, and the famous fleet set out from the shores of Norway to argue the claim out. The operations of Harold Fair Hair had already familiarised the people of Scotland with the heavy hand of the Norse, and they contemplated the approach of the Norwegian fleet with gloomy forebodings. The battle of Largs, however, was decisive. We usually regard the battle of Bannockburn as preserving intact our

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national identity. But Bannockburn only paved the way for the close union of the two races that fought against each other. It has been said that the misfortune of Ireland is that she never had a Bannockburn-that if she had, the union with England would have become real. Thus, broadly speaking, we may say that Bannockburn simply made easy and practicable the complete fusion of the two races in the coming centuries. With the victory of Largs, the Norwegian dominion was over, and accordingly that race was no longer to be a factor or force in the development of this country. Largs actually achieved what is claimed for Bannockburn—it preserved the national identity from an outside people. Whether that was a gain or a loss I will leave to you to determine. At any rate, it is certain that at that particular period we did not love England, and that a union with Norway would have been in no way unacceptable to a great part of Scotland. Even after the defeat of Largs, it seemed for a moment as if there was still to be a fusion of the races. The daughter of the Scottish King had married the King of Norway. The Scottish King died without issue. His granddaughter, the Maid of Norway, was the next claimant to the throne. Ambassadors were sent from Scotland for her. Michael Scott, the wizard, was among them, but hardly he, with his weird insight into coming events, could have foreseen that the death of that little girl was to have such disastrous consequences. On the death of the Maid of Norway, Scotland was at once seen by Edward of England to afford an opening for diplomacy, and, through the rival claims for the Scottish throne, Scotland was launched upon the tempestuous sea of the War of Independence. Now, we have in the development of history along these lines indications of the contact of Scotland with Norway. It, of course, has been usual to think of it as welldefined in the north—in the Orkneys, which are practically still Norse, and in Caithness, where the very names of the boys and girls-Sigismund, Lorna-in use to this day, reveal the Norse derivation. But, further south, we find distinct evidences. At Inchcolm you have the graves of the vanquished Norsemen; and, incidentally, it is curious to note as an illustration of the myriadminded outlook of Shakespeare that in "Macbeth" he refers to the indemnity paid by the Norsemen for the privilege of being allowed to bury their dead on St Colm's Inch. The memorial stones are still to be found there. I have also tried to establish

the evidence of the presence of the Norse in Dumfriesshire and further south, so that we see that in the north, middle, and south the Norseman had laid his hand. That occupation did not leave so many easily deciphered traces in the way of remains as the Roman occupation did, but it has left traces as well-defined for those who care to investigate them. The more the subject is looked into and analysed, the more it will be seen that there is no lack of evidence. The religion of the Norsemen has been described by Carlyle—full of his study of the early Norse Kings—as "a rude consecration of valour." They were a bold, fearless, daring race. Trickery, cunning, deception were held abomination by them; the oath-breaker was regarded as a criminal. The strong man was their hero, and strength was their worship. Metzsche, the Sandow philosopher, so much heard of once, would have assuredly found here his ideal over-man. In fact, it was that characteristic of theirs that kept them for long from being appealed to by Christianity. To the Norseman, as to the modern Metzsche, meekness was weakness, and the old chronicler's satire is deliciously subtle:

> In their temples Thor and Odin Lay in dust and ashes trodden, And King Olaf sweeping southward Preached the gospel with his sword.

That was an essentially Norse method of carrying forward the blessings of Christianity. You have in the strong, resolute attitude of the Lowlanders, as defined in their character as well as shown in their physical and mental characteristics, one of the not least important evidences of the Norse occupation—characteristics which were to give the associations of the Borders with thieving and marauding, and which were to mark out the Borderers as, above all things, first-class fighting men. All this may fairly be claimed part of the Norse heritage to the Lowlands of Scotland. A recent Border poet has pictured the warriors of the long-vanished centuries, men who knew the South, revisiting "the glimpses of the moon":

Eerie tramp and horses' tread Fill forgotten ways, Breezes whisper overhead Buried minstrels' lays; Soldiers of the legions,
Northern sea kings,
Mediæval knights, Border reivers,
Bustle it bravely side by side.

If the spirits of the departed Vikings ever return to the South, they will find much that is changed, also that time has not wholly obliterated their footprints by the shores of the Solway, where they lived, laughed, sailed, and fought, and made our world. One small glance. This is Friday, a Norse word; yesterday we said Thursday, that is Thor's day; the day before yesterday we said Wednesday, which is Odin's day. Friday, the night on which we are met, is the most popular night of the week in the South of Scotland, I am assured, for marriages, and Frias, the wife of Odin, is the Norse goddess of love. There may be other reasons, economic and social, which dictate Friday as the night of the week for marriages, but I do not think that it is at all a stretch of the imagination to see also an association of that established Lowland custom with the day which in the olden time was sacred to the Norse goddess of love. Now, I have made an effort to sum up generally (1) the influence of the Northern civilisation on Europe; (2) its influence on Scotland; and (3) its influence on Dumfriesshire. I have indicated various lines along which, I think, evidence can be led, and not attempting to exhaust the The evidence accumulates on all hands when you begin to look into the subject. These are lines, it seems to me, along which the study might be pursued, and the more they are developed the more clearly will be seen that there still linger memorials to attest the influence of the Norsemen in their occupation of the south, not only on place-names, customs, and literature, but, above all, on the lowland physical and mental characteristics, which have produced so many stirring scenes, so many daring and striking figures to play their part in the long-drawn romance of the Scottish Borderland.

THE SALMON DISEASE.

Mr S. Arnott, the secretary, brought up the question of "The Bacterial Origin of the Salmon Disease," referring to Sir Herbert Maxwell's "Jottings of a Naturalist" in the "Scottish Review." In it Sir Herbert said that in matters of natural

science it is never quite safe to jump to a conclusion even when it lies beyond but a narrow gulf of hypothesis, and no clearer instance of the danger of doing so need be sought than that given by Professor Huxley's diagnosis of the salmon disease. It was in 1877 that attention was first drawn to what was considered a novel epizootic attacking salmon in the Esk and Nith, and destroying many of them. White fungoid patches appearing first on those portions of the fish's skin which are not protected by scales—the head and fin bases—spread rapidly to other parts of the body, became confluent, and produced deep ulcers, generally causing the death of the fish. Huxley satisfied himself and others that the agent in the disease was the minute fungus "Saprolegnia ferax," the same which may be seen in autumn on the bodies of dead flies sticking to the window panes, and closely akin to "Peronspora," which causes the potato blight. He considered that the spores of his fungus, floating in fresh water, attached themselves to living tissues of a fish which had received some external injury, and multiplying rapidly, penetrated to the vital In the year 1903 Mr Hume Paterson announced his discovery that "Saprolegnia ferax" was not the cause of the disease at all, but simply of the mould which grows upon such portions of the flesh of salmon as has been previously "necrosed," or killed by another agent, and this agent was revealed to him in the form of a uncro-organism, now known as "Bacillus salmonispestis." So far from this disease originating in fresh water, this bacillus grows well in sea water, where "Saprolegnia" will not grow at all.

Mr Arnott proceeded to say that it was important and interesting to recall that so far back as April 23, 1880, Mr J. Rutherford, Jardington, read a paper to this society upon "Observations on the Salmon Disease," in which he said:—"I have not been able to trace the roots of the fungus beyond the skin that covers the scales. In making a cut into the fish through the fungus, the eye at once is attracted by an inflamed, unhealthylooking stratum of muscle below the skin, of varying thickness. In one fish that I examined it extended right through to the inside sections of that muscle, and when placed under the microscope were seen to be literally one mass of life—that life being a species of bacteria. . . . As I did most of this work in the winter, when the frost was so hard I took advantage of it to freeze parts of

fish in the section instrument, and by this means I got some capital sections of fungus, scales, skin, and muscle. I preserved one of these sections, which is a very fine one, showing the forms of bacteria still in and around the muscle. After examining a number of fish, and finding the conditions alike in each, I then began to speculate a little as to the nature of the disease, and the idea at once suggested itself, after what I had seen, that the disease was located in the muscle of the fish; and I also have some idea that when it is really known it will be found to commence in the blood, caused either by the food they eat or by some deleterious solution in the water which passes through the gills, and that the unhealthy, decaying fluid or matter, which will naturally pass off from these bacteria, and exude through the pores of the skin, forms a healthy and proper nidus for the germination of the zoospores of the fungus, which must be in those affected rivers in myriads."

In view of this old record he (Mr Arnott) wrote to Sir Herbert Maxwell drawing his attention to it, and Sir Herbert wrote in reply on 10th inst., saying:—"Mr J. Rutherford evidently had touched the secret of the salmon disease long before Mr Hume Paterson isolated and classified the specific bacillus. It is a great pity that he did not persevere a little further, for the date of his discovery corresponds with the period when Professor Huxley was investigating that very subject, and missed the key to it."

Continuing, Mr Arnott went on to say that Mr Rutherford had discussions with Professor Huxley and Mr J. Stirling, and that his paper further pointed out that "unless there is a predisposing cause, fish will not contract the fungoid part of the disease.

I am rather inclined to believe that salt water is not very favourable to the growth of 'salmon ferax,' but, as far as the bacteria in the muscles are concerned, no washing by any solution will affect them.'

This matter was of special interest to the society, as showing that one of their members was the original investigator who hit upon what was really at the root of the disease which has caused so much trouble before its discovery.

Dr Ross, who presided, said it might be recalled that this was not the only instance when Professor Huxley, great scientist as he was, went off the rails, but he was a thoroughly honest scientist when he saw himself at any time in error. It was of interest that one of the oldest of the members of the society—who was, unfortunately, not able to be with them so often now—had made such a far-sighted suggestion.

EDWARD I. AT SWEETHEART ABBEY.

The following note on the above subject was read from Dr E. J. Chinnock, formerly rector of Dumfries Academy:—

On a former occasion I quoted Archbishop Winchelsea's own words in his despatch to the Pope Boniface VIII. to prove that he and the Pope's Legate met King Edward I. at Sweetheart Abbey on the 27th of August, 1300, and delivered the Pope's command that Edward should abandon his claim to the sovereignty of Scotland. In reading the "Liber quotidianus Contrarotulatoris Garderobae,' or the "Daily Book of the Roll of the Wardrobe,' for the 28th year of King Edward I., i.e., November, 1299, to November, 1300, I have found the following entries, which prove that Edward's Court was at Douzquer or Sweetheart at the time specified.

- 1. "Paid to Sir John de Langeford, sent from Gerton upon Flete in Galloway to Carlisle to get money coming from the Exchequer, and bring it to the King to pay thence the expenses of his household and army, for his own expenses, those of Richard de Merewell, and of the others who were in his company, for bringing and guarding the said money, for 15 days, between the 10th day of August and the 24th day of the same month, going to Carlisle as is said before, staying at the port of Skynburness, waiting for a favourite wind, and also returning to the Court at Douzquer (Sweetheart)—£2 6s 0½d."
- 2. "Paid to Thomas le Convers, valet of the King's chamber, for mending the iron dogs for the King's chamber several times in the present year, by his own hands at Stamford on the 2nd day of May, 3 shillings; and at Douzquer (Sweetheart), in Scotland, on the 25th day of August, 10 shillings—total, 13 shillings."
- 3. "Paid to Sir John Lestrange, banneret, for his wages and those of his 2 knights and 7 esquires from the 6th day of July, on which his horses were valued in the aforesaid war, till the 23rd day of August inst., on which he retired from the King's army at

Douzquer (Sweetheart), the first day being counted and not the last, for 48 days, £36."

Note.—For "Oxford" in Dr Chinnock's paper on this subject in last issue read Otford. Otford is near Sevenoaks, Kent, where was a residence of the Archbishop.—Ed.

6th April, 1906.

Chairman-Rev. John Cairns, M.A., Vice-President.

New Members.—Provost Halliday, Esthwaite, Lochmaben, and Mr D. Manson, Acrehead, Dumfries.

The House of the Maxwells of Nithsdale at Dumfries. By James Barbour, F.S.A. Scot.

Elsewhere the writer has endeavoured to show that there were two castles here, namely, the King's Castle of Dumfries at Castledykes and a house of the Maxwells of Nithsdale, which occupied the site of the present Grevfriars' Church, at the head of High Street and adjacent to the spot where the ancient Friary stood. These are referred to and discriminated by the Rev. Dr Burnside, minister first of the New Church and afterwards of St Michael's, 1780-1806, in a MS. history of the town and parish of Dumfries. It was written in 1790 for Sir John Sinclair's Statistical Account of Scotland, and printed in that work in abridged form. Castledykes is called a castle of the Cumyns, the chief residence of the family being Dalswinton, seven miles up the river. We do not know of any authority for this designation; and the Wardrobe Account of the twenty-eighth year of Edward First and the numerous State papers containing references to the castle catalogued by Stevenson and Bain invariably speak of it as the Castle of Dumfries, or the King's Castle of Dumfries. But the more important conclusion affirmed by Dr Burnside is that Castledykes is the castle round which King Edward, in the year 1300, placed a palisade, worked in the forest of Inglewood, and which John de la Dolive and William Arnold de Podio held for the English. That is to say, it is the castle concerned in the war of succession and independence, and which Bruce captured after the death of Comyn.

The castle or house of the Maxwells of Nithsdale, with which this paper is concerned, being a family manor place, does not figure prominently in history, but enough connected with later public events and an atmosphere of tragic incidents reveal themselves as to call for brief notice by way of preserving what is interesting relating to the town of Dumfries.

"Near the site of the Old Friary," says Dr Burnside, "stood afterwards a castle belonging to the Maxwells of Caerlaverock and Nithsdale, which in some old charters and seisins belonging to the Duke of Buccleuch is styled a 'Magnum Palatum,' " and, proceeding, he states that so far back as the year 1299 the Crown made a grant of the mote and mote lands to the family. These are the lands on which their castle afterwards stood, but at what time it was first erected does not appear. Later we have more certain information. Robert, fifth Lord Maxwell, 1513-1546, a man of great wealth and high consequence, had the misfortune to fall into the hands of the English at the battle of Solway Moss, 25th November, 1542, when he and other Scots were imprisoned in the Tower of London, and compelled, in order to recover their liberty, to acknowledge Henry VIII. as lord superior of the realm of Scotland; and Maxwell, after protracted resistance, also yielded the castles held by him to the English. These concessions brought Lord Maxwell into collision with the Scottish Government, which he had now to conciliate. For this purpose he made a solemn protestation in his new house of Dumfries for his exculpation, dated 28th November, 1545, representing that he had been induced to give over the castles to the English from fear and danger of his life. We here learn definitely that the Maxwells' house of Dumfries was new in 1545, and doubtless it was built by Robert, fifth Lord Maxwell, remembered as the promoter of the bill for the translation of the Scriptures. In this house of Dumfries Lord Maxwell made his protestation of innocence, and declared himself a loyal subject of Queen Mary. The protestation was accepted, and Lord Maxwell was again received into royal favour, and had his honours and dignities restored to him. But he did not long enjoy the royal favour. Worn out by the troubles through which he had to pass, he died the following year, 9th July, 1546.

We know little of the character of this castle. In the MS. history of the Maxwell family it is stated that the Lord Maxwell built a castle in Dumfries with a bartizan about the same; and an English officer reporting to his Government anent the defences of the town of Dumfries describes it as a fair house, battled, but not strong.

Robert, sixth Lord Maxwell, died early at Dumfries, 13th September, 1552; and the seventh lord passed away at Hills Tower when only four years of age.

John, eighth Lord Maxwell, afterwards created Earl of Morton, 1554-1593, early joined the ranks of the supporters of Queen Mary, and thereby became obnoxious to Queen Elizabeth, who in 1570 sent Lord Scrope with an army into Dumfriesshire, instructed to lay waste the estates of those who favoured the cause of the Scottish Queen. According to his report to Elizabeth, Scrope "took and cast down the castles of Caerlaverock, Hoddom, Dumfries, Tinwald, Cowhill, and sundry other gentlemen's houses, dependers of the house of Maxwell, and having burned the town of Dumfries, returned with great spoil to England."

How long the castle remained dismantled is uncertain, but in 1580 Lord Maxwell appears again to be resident there.

This eighth lord was imbued with a strain of turbulence in his disposition, which frequently involved him in difficulties; and his castle of Dumfries was threatened, and ultimately taken by the royal troops in consequence of his hostility and disobedience to the Government.

The Regent, the Earl of Morton, desired Lord Maxwell to depart from a claim which he had on that earldom, and being refused, he in 1577 deprived Maxwell of the Wardenship of the West Marches, and installed his rival, Johnstone of Annandale, in his place. After the execution of the Regent, Maxwell was restored to favour, and the Earldom of Morton was bestowed on him. Arran, the Chancellor, next, for personal reasons, attempted to curb the power of Lord Maxwell. On 26th February, 1585, it was ordained by the council that Lord Morton should be denounced his Majesty's rebel for harbouring two of the name of Armstrong, and it was further ordained that he and all other keepers of the Castle of Caerlaverock, the Thrieve, the houses of Dumfries, Mearns, and Goatgellis, should be com-

manded to deliver them up and to remove themselves and their servants forth thereof within twenty-four hours after being summoned.

An army intended at this time to march on Dumfries against Lord Maxwell was dispersed on account of an outbreak of the plague.

In 1585 an Act of Indemnity was passed in favour of Lord Maxwell; but the same year he again offended. On Christmas Eve, collecting his followers at his Castle of Dumfries, they marched in procession to Lincluden College, where mass was celebrated in ancient form. For this act, the age being intolerant, he was put in ward, but shortly liberated. Again, in 1588, Lord Maxwell mustered his forces to act in concert with the Spanish Armada, when it should arrive, he having advised that the attack on England should be made through Scotland. Of this his cousin, Lord Herries, having warned King James VI., Maxwell was summoned to appear before him, who defiantly replied by arming his castles. King James assembled such forces as he could suddenly bring together, and hastened to Dumfries. Lord Maxwell, who was in his house, received warning of the King's advance only an hour before, and was almost surprised by the royal troops. The gate, however, was held until he had escaped by a postern. Ultimately taken and imprisoned, he was liberated and restored the following year. Lord Maxwell was too able and powerful to remain long in disgrace, and condonation followed every transgression on his part.

A bitter feud existed between the Maxwells and the Johnstones, and the latter clan, having raided the Crichtons of Sanquhar, who complained to the King, Lord Maxwell, as Warden of the Marches, was commanded to see justice done. This congenial task he undertook, and having assembled his friends, marched from Dumfries against the Johnstones, who, being warned, had also made preparation. The clans met in battle on Dryfe Sands, 6th December, 1593, when the Maxwells suffered defeat, and their chief, Lord Maxwell, Earl of Morton, was slain, to the great grief of his followers. He was buried in a vault prepared for him in Lincluden College. The remains of it stand in the middle of the chancel.

This eighth lord is characterised in "The Book of Caerlaverock" as a nobleman of great spirit, humane, courteous, and learned; and the beautiful seals illustrated in that work are proof of a refined taste.

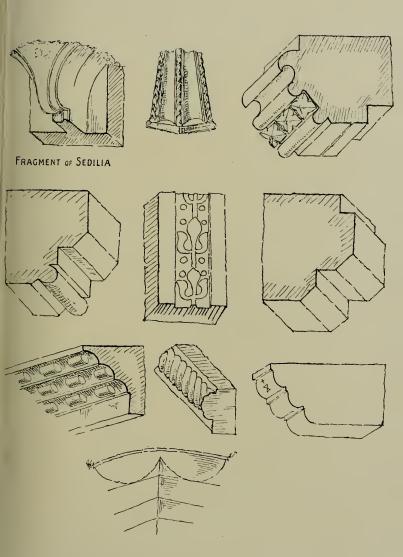
John, 5th Lord Maxwell, 1593-1613, brought on himself dire calamity and odium. Having broken prison from Edinburgh Castle, the King, very angry, issued a proclamation that none should harbour him under pain of death. Outlawed and in hiding, Maxwell thought to better his condition by securing the friendship of the hereditary foes of his family, the Johnstones. With that view a meeting took place according to appointment between him and the chief of the latter clan. Maxwell's motive will never be known, but conceivably the meeting with his ancient enemy reminded him of the disgrace of Dryfe Sands and his dead father, and roused in him uncontrollable passion. However that may be, he treacherously shot the laird of Johnstone in the back, who, coming to the ground, shortly expired, exclaiming, "I am deceived. Lord have mercy on me! Christ have mercy on me!"

Lord Maxwell fled to France, where he remained four years. On returning to Scotland he was apprehended, carried to Edinburgh, tried, condemned, and executed, confessing the justice of the sentence passed on him.

The flight to France was the occasion of the ballad "Lord Maxwell's Good-Night." It enumerates the castles his lordship held, and describes Dumfries as "my proper place," that is, my residence or chief residence.

The castle dismantled by Scrope had been rebuilt. Dr Burnside puts the date about 1590, that is, in the time of the 8th lord, who fell at Dryfe Sands. It will be seen that the castle, like the seals of the lord before referred to, evidences artistic tastes—it was highly ornate. Scotland, notwithstanding evil times, had developed a form of architecture peculiarly her own. Glammis and Fyvie are noted examples. Lord Maxwell's Castle of Dumfries may not compare with these in 'magnitude, but it seems no way inferior in richness of ornamental detail.

The county records furnish evidence showing that the castle was of three storeys, with vaults below; and its architectural character is disclosed by certain typical stones recovered from the walls of the New Church, taken down to make way for the existing Greyfriars' in 1866. Among these are a bold corbel such as is usually found supporting a wall-head battlement; corbels of





circular corner turrets; jambs and lintels of wall openings, variously moulded, and enriched in some instances with dog-tooth ornaments; richly billeted corbeling course; cabled strings of various sizes; tapered pinnacles hollowed on the sides and cabled on the angles; and running conventional leaf ornament, which probably framed the panel for the coat-of-arms over the door.

A few stones typical of church work were also recovered, the castle having been partly built of the ruins of the Friary.

The castle was enclosed in a court, had stables and other offices, and extensive and no doubt beautiful gardens, reaching backwards to the river.

Robert, 10th Lord Maxwell, created Earl of Nithsdale, espoused the royal cause during the troubles of the Civil War, on which account this fine manor-place, along with all the other castles of the Nithsdale family, was wrecked. In a claim afterwards submitted by Lord Nithsdale for compensation, they are said as to having been "dismantled and razed."

Robert, 2nd Earl of Nithsdale, "the philosopher," purposed, the house having become unfit for his residence, to have it in some suitable degree repaired. In September, 1659, he appointed John Maxwell of Cowhill and Robert Maxwell of Carnsalloch to ascertain from tradesmen what would be the cost of repairing his house in Dumfries and the garden dykes, with necessary office houses. They ascertained that the expenses would extend at least to £3000 Scots money, and some whom they consulted estimated that the cost would extend to £5000. This scheme does not seem to have gone further.

We are made acquainted with the actual state of the castle in 1675. Correspondence passed between the Privy Council and the Commissioners of Excise of the county of Dumfries relative to the use of the castle for the accommodation of a garrison. On 5th August, 1675, a letter was received from the Privy Council stating that the Council had emitted an Act appointing garrisons to be in divers places, particularly at the Castle of Dumfries, in which there is to be 50 foot and 12 horsemen, who are ordered against the first day of August to be at the said place; and the commissioners are to sight the castle and see that it be made ready. On 25th August report was made by three gentlemen, who had been appointed to examine the castle, that the vaults and second storeys were sufficient. The other two storeys were not

sufficient, and the roof was not altogether watertight. Withal the first two storeys are sufficient enough for the conveniency of a greater garrison than is appointed. On 14th September report was made by some workmen that £80 (Scots?) would make the roof of the castle watertight. On 3rd January, 1681, a letter from the Privy Council, ordaining a garrison of 30 horse to be furnished at the Castle of Dumfries, was considered. It was recommended to the magistrates to sight the stables and assist in providing what may be useful, and to furnish the high rooms of the castle with beds and dales, and cause the windows to be filled up with divots.

The castle, according to Dr Burnside's MS., was sold by the last Earl of Nithsdale, whose romantic escape from the Tower is well known, before the year 1715, to M'Dowall of Logan, from whom the town acquired the site for the New Church in 1722. The site purchased is described in the Town Council minutes as the foundation of the old castle pertaining to John M'Dowall, younger of Logan, with a large part of the close, and 90 feet square of the castle garden.

This being the castle associated with "Lord Maxwell's Good-Night," we will conclude with a few stanzas of the ballad:—

Adieu, madame, my mother dear, But and my sisters three! Adieu, fair Robert of Orchardstane! My heart is wae for thee.

Adieu, the lily and the rose, The primrose fair to see; Adieu, my lady, and only joy! For I may not stay with thee.

Though I hae slain the Lord Johnstone, What care I for their feid? My noble mind their wrath disdains— He was my father's deid.

Adieu! Dumfries, my proper place, But and Caerlaverock fair! Adieu! my castle of the Thrieve, Wi' a' my buildings there!

Adieu! Lochmaben's gate sac fair, The Langholm holm, where birks there be; Adieu! my ladye, and only joy, For trust me, I may not stay with thee.

Authorities: "Book of Caerlaverock," Sir Herbert Maxwell's History, Dr Burnside MS., Mr William Dickie's "Dumfries and Round About." THE HONEY BEE: ITS NATURAL HISTORY, ANATOMY, &c. By HENRY MARRS.

Much has been written on the subject which I have the pleasure of bringing before you this evening, and still there is much in dispute regarding seeing, hearing, and smelling in the honey bee. Mr T. W. Cowan, in his book on the anatomy, etc., of the bee, quotes no less than 126 writers on the subject. Much has also been written on beekeeping, and still there is much misconception amongst beekeepers on that part of the subject too. Some time ago a lecturer before the Society of Arts in London said that beekeeping in some parts of England had made no progress during the last 2000 years. This may seem an exaggeration, but seeing that bees are still killed to take the honev it is not so. Columella, a Roman writer on agriculture, who lived nearly 1900 years ago, dealt with apiculture in one of his books, giving instruction on the best situation and management of an apiary, which is far in advance of the methods carried out in some rural districts at the present time, and might almost be an extract from a book on modern beekeeping. But I have been asked to confine myself to-night to the natural history, anatomy, etc., of the bee, which I now proceed to. If we take a hive of bees in June, we will find three different kinds of bees therein. The queen, which is the mother; the drones or male bee, and the workers, which are undeveloped females. These, the workers, were at one time thought to be neuters, but that is not so, they being produced from the same egg as the queen. The male bee is brought into existence at the beginning of summer for the purpose of impregnating the queen, and is destroyed at the end of the swarming season. There is only one queen in a hive, a few hundred drones, and from 50 to 70,000 workers. If the hive becomes too crowded. preparations are made by the bees to swarm. Large cells are formed, hanging downward, something like an acorn in shape. In these cells the queen deposits an egg, which hatches on the fourth day. It is fed on chyle food till the 9th day, when the cell is sealed over, the bee leaving the cell on the 15th day. As soon as the cell is sealed over the queen and nearly all the flying bees leave the hive and form a new colony. On the 15th day a virgin queen hatches, and, if the bees are willing to allow this firsthatched queen her own way, she will destroy, assisted by the bees

probably, all the rest of the young unhatched queens. On the third day, if weather is suitable, she will fly out of the hive to be fertilised, which, when once accomplished, lasts her lifetime, and rarely leaves the hive again except with a swarm. I say rarely, because some beekeepers maintain that queens do sometimes take an airing flight in the spring, which I doubt. Bees gather nectar from flowers, most single blossoms containing some. This nectar contains a large proportion of water, which is evaporated by the heat in the hive, which never falls below about 60 deg. even in winter. Nectar is cane sugar, but is converted by the bee into the grape sugar or honey by secretion from its salivary glands. Pollen is gathered from flowers, and is used as bee food -propolis also, and is used as a glue for stopping up any air holes in hive. Water is also gathered, but not stored. The eggs laid by the queen are of two kinds. The egg hatches on the third day usually, but sometimes is delayed a little longer, it depending on the temperature. The larva lies at the base of the cell, slightly curved, and as it grows forms a complete ring. The larvæ are fed on chyle food for three days, during which time the food is absorbed by the body as well as the mouth. After three days the food is changed, and honey and digested pollen is added for workers, and honey and undigested pollen for those intended as drones; but those intended for queens are fed abundantly on the same chyle food during the whole of their larvæ existence. It will be noticed that the difference between a queen and worker is a question of food. When the larvæ have grown their full length feeding ceases, and the cells are sealed over with wax and pollen. This is to keep the cell porous and allow the bees to breathe. The larvæ spin a cocoon with silk from the silk glands, which takes one day for the queen, two for the worker, three for drones. Then they all have a period of rest for two, three, and four days. They each take a day to be transformed into nymphs, and the time in nymph state is three, seven, and seven days respectively. The queen takes, therefore, 15 days to develop, the worker 21, and the drone 24 days. It will be noticed that the food is changed at the end of the third day. It is then that the genital organs in female larvæ appear, and if the chyle food is continued, the ovaries are developed. If the food is changed, we have only the rudimentary ovaries. Reproduction without fecundation is called parthenogenesis. This was known to exist in some insects 200 years ago, but it was only about 50 years ago that it was known in bees. All eggs which come to maturity in the ovaries are one and the same kind, which, when without coming into contact with the male fertilising germ develop into male bees. Those which are fertilised produce females. If we cross an Italian queen with a black drone, the female progeny will show qualities of the two races, but the drones will be Italians. The drone, therefore, has no father. This was anatomically proved by Siebold, who crushed eggs newly laid, and eggs laid in drone cells were found to be without the fertilising germ, whilst in the eggs found in worker cells the germ was plainly seen. In the head of the worker bee are the compound and simple eyes, antennae, and mouth parts. In the worker the three simple eyes are on the crown of the head. Set in triangular form, they are much the same in the queen, but in the drone the compound eyes are so large that they displace the simple ones, which appear right in front of the face. antennae, of which there are two, are in the centre of the head of each bee. The mouth parts consist of several organs, of which the most interesting is the tongue. The thorax gives place to the two pairs of wings and three pairs of legs. The abdomen contains the honey sac, true stomach, etc., etc. The compound eyes consist of a large number of simple eyes placed together, with sensory hairs between each facet. There are never less than 3500 in each compound eye. The queen has more, and the drone which has to seek its female many more, displacing the simple eyes entirely. The compound eyes are for seeing at long distance, it being calculated that the angle formed by the lenses enables the bee to see an object of half-an-inch at seven yards. The simple eyes are for short vision, and useful in dark places. Mr Cowan thinks Lord Avebury's experiments not conclusive; they simply show bees can become accustomed to certain colour. Recently a lecture was delivered before the Academy of Science in Paris on the life of bees by Mr Gaston Bonnier, who said: "With respect to the visual powers of bees scientists are not agreed, but after a long study of them had noticed that bees were not attracted by bright and showy colours, but were evidently guided by the scent, which draws them towards those containing nectar." This is exactly my opinion on the subject. The antennae in the worker have twelve separate joints, and near the end

have sensory hairs. Many scientists maintain that it is in the antennae that the auditory and olfactory organs are situated; others say that organ of smell is in the labrum within the mouth. Cowan thinks the weight of evidence is in favour of their being considered olfactory. There are two pairs of wings, the larger in front, and the bee can at will join the two at each side together, the hind wings having a series of hooklets which fit into a trough in front wings. Bees can fly backwards at a speed of about 12 miles an hour, but I think this can be exceeded. Young bees just hatched cannot fly owing to their trachea not being sufficiently charged with air. The first pair of legs has an arrangement for cleaning the antennae exactly like a comb, and it has also brushing hairs for collecting pollen gathered on the hairs of thorax. The hind legs are provided with a basket for carrying pollen, and also with a pair of pincers for removing wax from the wax plates on the under side of abdomen. The foot of the bee has claws which enable it to hang on to any rough surface. There is also a cushion which secretes a sticky substance, enabling the bee to walk on smooth surfaces where there is no hold for the claws. The abdomen is made up of six imbricated rings of chitine connected by a membrane, which by creasing allows the plates to pass over each other so that the abdomen can be expanded or contracted. There are six dorsal and six ventral plates. Bees do not breathe through the head, but by openings on the surface of the body, called spiracles; they are double, the inner closed with a valve, and the outer, with hairs to keep out dust, lead to large air sacs inside abdomen. There are two pairs of spiracles on thorax, five pairs on abdomen. Spiracles are connected with tracheal tubes, which extend to antennae. Newport says the use of air sacs is to enable the bee to alter its specific gravity at pleasure by enlarging its bulk, and thus rendering it better able to sustain itself on the wing. The ovaries of the queen, of which there are two, are placed on each side of the abdomen—they are tubular glands. Over each side there are about 200 tubes or follicles, each follicle containing about a dozen of eggs, making about 5000 altogether. On the ovary on the right side is the spermatheca, which centains the fertilising spermatozoa. The queen allows the egg to be fertilised or not as the egg passes out of the ovaries. The wax glands are below the ventral plates of abdomen. Wax is a voluntary secretion; yet can only be produced at a high temperature, a temperature of 90 degrees being required. This the bees obtain by close clustering. Huber found that bees produced slightly more wax when being fed with sugar syrup than honey syrup. Pollen is not needed in the production of wax, except to make up for wear of tissue, which is great when secreting wax. It is estimated that bees consume from 10 to 12 lbs. of honey to produce 1 lb. of wax, but temperature must influence the quantity used. The way in which bees form the hexagonal cells is said by Mullenhoff to be that of mutual interference, as all circles coming into contact with each other assume that form, and also shows that the cells are like soap bubbles, which if alone are round, but when touching form a wall, and if there are many the centre will be hexagonal. We come now to the sting of the bee. It is formed of a pair of feelers, a sheath, and two lancets having barbs like a fish hook. Attached to the sting is a poison sac worked by a set of muscles which pumps the poison into the wound. The bee first uses the feelers to see if the object is stingable. It then drives in the sheath, and then the lancets, which move alternately or together. The pain of a sting is caused by the poison introduced into the wound, and not by the wound itself, as the sting is only 1.500 in. in diameter, and is driven in to the depth of 1.50 in. While bees die from the effects of a sting, the poison, which is formic acid, can be given them in their food without any ill effects. Formic acid is one of the remedies used in foul broad

20th April, 1906.

Chairman-The PRESIDENT.

BIRD LIFE AND BIRD PHOTOGRAPHY. By HUGH STEUART GLADSTONE, F.Z.S., &c.

Birds' nests are often built at such a height from the ground that it is difficult to get the lens of the camera to look down into them. It may at times be necessary to climb a neighbouring tree, taking your camera with you, and fixing it as best you can, so as to look down on the nest. Usually, the desired elevation

can be obtained by lashing three pieces of stick to the legs of your tripod, while you focus from a ladder or from your assistant's back. To photograph the birds themselves, it is, of course, necessary to frighten them as little as possible. Mr Kearton, who may be regarded as the pioneer in this branch of photography, made use of a stuffed bullock, in which he hid with his camera near the nest. He also worked from under the shelter of a stuffed sheep and an imitation rock. Personally, I have not tried these dodges, but I have noticed as incubation advances that the bird's fear of man lessens proportionately as its eggs near the final stages of incubation. Having found the nest of a bird I wish to photograph, I make an imitation camera and tripod out of an old cardboard box and three pieces of stick, and this I place some distance from the nest. Every day I move my "dummy" nearer the nest, till at last it is at the spot where I should like to have my real camera. On the fateful day I substitute the genuine for the false article, I attach thirty feet of india-rubber tubing controlling the pneumatic release of my shutter, and I lie down behind some convenient bush or depression in the ground and am covered over with grass and leaves, and wait for the bird's return. In this way many of our slides have been obtained. The greatest nuisance the bird photographer has to contend with is what is technically termed "movement." There is no dodge for overcoming this, but a lens working at a wide aperture is essential for good results. Mr Legard and I use an Aldis Lens working at F.6, and for nests and eggs employ Edwards' "isochromatic plates," with a plate speed of 56, and for birds Ilford "monarch plates," with a plate speed of 200. The old-fashioned pyro developer, though messy, is still the best, but we have obtained many excellent negatives with other developers. As I have a number of slides to show I cannot now deal further with photographic details, but if there is time at the end of my lecture I shall be glad to answer any questions I can. Throughout the exhibition of these photographs I would ask you to remember that in nature birds' nests, and also the birds themselves, often closely resemble their surroundings, so that in some cases you may have a little difficulty in making out the pictures thrown on

Our first photograph is of a bird's nest which is probably familiar to most of you. Here we have a blackbird's nest and

eggs. This picture needs no lengthy description, so we pass to the next.

This blackbird's nest was built in an espalier apple tree trained against a stone wall. The camera and operator were hidden behind a screen of old sacking. Mr Legard, who took this photograph, noticed that the bird in feeding its young had recourse to what is known as "regurgitation."

This picture shows the nest and eggs of our familiar summer visitant, the spotted flycatcher, built in the ivy growing round the porch at Capenoch.

Here we see the spotted flycatcher at its nest. This slide shows a young spotted flycatcher.

THE PIED FLYCATCHER.

Our next five slides are of considerable interest, for they concern the pied flycatcher, a bird which is extremely local in its breeding haunts as regards Great Britain. I am very glad to be able to say that this bird now nests annually in the valleys of the Scaur and Shinnel. Here we see a view on the river Shinnel. The natural growth of alders afford plenty of nooks and crannies in which the pied flycatcher can make its nest, and the proximity of the river assures the bird of a constant supply of flies and insects. This is a photograph of the actual tree utilised by the pied flycatcher for nesting purposes. The hole shows the entrance to the nest. Oddly enough a convenient hole at the top of the same tree was similarly used by a pair of spotted flycatchers. By carefully removing a portion of the tree we are able to display the nest and eggs. This nest was so badly lighted that with the lens stopped down to 45 an exposure of no less than 135 seconds was necessary. The eggs, as regards size and their pale blue colouration, are not to be distinguished from those of the redstart, and the position of the nests of these two birds is often the same. But in the structure of the redstart's nest it is usual to find feathers, whereas these are not made use of in the nest of the pied flycatcher. Here we see the female pied flycatcher about to enter her nest to feed her young. This photograph was obtained by employing a dummy camera, to which in a few days she became so accustomed that she paid not the slightest regard to the real camera when it was placed in position. This slide shows two pied flycatchers at the nest at the same time, and affords an

ornithological puzzle. As can be seen, neither of these birds is a mature male. As a matter of fact we often saw the "pater familias," but he would never face the camera. Probably one of these birds is a female which had lost her young, and so, prompted by the feelings of maternity, carried food to a nest where she knew there were eager mouths to fill.

TREE CREEPER.

This slide shows the nest of a tree creeper, built in a loose stone dyke. Usually this nest is made in a crevice of a tree or behind some semi-detached piece of bark. These birds have the peculiarity of always lining their nests with strips of bark, as can be seen. Here we see the tree creeper about to enter its nest. The stiff, stunted tail should be noticed, which, with its two legs, makes a kind of tripod for the bird to rest on when creeping the trees in search of its insect food.

THE LITTLE GREBE.

Our next series of photographs concern the little grebe or dabchick. This bird, I understand, has only comparatively recently taken to nesting in this locality. This photograph is of the Far Loch at Capenoch, where it is now an annual visitant. This year I first noticed it on April 6th. The little grebe is extremely shy in its habits. Its nest is but a floating raft of aquatic plants moored to the surrounding rushes and reeds. On leaving the nest the bird carefully covers up its eggs, so that, as can be seen by our photograph, the nest might often be passed by in mistake for a bunch of weeds. Here we see the nest uncovered. The eggs are newly laid, or they would soon have become discoloured by being so frequently covered over with decaying vegetable matter. When fresh laid, these eggs are of a chalky white colour, which soon becomes stained. When blown, they are of a blue-green colour within. This slide shows the bird on its nest. To get this photograph a dummy camera was placed near the nest for several days in about three feet of water. When the photograph was taken the camera took the place of the dummy, and I hid on the bank as far away as the length of tubing of my pneumatic release would allow. Encouraged by my success, the next day the camera was placed even nearer the nest, with the result shown. On the first sign of danger the little grebe in an

incredibly short time first covers up its eggs, and then dives straight into the water without leaving so much as a ripple to betray its presence. It then stays with only its head above water near the nest, till it is safe again for it to resume incubation. My audience may be glad to know that this bird successfully reared its brood.

WHITE WAGTAIL.

This photograph of a white wagtail's nest was taken in Iceland by Mr Legard. This bird, though only a rare visitor to our shores, is probably often overlooked on account of its similarity of plumage to our familiar pied wagtail, the nest and eggs of which are indistinguishable. Here we see the bird near its nest. I regret that the photograph does not more clearly show the plumage; but the white wagtail can always be distinguished from the pied by the preponderance of grey on its back, and by the more conspicuous white on its wings.

MEADOW PIPIT'S NEST AND CUCKOO'S EGG.

This nest belongs to a meadow pipit, but contains, in addition to its proper complement, the egg of a cuckoo. Its larger size at once distinguishes it. The parasitic habits of the cuckoo are well known, and upwards of 120 different birds have been known to have been thus imposed upon. In this locality, the meadow pipit would appear to be the most common victim.

RED NECKED PHALAROPE.

Our next four photographs are of the red necked phalarope, an exceedingly rare nesting bird in Great Britain. Owing to the greed of egg collectors, this bird has been almost exterminated from its original nesting haunts on the north-west coast of Scotland. I know of no bird whose habits are more engaging. The female is the more brilliantly plumaged of the pair, and contrary to custom (I should perhaps say bird custom), courts the male. On him devolves the duties of incubation and also the care of the young: the female being content to idly preen herself on some neighbouring pool, without a thought of domestic cares. My photograph was obtained in Ireland. Here we can barely see the nest, hidden as it is by the short herbage of a maritime shore. Without moving the camera, but by pressing down the herbage on either side, we can see the four pear-shaped eggs—the smallest

pyriform eggs, I believe, that are known: they measure 1.1 by .83 inches. Here the patient male bird can be seen attending to his unnatural duties. No screen of any kind was needed to take this photograph, for the tameness of these birds is past belief, as can be seen by our next picture. Having found some nestlings, and seeing that their parent kept hovering close to our heads, I got my friend to hold a nestling in his hand, and focussed my camera on it. I had only a few minutes to wait before the bird came running up quite boldly to enquire after its young.

BLACK GAME.

This photograph is of a nest of the black grouse, who are perhaps better known as black game, the male and female being called respectively the blackcock and greyhen. Situated as these nests usually are on grassy hillsides, they are frequently (as happened in this case) destroyed by rooks. Here we see a greyhen on its nest, more securely hidden in a young larch plantation. It is to be regretted that this bird has decreased in this locality. The diminution of cropping, the draining of hill marshes, and the fertility and increase of the pheasant, all help to banish black game.

PHEASANT.

This nest of pheasant eggs would be regarded as a good clutch. The bracken has been laid aside, so as to better reveal the eggs. This slide shows the old bird on its nest, and was taken by Mr Legard in Yorkshire. The pheasant is a notoriously careless layer. I have found pheasants laying in the nests of ducks, black game, grouse, partridges, and woodcock, and in one case I knew of seven pheasants laying in one nest.

WOODCOCK.

It is satisfactory when we can affirmatively state that some bird is becoming a more constant visitor to this locality, and this, I am glad to say, is the case with the woodcock. Ten years ago a woodcock's nest was regarded as a rarity; now it is quite common. At Capenoch I can see woodcock in every month of the year. Here we see the woodcock's nest and eggs. The nest is but a depression in the ground, scantily lined with leaves or bracken. The eggs are not nearly so pyriform as might be expected of a bird of this family. This picture is of a woodcock

on its nest. Some observers have stated that the woodcock when incubating always keeps her eyes shut—lest, in the words of the poet, "Her eyes should betray her secret." My experience has been that the eyes are more often open than closed. This bird was so tame that I could stroke her back with my hand, and she reared her young without mishap.

SNIPE.

This is the nest of a common snipe, well concealed by a tuft of rushes, which have been cut so as to show the eggs. Our next photograph, of the bird on its nest, was obtained with great difficulty. Although a dummy camera had been erected for many days, the bird was extraordinarily shy. The ground was flat and quite open, and though I could worm my way to within thirty feet of the camera, where I had the pneumatic release, however cautiously I peeped up to see if the bird was on its nest, it always saw me before I saw it, and was off before I could do anything. At last one day I pressed the bulb on chance of the bird being on its nest, with the result shown. This photograph was taken in splendid light at noon on June 24th, 1905, with an exposure of one-thirtieth, the lens being stopped down to 23.

WOOD PIGEON.

Here we see the nest of the wood pigeon, a nest not often easy to photograph on account of the height from the ground at which it is usually placed. This slide shows two young wood pigeons, fully fledged, in the nest. These birds gave us a great deal of bother to photograph, for they were sufficiently educated to resent the presence of the camera; and as fast as one bird was placed in the nest the other walked off to one side of the nest and so become out of focus. However, patience at last gave us their portrait.

CURLEW.

The curlew's nest is annually increasing in numbers on the grassy hills in the Thornhill district. Here we see the nest and eggs. In the spring of the year our hillsides still resound with the cries of this bird, and we have read that in the old Covenanters' days these birds often forewarned some poor wretch hiding in the peat hags of the approach of Claverhouse's

dragoons, and so gave him time to effect his escape. This picture shows the curlew on its nest. Wild and wary as she is, maternal instinct has tamed her timorous disposition.

LAPWING.

Our next three pictures concern the lapwing or green plover, a bird so exceedingly useful to the agriculturist that it is regretted by some that it should still be legal to take its eggs up till the 15th of April. Here we see a nest made in a meadow; while our next photograph shows a nest made on a ploughed field. To get a photograph of a lapwing on its nest we had a hut made of spruce branches and placed for several days conveniently near a nest; but when we went to photograph the bird we found her eggs had all been destroyed by rooks. When moving the hut we found a blackbird had made its nest in the spruce branches; so care was taken when erecting the hut near a fresh lapwing's nest not to disturb the blackbird. This lapwing's nest was also destroyed by rooks, so the hut was moved a third time to another lapwing's nest; and this photograph was obtained. As I sat in the hut with my camera the blackbird, who had fearlessly followed her nest, incubated her eggs within two feet of me. Eventually, as the field had to be harrowed, the spruce branches of our hut were carefully placed at one side of the field, and here the faithful blackbird had the satisfaction of rearing her brood unmolested.

MERLIN.

This photograph is of a merlin's nest and eggs. One of these shows most remarkable colouration, being more like that of a kestrel than of a merlin-hawk. This photograph, as also the following one, was taken in Iceland by Mr Legard. It shows young merlins in the nest. This picture is interesting, as showing the development in the plumage of the nestlings you have seen in the preceding photograph. Only seven days had elapsed since the first photograph had been taken.

BLACK HEADED GULL.

Our next series of photographs deal with the black headed gull; a bird I consider misnamed, as for the greater part of its existence its head is white, and only in spring does its head become brown. A far more appropriate name would be the

masked gull. This bird is a great benefactor to agriculture, but as is the case with rooks, kestrels, and owls, certain individuals by their carnivorous malpractices call down wrath on the whole of their community. At the Dhu Loch, near Capenoch, there is what is termed a large "gullery" of these birds. Here we see the birds at the Dhu Loch hovering over their nests. This photograph hardly gives a notion of the number of birds that assemble here to nest. This photograph is of the bird's nest and eggs; you will note that they are not unlike those of the lapwing, being of an olivaceous ground colour, blotched and spotted with dark brown, with undermarkings of grey, but not so pyriform in shape. They are often sold to the uninitiated as plover's eggs. This photograph, taken in Ireland, shows a clutch of extraordinary eggs, all pale blue, without any markings whatever. To find one egg of a clutch lacking in pigmentary colouration is not very unusual, but to find all three eggs in one nest absolutely spotless is, I believe, unprecedented. This picture is of the owner of the nest, anxious to resume its duties as a mother, yet still not quite certain what the camera is going te do. All fears set at rest, we see the bird once more settled on her eggs.

PUFFIN.

This picture shows the nest and egg of a puffin. As a rule these birds nest in burrows, and so large are the nesting colonies that it is at times impossible to walk over the ground they have burrowed, so often does one sink in up to one's knees. Here we see a colony of puffins on their nesting ground. You will notice that these birds carry themselves at an unusually upright angle.

GREAT AUK.

Our next photograph is of an extinct bird, the great auk. This photograph is from a stuffed specimen in the York Museum, to which it passed from the Strickland collection. The bird here shown is in summer plumage. This slide shows the great auk in winter plumage, and it will be noticed that the throat at this season of the year is whiter. This photograph is also from a specimen in the York Museum, who obtained it from the Rudstone Read collection, to whom it had been presented by Mr Bell of Thirsk. It may be interesting to note that the last great auk was killed in 1844; the last British specimen being killed some

ten years previously. The only immature specimen of this bird known is in Trinity College Museum in Dublin. It was caught alive in Waterford Harbour, and was with difficulty kept alive for four months, mainly on potatoes and milk. Oddly enough, it devoured fresh water fish greedily, but did not seem to care for sea fish.

This is the photograph of a cast of a great auk's egg—from the Hancock Museum, Newcastle. Only some 71 eggs are now known to be extant.

SEA BIRDS ON FLAMBOROUGH HEAD.

Our next photographs are of that famous nesting resort of sea birds, Flamborough Head, off the coast of Yorkshire. Here we see the "Door" Cliff and "Staple Nook." Myriads of puffins and guillemots annually come here to nest, and when the Ornithological Congress met in England last year, the foreign members were taken to this spot as being one of the ornithological sights of Europe. Personally, on the unfrequented wild north-west coast of Ireland I have been far more impressed, both by the variety and numbers of birds there, and by the superior grandeur of the maritime scenery. This photograph, also taken at Flamborough Head, shows some guillemots sitting on a ledge of rock; and gives a good idea of the steepness of these cliffs.

LESSER TERN AND ARCTIC TERN.

Our next four photographs were all taken in Ireland, and concern the lesser tern. Here we see a nest on the sand. It is very seldom that any materials are made use of, and the supposition that this bird decorates its nest with pieces of shell is, I think, erroneous. Such decorations are employed by the ringed plover, whose old nests are occasionally utilised by the lesser tern. This photograph shows the eggs of a lesser tern placed in what I take to be a ringed plover's disused nest. The colony of lesser terns which provided us with these photographs nested in close proximity to a colony of Arctic terns. Here we see a nest containing three eggs of the Arctic tern and one of the lesser tern. That such mistakes do not more often happen, when large colonies of birds are nesting within but a few feet of one another, is one of the marvels of Nature. The Arctic tern was sitting on all four eggs, but I had left before they were hatched. This photograph shows

the lesser tern on its nest. A pit was dug in the sand near the nest, into which my friend Mr Legard got with his camera. He was then covered over with old sacks and liberally sprinkled with sand.

Our next six photographs concern the Arctic tern. This photograph shows an islet on the Langa river, in Iceland, which was resorted to for nesting purposes by these birds. The next, taken in Ireland, shows two eggs in the nest. The eggs, which vary enormously, in colouration, are in this case dark chocolate brown, blotched and spotted with black, and with undermarkings of grev. Here we see an interesting photograph. You will notice that one egg is normal; the other is abnormal, being spotless and pale blue in colouration. When speaking of the black headed gull, you will remember that I said that to find one egg of a clutch lacking in pigmentary colouration was not very unusual. This picture shows the Arctic tern brooding its young, which can just be made out below the bird's breast. This photograph is of the same bird as in the preceding, and was taken in Iceland. It shows the bird at the nest, with its wings uplifted in a truly characteristic manner. Our next photograph, taken in Ireland, shows the Arctic tern contentedly incubating her eggs.

4th May, 1906.

Chairman-Mr Robert Service, V.P.

It was agreed to record in the minutes an expression of regret at the deaths of three members of the Society, viz.:—The Right Hon. the Earl of Mansfield, Captain W. Stewart of Shambellie, and the Rev. Joseph Hunter.

Mr J. Rutherford, Jardington, exhibited an equatorial star finder of his own design for the use of beginners. The following is Mr Rutherford's description of the instrument:

A few years ago, when learning the stars, I sometimes had a good deal of trouble in finding the ones that I saw in the sky on the map; also, trouble and doubt were experienced in regard to stars I saw on the map in locating them in the sky. Under those

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circumstances, I very much felt the need of something to assist in searching, and for confirmation of my observations. After some consideration, I designed and made the finder you now see. The circles are made from old clock dials roughly divided by hand (cardboard would do quite well). The right ascension circle is divided to minutes, the dec. to degrees. The finder requires to be placed on a level stand (I used a large flower vase). It must stand when in use in its proper position in regard to the meridian of the place. To do this, find the longitude of the place on a map, and for every degree that it is west of Greenwich it will be 4 minutes later than Greenwich time; for every degree that it is east it will be 4 minutes earlier. This will give the time of the place when this is found. Stick a piece of wire upright on the top of the stand, and at the correct time of noon draw a line along the shadow made by the wire and the sun; this line will be the guide for placing the finder. To find the polar axis, take a piece of wood or cardboard, say, 14 by 18 inches, stand it with its 14-inch end on the top of the stand or table. Look along its edge, and tilt it until the edge comes in a line with the pole star; this will give the required angle. To use, place the finder in its proper position as to north and south on the stand, guided by the line already drawn, and I will assume that the top star (Delta) in the belt of Orion is known to the observer. Look for its position in the star map, which will be found to be: R.A., 5 hrs. 26 mins.; Dec., 0 deg. 23 mins. S. Look through the tube, and bring the star into the centre, turn the R.A. and Dec. circles until the pointers are on these figures. Now, suppose you want to find Castor in Gemini: Find its position on the star map, which is R.A. 7 hrs. 27 mins., Dec. 32 deg. 9 mins. N. Without touching the circles, turn the Dec. and polar axis until the pointers are on these figures, and the tube will be pointing to the star, or very near it. Now, suppose you see a star or group of stars in the sky, and you wish to know what this particular star is, or in what constellation the group is. Again adjust the R.A. circle on Delta (Orion) or any other star the position of which is known; turn the tube to the star or group, and the pointers will give the R.A. and Dec.; find this place on the star map, and this will show what the star or group is, and in what constellation it is situated. It is not to be expected from this roughly-made and imperfectlydivided finder that its readings will be quite accurate, but it certainly is a great help to anyone just beginning to learn the stars and constellations. I designed and made it in a hurry, and used it along with the telescope until I got pretty familiar with the different constellations and principal stars; it may be constructed in a short time by any amateur mechanic of ordinary capacity. I may add that to get a familiar acquaintance with the stars a telescope is not really necessary, but a good star map is required, and I can recommend to all beginners Proctor's small atlas, price 5s, and when used along with Webb's "Celestial Objects for Common Telescopes" and a good 3 in. glass, and all mixed up with a real desire "to know," it is all that any amateur astronomer may desire.

THE BIRTHPLACE OF ANNA LAURIE. By W. DICKIE.

This note is a sequel to the very pleasant visit which the Society paid to Glencairn last summer. You will remember that our host at Maxwelton House, in the very interesting account which he gave us of the house and the Laurie family, mentioned an idea which has lately prevailed in some quarters, that the heroine of the song which has made the house and its braes celebrated was born, not in Maxwelton, but at Barjarg Tower, in the neighbouring parish of Keir. In conversation with Sir Emilius I learned that the only basis for this theory was the record of her birth in what have come to be known, somewhat vaguely, as the Barjarg Manuscripts. I expressed the opinion that it rested on a misapprehension of the nature of these records, and I undertook to make inquiry on the subject. I have since done so, and it has been suggested by the Secretary that the result should be recorded in the Transactions of the Society.

The Laurie family records of the sixteenth and seventeenth centuries, I ascertained from Sir Emilius, have not been preserved at Maxwelton; but I found in the valuable library at Barjarg, to which I was kindly given access by Mrs Hunter Arundell and Mr Wadd, a transcript of that record, covering the period from 1674 to 1731. It is this copy of a Maxwelton document—not an original record kept at Barjarg—which contains the entry of the birth of Anna Laurie. The following is a complete copy of the record:—

MAXWELTOUN REGISTER.

At the pleasure of the Almighty I was married to my wife, Jean Riddell, upon the 27th of July, 1674, in the Trone Kirk of Edinb. by Mr Annane.

At the pleasure of God my da. Cath. Laurie was borne upon the 15th of June, 1675. She was baptized upon the twenty 2d of the same month by Mr Geo. Hunter.

At the pleasure of the Almighty God my son Robt. Laurie was borne upon the 21st of July, 1676, about 2 o'clock in the afternoon, it being upon a Wednesday, and he was baptised upon the 8th day of Augt., 1676, by Mr Geo. Hunter at the Kirk of Glencairn.

At the pleasure of the Almighty God my Da. Jane Laurie was borne upon the 12th of July, 1677, about 9 o'clock in the morning, it being upon ane Thursday, and she was baptised upon the 25th of the same month by Mr Geo. Hunter, our minister.

At the pleasure of the Almighty God my Da. Violat Laurie was borne upon the last day of June, 1680 years, about 12 o'clock at night, it being upon Wednesday, and was baptized by Mr Geo. Hunter.

At the pleasure of the Almighty God my Da. Susanna Laurie was borne upon the 15 of July, 1681 years, about 6 o'clock at night, and was baptised at Glencairn Kirk by Mr Geo. Hunter upon the 26th of the forrsaid month.

At the pleasure of the Almighty God my Da. Anna Laurie was born upon the 16th day of Decr. 1682 years, about 6 o'clock in the morning, and was baptised by Mr Geo.

At the pleasure of the Almighty God my sone Walter Laurie was born upon the 3d of May, 1684 years, being Saturday about 7 o'clock at night, and was baptised by Mr Geo. Hunter our minister.

At the pleasure of the Almighty God my son John Laurie was borne upon the 14 day of Oct., 1685 years, being Tuesday, about ten o'clock of the day, and was baptised by Mr Geo. Hunter our Min.

At the pleasure of the Almighty God my father Sir Robt. Laurie was called by Death, the 23d Augt., 1698 years, it being upon a Saturday betwixt 4 and 5 in the morning, his age being 57 on the 7 of Sepr.

Signed ROBT. LAURIE.

At the pleasure of the Almighty God my brother, Sir Robt. Laurie, was called for by death upon the 28th of Feby., 1702 years, it being upon a Tuesday before 12 o'clock in the forenoon, his age being 27 come the 21 day of July ensuing.

Signed WALTER LAURIE.

At the pleasure of Almighty God my father Sir Walter Laurie was called for by death upon Tuesday, the 23 of Novr., 1731, at six o'clock in the morning, being aged 47 from the 3d of May last.

Signed Robt. Laurie.

The preservation of the terms of this interesting record we owe to Mr W. F. Hunter Arundell of Barjarg, who died in 1827. He cherished the idea of writing a history of the county of Dumfries and the county families, and had amassed a great deal of genealogical material; but he was not spared to cast the fruits of his industry into literary form. They were, however, placed at the disposal of the late Mr M'Dowall, and largely drawn upon in the compilation of his "History of Dumfries." The "Maxweltoun Register" is copied into a volume containing entries relating to many other families, and arranged in alphabetical order. The title prefixed to it, as well as the nature of its contents, shews that it is a register of events occurring in the Maxwelton family, and, except where otherwise stated, at their own residence. Maxwelton had been the life-long home of Sir Robert Laurie, the first baronet, who succeeded to the estate as a boy in 1648; and there his sixth child, Anna, was born on the 16th of December, 1682.

I communicated the result of my inquiries, with some other material, to Sir Emilius Laurie, and I received from him a letter, in which he wrote:—

"Let me again thank you for the very interesting article, a copy of which you have so kindly sent me. You have certainly completely cleared up the doubtful question of Annie's birthplace. I, too, had carefully read, as I thought, M'Dowall's History, but I do not remember to have read the preface, and, therefore, accepted the Barjarg myth. It is a case in which the injunction 'verify your references' needed application, and you have done well to all who love accuracy in historical statements in clearing it up. You have also cleared up to me another difficulty, namely, Anna's age at marriage. I had always supposed that the date on her marriage stone at Craigdarroch was the date of her marriage.

This appears not to have been the case. You also show, which I was not aware of, that she was three years older than her husband, Alexander Fergusson. In the portrait which I have at Maxwelton of Annie and her husband she certainly looks the older of the two, and if the portraits were taken at the same time, which would seem to be probable, the circumstance is explained."

I may add that Sir Robert Laurie was first married to Marion, daughter of Sir Robert Dalziel of Glenae, their marriage contract being dated 21st April, 1662. Of that marriage there were born three daughters, one of whom became the wife of Alexander Ferguson of Isle, advocate. Sir Robert's second wife, mother of the heroine of the song, was Jean Riddell, daughter of Walter Riddell of Minto. Anna's marriage to Alexander Ferguson of Craigdarroch took place on 29th July, 1709.

PHTHISIS AND SANATORIA. By Dr James Maxwell Ross.

Dr Maxwell Ross first showed a set of lantern slides illustrating the effect of the disease on the lung, the bacilli from which it originates, and methods by which it may be disseminated. Thereafter there were thrown on the screen tables and diagrams shewing the mortality from consumption in various countries. Those relating to England and Wales shewed a progressive decrease in the death rate from this cause in recent years, it having now fallen to 1.2 per thousand. The lecturer further stated that there was a more rapid fall in the death rate among females than among males. It might be that the dust occupations affected the latter to a greater extent; and factory legislation had probably affected females more than males. Taking into account the increase of population, the tables shewed that as compared with fifty years ago there was an annual saving of about forty thousand lives which under old conditions would have been sacrificed to this disease in England and Wales. The Registrar-General's reports shewed that about seven thousand people die from consumption in Scotland each year, and that the mortality per ten thousand of the population had dropped in thirty years from 27 to 16, representing a saving of nearly five thousand lives per annum. This gratifying improvement was more largely the result of what had been done by the sanitary authorities in large towns than of any change in rural districts or small towns.

Tables of the consumptive death rate for five-years' periods in Edinburgh and Glasgow shewed a fall in each period. This was markedly the case in the city of Glasgow, and was a most gratifying result of the action of the Town Council in regard to sanitary matters. Dr Ross also shewed a diagram illustrating the consumptive death rate in the burgh of Maxwelltown, for which he is medical officer. It shewed the extreme fluctuations which you got in small communities. To get a proper idea of the rate of mortality in Maxwelltown you would require to take a longer period than ten years. Last year it was below one per thousand. If that would only continue, they would have great reason to congratulate themselves on the reduction of the death rate in that burgh. Exhibiting a diagram which shewed by curved lines the rate of mortality in Scotland generally and in the county of Dumfries from consumption during the last twenty-five vears, Dr Ross said this would almost make one pessimistic, as it shewed that the death rate of Dumfriesshire had often been the largest of any county in Scotland. A coloured map indicating the distribution of the disease in the county during the past fifteen vears shewed that the death rate was highest in Nithsdale. Another diagram shewed the death rates in the landward part of Dumfriesshire during the last twenty-five years from consumption and from zymotic diseases respectively. The zymotic diseases, he explained, include smallpox, scarlet fever, diphtheria, typhoid, whooping cough, measles. From the period 1881 to 1890 the zymotic diseases and the phthisis diseases had a mortality not very greatly differing from each other; but from 1890, when the change in local government occurred, as the years went on, and more and more was being done by the local authorities for prevention of zymotic diseases, the death rate from these diseases gradually declined, while there was very little difference in the death rate from phthisis, for which nothing had been done. This was an indication to local authorities that when they had done as much for phthisis as they had done for zymotic diseases they would bring about a corresponding improvement. Turning to the consideration of preventive measures, Dr Ross showed photographs of bottle spittoons for use by consumptive patients, and he spoke of the great danger from infected sputum. When he went about the infirmary, he remarked, he was struck by this, that there was an enormous number of cases of glandular

diseases of the neck. Many operations were performed on children for removing glands and so on. A number of the children came from the closes about High Street and Queensberry Square. He would like them to think what the loafers in that square and "Monument rangers" were doing. They were loafing about there, spitting broadcast, and some of them them were known to be suffering from phthisis. The sputum became dry and was carried about as dust. The children, playing about, inhaled that dust and the bacilli of phthisis which it contained; and so they contracted the disease. Touching on conditions tending to promote the spread of consumption, Dr Ross mentioned the want of sufficient sunlight and of free movement of air in the closes of towns. He finally showed a set of slides illustrating the construction of sanatoria and the results of the treatment.

In reply to a question as to how Dr Ross accounted for the large amount of consumption in Ireland as disclosed by one of the slides, the smaller amount in Scotland, and the still smaller amount in England and Wales,

Dr Ross said he was afraid the answer to that question would involve a pretty long dissertation. Generally speaking, it was a question of housing and living. They knew what the housing and living were in the lower parts of Ireland; and what it was in certain parts of Scotland had recently been shown by the medical report on the prevalence of this disease in the Lewis. In England a number of Boards of Guardians had been in the habit of giving out-door relief to consumptive paupers and allowing them to live with their families, where they became centres of infection. Some years ago they changed their policy, and insisted that consumptive paupers should go into the workhouse infirmaries. Coincident with that, there had been a considerable fall in the death rate from this cause in England and Wales. Factory legislation and sanitary improvement had helped very much.

FIELD MEETINGS.

Field Meeting-2nd June, 1906.

(From the Dumfries and Galloway Standard.)

On Saturday the members of Dumfries and Galloway Natural History and Antiquarian Society, to the number of over forty, had a field day in Borgue district, and were the guests of Mr and Mrs Brown at their beautiful coast residence of Knockbrex. They were met at Kirkcudbright railway station by several gentlemen resident in the district, including Mr John M'Kie, R.N.; Mr E. A. Hornell, artist; and Mr John Douglas, Barstibly. Brakes, kindly provided by Mr Brown, were in waiting for their conveyance. Numerous points of interest were pointed out on the route, and the drive through a sylvan district, in sight of the Dee and the Solway, in brilliant summer weather, was greatly enjoyed. A halt was made at Borgue House, where, by the courtesy of Mr W. T. Sproat, the company were enabled to inspect the ruins of Borgue Place, immediately behind the modern mansion-house. The Place is chiefly interesting as an example of architecture which came into vogue after the union of the crowns and the better settlement of the country. The building occupies three parts of a square. The wall on the fourth side. with its strong gate, has long since disappeared. Driving past Borgue village, with its beautiful Parish Church, and Chapelton Row, Earlston House, the residence of the late Sir William Gordon, was pointed out. The view from here is very fine, and the day being an ideal one, everything was looking its best. To the left is the broad expanse of Wigtown Bay, with the Wigtown coast standing out clear and sharp, the coast line between Gatehouse and Ravenshall being also very distinct. Nearer, nestling in the hollow of the shore, is the hamlet of Kirkandrews, and further on are the woods of Knockbrex. Passing Carleton farmhouse, the old manor house of the Earlston estate, on the right, a halt was made at Barmagachan, tenanted by Mr Barber. This is another example of the same style of architecture as at Borgue Place. Near by is Barmagachan Moat, a small but very perfect example of the circular mound.

The journey was then resumed by way of Margrie to Knockbrex, where they were most hospitably received by their host and hostess. Under the fostering care of Mr Brown, Knockbrex is rapidly becoming one of the most beautiful places one could wish to see. The ancient home of the Gordons has been transformed into a handsome modern dwelling-house; but it is on the grounds that the greatest transformation has taken place. The gardens have been in course of extension and development since Mr Brown acquired the estate, and when the shrubs and other plants recently added have become established they will rank among the most beautiful in the South of Scotland. A delightful artificial lake, with various bays and inlets, surrounded by rhododendrons and other flowering shrubs and trees and choice conifers and foliage trees, was much admired. It has been formed with much taste, and the rockwork to the west, recently constructed, is extensive, and has been planted with a number of choice rock plants. There is in front of the house a spacious lawn and a number of beds, each filled with a choice variety of roses. A fine pergola, about 150 feet long, has also been added for climbing roses, and a unique "sunk garden," after the style of the ancient Roman gardens, has been formed in the centre of the lawn. The paths are paved with pebbles like tesselated stone work, and the beds are filled with the finest shrubs and plants suitable for the position, while the walls will be covered with climbers and wall plants. The kitchen garden and glass-houses were also visited and are of an extensive character, and do credit to Mr Bennett, the head gardener.

After having been entertained to a sumptuous tea, the party were conducted over the grounds, visiting the splendid stables, the electric installation, and the laundry, all of which are perfect models of their kind, and all fitted up with the very latest appliances. Mr Brown has also recently formed a harbour, where small vessels may land their cargoes, and near it is a large storehouse.

Returning to the house, Mr M'Kie, addressing Mr Brown,

said that, as it was chiefly through his recommendation that the members of the Society were led to visit that district, he had, therefore, personally to thank Mrs Brown and himself most cordially for their great courtesy and kindness. The members had had an opportunity of seeing the beautiful and natural arrangement of the grounds, but they could have no idea of the taste and skill, to say nothing of the cost, which it had taken to bring these to their present state and condition. It might truly be said of this place, as did the poet when describing the highways then recently opened in the Highlands, who said—

Had you seen these roads before they were made, You would hold up your hands and bless General Wade.

Had they seen this place before Mr Brown took it in hand and as they saw it that day, whatever they might do in the way of blessing, he was sure they would be struck with surprise and admiration. In the early part of last century that wayward genius, John M'Taggart, sang of Borgue as "a parish famous for its Browns and Sproats, the like ot's no on this side John o' Groats!" They had ample proof now before them that since then the race of Browns had in no way degenerated, as we held whoever made a portion of his Majesty's dominions beautiful, as Mr Brown had done these, deserved well of his country. The visitors would presently have an opportunity of seeing the interest he was taking in antiquarian research, through having had the accumulated rubbish removed from the Broch at Roberton, whereby its form and structure could now be seen, and it would be interesting to get the expert opinion of the society as to its probable origin and the purposes for which it might possibly have been used. While tendering thanks, it was with the hope and trust that Mrs Brown, himself, and family might long be spared to enjoy the fruits of his most interesting labour.

Mr Barbour also added a few remarks, and expressed the wish that Mr Brown and his family would long live to see their work come to maturity.

Mr Brown, in reply, said the visit of the society to Knockbrex had been a great source of pleasure to Mrs Brown and himself, and it was a pleasure they had greatly looked forward to. Anyone of an artistic temperament was always welcome to Knockbrex. They valued the kind remarks that had been made,

and appreciated them very much. The people who were not welcome at Knockbrex were the people who went about uprooting flowers, carving their names on rocks and trees, and scribbling on gates; but anyone interested in botany or natural history would always be made very welcome there.

At the business meeting the following new members were admitted:—Mrs Waddell, Victoria Terrace, Dumfries; Mr D. H. Hastie, Dumfries; Mr W. M. Grey, 5 Victoria Terrace, Dumfries.

The party, accompanied by Mr and Mrs Brown, then drove to Corseyard, the residence of Mr P. M'Connell, Mr Brown's factor, where the visitors' book was signed.

A visit was then paid to the "broch "* on the Roberton shore discovered some time ago, and which has been excavated and cleared out under Mr Brown's direction. The main entrance is from the side nearest the road. The "broch" consists of two walls, with a passage about three feet wide between. The ground appears to have been excavated, as the outer wall is built against the rock. When first discovered the walls, outer and inner, were about three feet high. A mark has been made indicating the height when found, and they have been considerably heightened. From the inner court a number of openings lead into the passage. This has evidently been covered, as at the west corner the slabs across are still in position. In the south corner is a part of the original payement, and here most of the interesting relics, now at Knockbrex House, were found. These consist of a beautiful ear-ring found in the main doorway, teeth, skeleton of a hand, remains of chain metal, blue and white bead, rings. Still lving in the "broch" are to be seen a quern, a stone knife, and a whetstone, all in excellent preservation; besides fragments of deer's antlers. On the south-west is a passage leading through both walls, and still showing the original path to the shore, covered with rough slabs. Another peculiarity is the number of openings leading into the passage. The whole building is circular. The importance of the discovery lies in the fact that no structure of this kind has hitherto been known to exist in the south-west parts of Scotland. A broch is described by Dr Joseph Anderson as a hollow circular tower of dry-built masonry, rarely

^{*} Note.—Since this was written further research has shown that this building is not a "broch" but an ancient fort.—Ed.

more than 70 or less than 40 feet in total diameter, occasionally at least 50 feet high, and enclosing a circular court or area from 25 to 45 feet in diameter. In his opinion, it is clear that these ancient buildings were used as places of refuge, and in those days they would be practically impregnable. Roberton broch is built on a rocky eminence, but whether it was also defended by ditches and embankments, earthen ramparts, or dry stone walls has not yet been ascertained.

A hurried visit was paid to the ancient hamlet and churchyard of Kirkandrews, which contains two stones erected to the memory of Covenanters done to death near by, and the grave of William Nicholson, the Galloway poet. Mr Brown, with characteristic generosity, is building a handsome chapel at Kirkandrews to take the place of the old meeting-house. A beautiful lychgate has also been erected.

The party were greatly indebted to the veteran Mr M'Kie, for so kindly acting as guide, and pointing out and explaining the various objects of interest on the route.

Field Meeting-16th June, 1906.

(From the Dumfries and Galloway Standard.)
MOFFAT DISTRICT.

A party, numbering about twenty, paid a visit to places of interest in the vicinity of Moffat. Driving first to Auchencastle, they had, through the courtesy of Mr Younger, the privilege of inspecting the fine collection of pictures, which includes a beautiful portrait of a lady, "Madame Elizabeth of France," by Vegee Le Brun; characteristic works of George Morland, Sidney Cooper, Sir W. Beechey, Horatio M'Culloch, several works of Dutch painters; a striking portrait of Oliver Cromwell as a comparatively young man and in armour, suggestive rather of the Cavalier than the Roundhead. Mr Younger has also in his study a most interesting collection of print portraits of distinguished British statesmen. Among numerous artistic objects to engage attention was a massive piece of old oak carving forming the frame work of the hall chimnevpiece, the side supports being statues carved in wood. The beautifully laid out grounds around the castle present at this season a gorgeous mass of colour, produced by extensive clumps and deep banks of many-tinted rhododendrons and azaleas; and the chestnuts and laburnums also bear a profusion of blossom. Under the guidance of Mr M'Adam, head gardener, the visitors made a round of the conservatories, vineries, and peach-house, where they found much to admire; among other special features, the magnificent collection of calceolarias, each of distinct colour and all of a wonderful size; the fine, rose-like carnations, and splendid double begonias. Driving next by way of Lawesknowe to the old castle of Auchencas, an inspection was made of its ruins. The outer walls, which are about ten feet thick and enclose a square of about 120 feet, remain to a height of several feet, as grass-grown ridges, along their whole length, and stumps remain of three of the angle turrets. The encircling moat also is plainly to be traced for almost its entire extent. But the internal buildings have wholly disappeared. The castle is associated with the name of Randolph, Earl of Moray, the comrade of Bruce, and afterwards Regent of the kingdom; but little mention of it is made in history. It is known that it became the property of the Johnstones of Corehead in 1638, and that it had formerly been the property of the Douglases of Morton. Proceeding next to the beautiful Garpol Glen, which is in the immediate vicinity of the old castle, the party viewed its pretty water falls, noted its geology, particularly the spots where the Silurian shales are exposed and samples of the Moffat graptolites can be obtained; and found much to interest them in its wealth of flora. Emerging at the foot of the glen—where a long tunnel has been made in the rock to carry the stream below the Caledonian Railway—the party walked across the fields to Auchencastle avenue, where they rejoined the brakes. On the way they passed St. Margaret's Home, a practical embodiment of Mr Younger's philanthropy, providing as it does a place of country residence for invalid city children during periods of convalescence. Driving up the valley of the Evan as far as Longbedholm, they thence proceeded by the steep hill road over the ridge into the valley of the Annan, and called by the way at Chapel farm to inspect the remnant of the old chapel of the Knights Templars, from which it derives its name. The remains consist of a portion of the west gable, with three-light pointed window, of which one of the mullions is awanting, and part of the east gable, in which had been the doorway. The latter has been built into the gable of one of the farm cottages; but through the kindness of Mr Lindsay, the farmer, the visitors were enabled to climb the loft and see there the top of the pointed arch of the chapel wall. Traces of foundations show that there had been extensive buildings adjoining the chapel, and it is said that the Templars possessed land for two miles up the valley, including Gardenholm, where their orchard was. They also had an establishment at Frenchland, on the opposite side of the river and town. In a document of date 1355 the chapel is referred to as "Kyrkbride, in the tenement of Kirkpatrick-Juxta, Moffat, in Annandale," and it is stipulated that the redemption money of a certain property, on which a "wadset" or mortgage had been granted, was to be paid on a green cloth before the high altar of the church so designated. The lands of Chapel were anciently known as the barony of Cuthbertrig.

In the Council Chamber at Moffat, to which the party next proceeded, Dr Pairman exhibited a very interesting collection of articles from New Zealand (in which he was long resident), illustrative of the life and customs of the Maoris, and also a number of other curios; and Mr J. T. Johnstone, who had been the guide for the day, shewed some examples of worm burrows and castings from the shales of the neighbourhood. Tea was provided through the kindness of several members resident in Moffat.

A short business meeting was held, at which the Rev. Mr Andson presided. Mrs Manson, Acrehead, Dumfries, and Mr William Miller, Moffat, were admitted as new members. Thanks were tendered to Mr Younger, Dr Pairman, Mr Johnstone, and to their hosts.

Field Meeting-28th July, 1906.

BONSHAW TOWER.

On the invitation of Colonel Irving a large party connected with the Dumfries and Galloway Natural History and Antiquarian Society visited "the chief" at his ancestral home on Saturday. Some went from Dumfries by train to Annan, and thence drove across the country. Others motored all the way,

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Mr Penman kindly placing at their disposal a handsome touring car which he had just built, and which is seated for twelve. Several journeyed from Lockerbie and Moffat. When fully mustered the company numbered 46. Bonshaw Tower stands on the right bank of the Kirtle, which at this point rises as an almost sheer rocky precipice to a height of about a hundred feet; and it is screened by umbrageous wood, much of it of venerable age. Beside it also is a bosky glen, with a succession of small waterfalls, and made accessible by pleasant paths and rustic bridges. The tower itself is a venerable battlemented structure, of the square pattern common on the borders, occupying the site and embodying probably part of the masonry of a baronial residence which is believed to have existed there from the early part of the eleventh century. Attached to it by a long hall, which might be described as a museum of arms and trophies of the chase, is the modern residence, the date of which is attested by the following lettering on a memorial stone: "1770. W. Irving J. Douglas." The names are those of the Irving chieftain of that day and his wife, a daughter of the ducal house of Queensberry. The inscription is placed over the main doorway, but that has been closed up, and tower and mansion have now a common entrance. The terrace overlooking the Kirtle is protected by low ramparts, on which are mounted six old cannon, and at one angle are remains of a smaller detached tower of ancient date. The flag of the Irvings, bearing their badge of three holly leaves, floated from the tower. Another Irving flag and the Scottish standard were displayed from the ramparts; and a piper in full Highland costume paraded the lawn playing a welcome to the visitors. They were most kindly received and hospitably entertained by Colonel and Mrs Irving and their daughters, and spent a most interesting day in inspecting the old tower, of which the original character has been preserved practically intact; in examining the many interesting mementos which have been collected within it; and listening to the Colonel's breezy narrative regarding the annals of the Irving clan, the stirring border scenes in which they figured, and more recent events of a warlike character in which individual members of it have taken part. "Bonshaw" is strongly possessed by pride of race and pride of country, and has a well-grounded aspiration to be the historian as well as the chief of his clan. Before succeeding to the estate and taking up his residence at Bonshaw he served his Sovereign in the field. His army experience was varied, beginning in the King's Own Regiment, and being subsequently transferred in succession to the military train, the transport service, and the Manchester Regiment. It was when colonel of this regiment that he retired from the army and bade farewell to military service, except such as may be incident to the duties of a member of the King's Bodyguard for Scotland. He took part in the Abvssinian campaign of 1867-8, and was at the storming of Magdala. Some of the most interesting objects in the tower are connected with that incident. They include a gold altar cross of Coptic work, with ornamentation of serpents, doves, and crosses; a sacred cup, and other articles which formed part of the loot of the capital. There are also weapons of numerous and curious forms in use in Abyssinia, Madagascar, South Africa, and India, as well as those of continental armies. It was curious to see an oldfashioned steel spur, with spikes of cruel length, such as was anciently in use on the Scottish and English border, side by side with one of the modern Mexican cowboy. The resemblance in shape is almost exact, but in the cowboy's the spikes are shorter. The walls are adorned with horns of the antelope, the vildebeest, and kindred species, and with antlers of the reindeer and the wapiti deer—the latter specimen having no less than fourteen

Beginning the exploration of the tower, the visitors first passed under "the Crusader's Stone," which is built into the roof of the little square entrance hall. It bears the sacred monogram in ancient Hebrew letters, and tradition says that it was brought from Jerusalem by an Irving who took part in one of the first crusades. Passing into the retainers' kitchen—a barrel-arched apartment of spacious dimensions—they had their attention directed to the immense stone bin, in which salted provisions could be stored in time of siege, and had an opportunity of making brief personal acquaintance with the dungeon. This is a small apartment in the thickness of the wall, capable on a pinch of holding fourteen persons. It is windowless and perfectly dark, but a small opening in the wall carried right up to the battlements admits of the ingress of a very meagre supply of air. Opening off the same little entrance hall is the stone stair of the

wheel type; or, as it was often called, a "turnpike," which goes to the battlements, and off it open the various apartments of the tower. The great hall is now the library. The apartment which forms the second storey was the chief bedchamber. Here, in an angle of the wall, is a little chamber from which a narrow square opening in the wall is carried right to the foundations of the Tower. Tradition has it that this communicated with a secret passage cut through the freestone rock from Bonshaw to the neighbouring tower of Robgill, about a mile distant; and that through this passage, in time of need, food was conveyed to the garrison of Bonshaw, and drawn up by a rope through this channel in the wall. A hole in the rock is to be seen at the Robgill end, which is said to have been the opening to this tunnel. A corresponding but smaller opening is carried up from the roof of the little chamber in the wall at Bonshaw to a still smaller secret apartment above, in which a man might be concealed, and who might be fed through that opening. The third storey has the original heavy roof beams still in position, fastened together by oak pins instead of the modern nails. This is now a billiardroom. On the battlements there is a pathway along all four sides of the tower, and on each side there are double openings, through which molten lead or boiling oil could be poured on assailants.

The tower has its traditional ghost of a hapless daughter of the house, who was thrown from the battlements because of her determination to wed a member of the house of Maxwell, with whom the Irvings had a long and bitter feud; but, of course, it does not walk by day, and it is disappointing to learn that it has not been known to walk at all within living memory.

Colonel Irving showed his visitors some interesting family records; among them the marriage contract of Margaret Johnstone, of the Annandale family, and Christopher Irving, younger of Bonshaw, in 1566. It bore to be signed "at the Lockhouse," which we take to be Lochwood, the ancient seat of the Johnstones, near Moffat. The father of the bride signed himself simply "Johnstone." Edward Irving of Bonshaw is made to say that he signs it "with my hand at the pen, led by a notary, at my command, because I cannot write." The Colonel mentioned that this Irving was a striking proof that learning is not essential to soldiering, for at the age of ninety he charged at the head of

his clan on horseback at Dryfesands, and turned a threatened defeat into victory for the Johnstones and Irvings. Cows and other bestial figured in the dowry of which the marriage contract made mention. Another possession of the family which attracted attention was an old chap-book containing an account of the capture of Donald Cargill, the Cameronian leader, by Christopher Irving of Bonshaw, at Covington Mill, and picturing his unholy glee at thus securing a reward of five thousand merks which had been offered by the Government of the day.

The visitors were entertained to luncheon and tea; and in course of the afternoon a meeting of the society was held in the library, at which the following new members were proposed by Mr Arnott, seconded by Dr Semple, and admitted:—Mr and Mrs W. Matthews, Dunelm, Maxwelltown; Mr and Mrs White, Noblehill Schoolhouse; Mr George Will, Crichton Royal Institution; and Miss Graham, Kilbarchan, Mr Dickie, who presided, tendered the thanks of the society to Colonel Irving for his kind invitation to visit Bonshaw and for the generous hospitality extended to them, and asked him to convey their thanks also to Mrs Irving and the members of their family. It was a privilege, he said, to have the opportunity of examining a typical border tower so well preserved as Bonshaw was, and entwined as it was with the story of old romance and warlike foray; and it was even more interesting to meet in their host a survival of the border chieftain. They had experience of his kindly nature; and might say of him that the gentle heart of a knight of chivalry beat under the rough armour of a border chief. Dr M'Lachlan, Lockerbie, seconded the vote of thanks, and observed that, notwithstanding the rather unfavourable weather, they had spent a most interesting and pleasant day. Colonel Irving assured them it had been a great pleasure to welcome the society to Bonshaw, and confessed that he loved the old tower like a living creature.

Field Meeting-8th September, 1906.

(From the Dumfries and Galloway Standard.)

SPRINGKELL AND ECCLEFECHAN.

The last of the season's field meetings of Dumfriesshire and Galloway Natural History and Antiquarian Society took place on Saturday, when between forty and fifty ladies and gentlemen paid a flying visit to Hoddom Church and Ecclefechan, and spent the afternoon at Springkell, as the guests of Sir Edward and Lady Johnson-Ferguson, viewing the works of art of which their palatial residence is a veritable treasure-house, and enjoying a walk along the sylvan banks of the Kirtle to the scene of the tragedy of love and jealousy celebrated in the fine old ballad of "Fair Helen." The bulk of the party journeyed from Dumfries; and on the way their number received accessions from Annan, Lockerbie, and Moffat. Driving from Annan by way of Hoddom Bridge, they first halted at the parish church of Hoddom and had an opportunity of viewing the interior, in which the old custom of a separate gallery for the chief heritor is still maintained. porch is preserved an inscribed slab, which links Christian Britain of the twentieth century with Pagan Rome of the second. It is a tablet dedicated to Jupiter, and was probably brought from the important military station of Birrens (on the farm of Broadlea, near Kirtlebridge), or perhaps from the post which the Roman soldiery occupied on Birrenswark Hill. It was built into the wall of the old church, for which much of the material might be got from the buildings left by the Romans, and since its demolition in 1815 the stone has been preserved in the modern church. Many of the words in the inscription are contracted, the first three being represented only by initials; but the skilled in such matters render it thus: "Sacred to Jupiter, the best and greatest. First Cohort of Germans, called the Nervana, under the command of L. Fænius Felix, the tribune, erected this." memorials of the dead in the surrounding graveyard is the family tombstone of the Sharpes of Hoddom, the record on which includes the names of the litterateur, Charles Kirkpatrick Sharpe, and his brother, General Matthew Sharpe, the first popularly elected member of Parliament for the Dumfries Burghs. One of the oldest stones is inscribed in large raised letters to the memory of "Mr Mathew Reid, who laboured in the church of Steipel-goordoune," an old parish now incorporated in Langholm, and who died seven years before the Prince of Orange came to the throne of these islands. A never-failing object of curiosity is the tribute to the perfect woman. A stone raised aloft, so that all may read, proclaims her virtues in these terms:—

1779.

This monument is erected by James Clow of Land in memory of Mary Hunter, his spouse. She was daughter of Robert Hunter, late in Middleshaw, and sister of John Hunter in Braehead of Hoddam. She was a virtuous wife, a loving mother, and one esteemed by all who knew her. And to be short in her praise, she was the wife that Solomon speaks of in the xxxi. chap. of the Book of Prov. from the 10th verse to the end.

Affliction sore some time she bore With patience, did resign Her life to God, that sure abode Where saints and angels reign.

A satirical dominie of the parish, William Irving, who is credited with the authorship of that "pungent pasquil," "Lag's Elegy," presented another side of the shield in the following rhyming commentary:—

"She was the wife!" Oh Solomon, thou fool, To make a pattern o' this grubbing tool; She clothe her house in silk and scarlet fine! Say rather i' the linsey woolsey twine, Her husband 'mongst the elders at the gate! Yes—known for nothing but an empty pate, For guzzling down whole chappins o' sma' beer, And selling meal and mant a groat too dear. Such were the honest, silly "Clows"—say clowns, Which every roll of honest fame disowns, Who erst, like Moses, brake the ten commands, That is the sacred relicts of the Lands."

Driving along the beautiful tree-fringed avenue that forms the highway between the church and village, the party called at the churchyard of the ancient parish of Ecclefechan, their chief object, of course, being to view the graves of Thomas Carlyle and his kindred. The place has a more cared-for appearance than it once presented, and a number of old stones, of cumbrous form

and in some instances uncouthly lettered, have been set up against the wall for preservation. One of them bears the date 1669. Above the severely simple inscription on the tombstone of Carlyle and his brother, Dr John, are carved the family crest—two wyverns-and motto, "Humilitate." It was noted that the coat of arms, somewhat varied in style, also appears on the back of the stone erected to the memory of his parents by a family "gratefully reverent of such a father and such a mother;" and on several other Carlyle stones scattered throughout the churchyard. "The Arched House" was also visited, and the numerous articles connected with Carlyle which are appropriately preserved in his birthplace were examined with great interest. Several of the company also made a call on Mr Graham, merchant, and were privileged to see three letters in the autograph of Admiral Lord Nelson, which are family heirlooms. They were addressed to Mr Graham's grand-uncle, Dr Graham, a naval surgeon, who served with the hero of Trafalgar on one of the ships which he commanded. The first was written from Burnham, Norfolk, in 1790, when Nelson was awaiting appointment to a ship. In it he complains of being greatly plagued by prosecutions about "these captures in the West Indies." An action had been raised against him for £5000 on account of one captured vessel; and while he was being defended by the Government, the action was a source of annoyance to him, and he contemplated the possibility that he might be put in prison if the decision should be given against him. He whose famous signal to his fleet has since become a historic trumpet-call to discharge the whole of duty, wrote to Dr Graham under the exasperation of that experience:—"All this shews that one may do his duty too well." Another of the letters was the first which the Admiral wrote with his left hand; and his correspondent used to relate that he practised writing with the left hand before he lost the right arm under a presentiment that such a calamity might overtake him. The third letter acknowledges congratulations on his elevation to the peerage. Dr Graham had proposed to make him the compliment of a brace of birds, and the Admiral asked that they should be sent by waggon to London, a practical commentary on the changes in locomotion which the vears have witnessed.

From Ecclefechan the drive was continued by way of Kirtlebridge and Eaglesfield to Springkell; but on the way a detour was made along the avenue of Blackett House in order to view Blackett Tower, which was the seat of the head of the Bells of Middlebie. The rejected suitor of Helen Irving was a Bell, and this is reputed to have been his residence. It has been a small tower of the customary square type, and is now in ruins, although on two sides the walls are entire. Over an entrance way is a shield lettered thus:—

I B I I I

We have here doubtless the record of the marriage of a Bell with another Irving than "Fair Helen." A lintel on the inner side of the arch also serves as a marriage stone, the inscription being in one line:—

17 GB IE 14

At Springkell a very cordial welcome was extended to the visitors. It is a stately mansion-house, of Grecian design, in light-coloured sandstone. The central portion is a massive square block, having the date 1734 carved over the doorway in the southern front, which is flanked by graceful pilasters. On each side of it is a slightly projecting wing of about equal size, these having been added about the year 1818. During the twelve years that the property has been in the possession of Sir Edward and Lady Johnson-Ferguson the house has been entirely reconstructed, so that not a plank of the original wood remains in it, and it has also been somewhat enlarged. A very beautiful terraced garden has also been constructed, which is at present gay with choice blooms. Arboriculture is an art which has been long practised at Springkell, and of which the fruit is seen in the magnificent specimens of trees of various kinds which stud the extensive lawns. Among them are a giant silver fir, a great Spanish chestnut, and many others notable not more for their size than for their symmetrical proportions. Of beeches there is a noble avenue. The turf is of rich velvety quality, and recalls the anecdote of the American visitor at Oxford, who wished to know how it would be possible to obtain such a grassy carpet. "By two hundred years of close cutting every day" was the recipe offered to him.

The art treasures which Sir Edward has inherited and himself collected would adequately furnish a civic gallery. Throughout almost its whole length the house is intersected by a broad corridor, the walls of which are covered with oil paintings, as are also those of a spacious apartment opening off it. There are examples of the most distinguished British artists, one that arrests popular attention most readily being Landseer's large canvas, "Taking the Buck;" and Dutch, Italian, and French masters are also largely represented. Many of the paintings have a history which invests them also with an extrinsic interest. Many family portraits have a place in the collection, including one of Ladv Johnson-Ferguson, painted since she came to Springkell by Sir Luke Fildes, R.A. The drawing-room is devoted to watercolours, of which the collection is at once choice and extensive. Here also is the marble bust of Oueen Victoria by Mr Brock, R.A., the last for which her Majestv gave sittings, and the great merit of which has secured for the sculptor the commission for the statue which is to be placed in front of Buckingham Palace. Many other beautiful pieces of statuary adorn the house. One of these is a marble bust of Sir Edward's father, which was presented to the family by the employees of the firm which he founded in Manchester and Bolton. In the morning-room there is a superb collection of Turner prints, embracing the whole of the early issue of reproductions of the work of Ruskin's idol, engraved with exquisite finish. In the library again is an extensive portrait gallery of Sir Joshua Revnolds' prints; and another apartment contains a large collection of prints of Landseer's works. The family have travelled largely and have brought from many lands articles curious and rare, illustrative of modern life and ancient art. India, Egypt, the Soudan, Japan, Persia, Palestine, Italy, Greece have all been laid under contribution, and other countries as well. These curios, as well as the pictures, were displayed and explained to the party as they were piloted through the house by Sir Edward and Lady Johnson-Ferguson and a lady relative.

Springkell estate comprehends the whole of the ancient parish of Kirkconnel, which is now incorporated in Kirkpatrick-Fleming. Kirkconnel was indeed the old name of the estate, as of the parish, and a village as well as a residence of old date existed near the spot where the modern mansion stands. The little "God's acre" of the parish stands on a rising ground on the left bank of the Kirtle, approached by a pretty glade through

the policies, of which it virtually forms part. Two heavy oblong slabs, raised on short supports, and lichen-grey, cover the tombs of Helen Irving and the lover whom she died to save. Not within living memory has any inscription been legible on the former; and from the latter has now practically disappeared what Wordsworth in his ballad calls "its lone hic jacet," although but a few years ago we were able to decipher quite distinctly the lettering, "Hic jacet Adam Fleming." The figure of a sword, extending almost the full length of the stone, is still quite legibly outlined, and another device beside it, which may have been intended for a cross, is more faintly seen. The story is a familiar one. Of two suitors the lady preferred Fleming (probably one of the Flemings of Redhall). Bell, inflamed by jealousy and disappointment, concealed himself on the opposite bank while the lovers strolled by the side of the Kirtle; then emerged from behind a tree and aimed a shot at his successful rival. Observing his murderous intent, the lady stepped before her lover, and received in her own bosom the bullet which was aimed at his. Swift vengeance was wrecked on her slayer by Fleming, who then fled the country and sought the balm of forgetfulness in foreign wars, but brought back to his mistress's grave a broken heart to be laid beside her. The romantic incident, which is traditionally assigned to the time of Mary Queen of Scots, has been the theme of many minstrels. We reproduce below the old form of the popular ballad, the authorship of which is ascribed to W. S. Irving, a native of Hoddom, who came to a tragic end by his own hand in Edinburgh. Sir Walter Scott, in his "Minstrelsy of the Scottish Border," mentions a doubt whether Helen was not of the same family as her "undoer," but there seems no reason to set aside the tradition that she was an Irving, of the family which possessed the estate of Kirkconnel until shortly after the year 1600, when it passed into the hands of the Maxwells. Several Irvings of Kirkconnel are commemorated in a burial plot adjoining her grave, which closely neighbours the roofless walls of the tiny church. Outside the burial ground is set up a large cross of coarse-grained sandstone, hewn out of a single block. This is understood to mark either the spot on which the tragedy was enacted, or to which Fleming carried the heroine when he saw her wounded. One of the arms of the cross has been partly broken. On each arm there is a sunken space, which suggests that a brass plate had been inserted; but if so, the plate has disappeared, and the cross bears no chiselled record of its purpose.

Among several curious stones in the burial ground is one with a grotesque piece of sculpture, shewing a lady, like Annie Laurie, "jimp aboot the middle," and with the lacing of her dress prominently displayed. The gossips have it that it is the effigy of a victim of tight lacing; but it does not shew intrinsic evidence of being anything but a crude attempt at an ordinary piece of sculpture. Below there is a smaller figure suggestive of a knight on mail-clad horse.

The visitors were entertained to tea; and before rising from the table Mr Barbour, architect, a vice-president of the society, tendered their very cordial thanks to Sir Edward and Lady Johnson-Ferguson for the delightful day they had spent at Springkell. Sir Edward assured the visitors it had been a great pleasure to them to welcome the Antiquarian and Natural History Society. They undoubtedly had very many beautiful things there, the result of the acquisition of a number of generations, and he thought half the pleasure of possessing them was to allow their friends to see them.

Mr W. J. Payne, solicitor, Annan, was admitted a new member.

FAIR HELEN OF KIRKCONNEL-LEE.

"I wish I were where Helen lies!
Night and day on me she cries;
O that I were where Helen lies,
On Fair Kirkconnel-lee.

"Curst be the heart that thought the thought,
And curst the hand that fired the shot,
When in my arms burd Helen dropt,
And died to succour me!

"O think ye na my heart was sair
When my love dropt down and spak nae mair!
There did she swoon wi' meikle care,
On fair Kirkconnel-lee.

"As I went down the water side,
None but my foe to be my guide,
None but my foe to be my guide,
On fair Kirkconnel-lee.

- "I lighted doun, my sword did draw,
 I hacked him in pieces sma',
 I hacked him in pieces sma',
 For her sake that died for me.
- "O Helen fair beyond compare!
 Pll weave a garland of thy hair,
 Shall bind my heart for evermair,
 Until the day I dee!
- "O that I were where Helen lies!
 Night and day on me she cries;
 Out of my bed she bids me rise,
 Says, 'Haste, and come to me!'
- "O Helen fair! O Helen chaste!
 Were I with thee I would be blest,
 Where thou lies low, and takes thy rest
 On Fair Kirkconnel-lee.
- "I wish my grave were growing green,
 A winding sheet drawn o'er my e'en,
 And I in Helen's arms lying
 On Fair Kirkconnel-lee.
- "I wish I were where Helen lies!
 Night and day on me she cries;
 And I am weary of the skies,
 For her sake that died for me."

Abstract of Accounts for Year

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	C	HAR	GE.							
1.	Balance from Session 1905-6						£21	6	10	
2.	Arrears of Subscription recover	ed					3	0	0	
3.	Annual Subscriptions from 178	Mem	bers.			••-	43	7	6	
4.	Sum repaid by Mr George Irvin	ng for	Block	ks and	Draw	ings				
	used in printing his paper	• • •					1	17	0	
5.	Arrears of Subscription						1	15	0	

			£70 12 2
To Balance due by Treasurer	 	 	 £12 19 2

DUMFRIES, 11th October, 1906.—We have examined the Books and quarian Society for the year ending 30th September last, and certify that the operations.

ending 30th September, 1906.

-K:-K:-

DISCHARGE.

2. Advertising Meetings	1. Rents and Insurances .								£8	14	6
1. Annual Subscription for Annals of Scottish History £0 7 6 2. R. Grieve & Son 1 10 6 3. Dumfries Standard for Printing Transactions 24 15 0 4 J. Maxwell & Son 14 2 1 4. Miscellaneous:— 1. Hire of Cabs (Bruce Sexcentenary) £0 7 0 2. A. Turner 1 0 9 3. J. R. M'Lean 0 4 6 4. Bank Commission, &c 0 1 2 5. Posts, &c. :— 1. Posts of Transactions £1 15 0 2. Secretary and Treasurer 3 9 6 6. Balance :— In Savings Bank £17 0 0 In Deposit Receipt £19 11 5 £19 11 5	2. Advertising Meetings .				***				1	5	6
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£70 12 2									£70	12	2

Accounts of the Dumfriesshire and Galloway Natural History and Antiforegoing Abstract exhibits a true and correct account of the Treasurer's

(Signed) JOHN SYMONS, Auditor.

BERTRAM M'GOWAN, Auditor.

EXHIBITS.

OCTOBER 6TH.

- Miss M'Kie, Moat House, Dumfries—Large sunflower, 10 feet high.
- The Secretary—Flowering branch of Bambusa Henonis, Colchicum autumnale fl. pl., Crocuses iridiflorus and zonatus.

NOVEMBER 3RD.

- Mr George Irving, Corbridge-on-Tyne—(1) A declaration of loyalty by inhabitants of Morton; (2) scheme of valuation of division of Hightae community; (3) burgess ticket of burgh of Dumfries to George Sharp of Hoddom, dated 1767; (4) burgess ticket of city of Glasgow to George Sharp of Hoddom, about same date; (5) burgess ticket of burgh of Linlithgow to James Kirkpatrick, son of Sir Thomas, second Baronet of Closeburn, with seal attached; (6) plan of Birdoswald camp, recently visited by the society.
- Mr J. Laidlaw, Lockerbie—Old sermons published in Dumfries in the eighteenth century.
- Mr A. Turner, Chemist, Dumfries—A relic of David Livingstone, taken from his medicine chest.
- Mr J. S. Thomson, Jeweller, Dumfries—(1) Seismographic record showing the movement of the earth at Paisley on the occasion of the recent Indian earthquake; (2) piece of Banket gold reef from West Africa.
- Mr Harry Edgar, Ferguslea—(1) Tenor granting John Carruthers of Denbie power to uplift the stipend of the parish of Tundergarth; (2) burgess ticket of Dumfries, dated June, 1808, in favour of Richard Hetherington, of the Annandale and Eskdale Local Militia; (3) lieutenant's commission in East India Company's service, signed by Earl Cornwallis, of date 6th April, 1785; (4) act of freedom of burgh of Dumfries in favour of John Carruthers of Denbie, dated 4th

- June, 1808; (5) burgess ticket of New-Galloway in favour of Viscount Kenmure, dated 17th September, 1820.
- Mr M. H. M'Kerrow, Solicitor, Dumfries—Skin of a baby crocodile shot by his brother on the Paraquay river, South America; also a lizard's skin, two python skins, a toucan, and the nest of the tailor bird.
- Mr S. Arnott, the secretary—Two rare species of meadow saffron and an Albanian autumn snowdrop flowered in the open at Sunnymead, Maxwelltown, on 12th October.
- Professor Scott-Elliot—Photographs of cup and ring markings found in Wigtownshire.
- Mr Service—Several exhibits referred to in report of proceedings, and larvae of Death's Head Moth found in the end of October on farm of Townhead, Closeburn.

DECEMBER 18TH, 1905.

- Series of paintings of Swiss plants and British orchids not found in this locality, shown by and the work of Mrs Thompson, Castle Street.
- Rev. H. A. Whitelaw—A number of ancient Eastern lamps, one of pre-Christian date found at Joppa, while the others were mostly Roman-Christian; a number of coins of Bible times and others of the period of Charlemagne, and Robert of Anjou; and a curious dice box.
- Mr R. Murray--Eastern lamp.
- Mr Reid, Chemist—A number of stereoscopic views illustrative of local scenes, as well as of the siege of Paris and of Alpine regions.
- Mr H. Edgar and Mr Robert Service, jun.—Old burgess tickets of Annan and Dumfries; the former documents of the old East India Company.
- The President—Fossils of fish found in the chalk near Brighton; also seeds of the common yew, found in the gizzard of a hen pheasant.
- Mr J. T. Johnstone, Moffat—A number of specimens of deposits found at Moffat sewage works.
- Mrs Jeffrey, St. Mary's Isle Gardens—A list of wild flowers found on St. Mary's Isle as a contribution to the botany of the Isle.
- Mr James Lennox—A number of lantern slides of local Abbeys, Castles, and Towers.

DECEMBER 15TH, 1906.

- Mr J. Bryce Duncan, Newlands—Chrysanthemum sport showing three colours.
- Mr James Watt—Photographs, curios, and maps, to illustrate his lecture, which see.
- Mr John Miller, of the Haussaland Horse—A large number of curios.
- The President—A number of E. African photographs.
- Mr R. Service—Male and female specimens of a new vole recently discovered in the Orkney Isles by Mr Millais; a brass medal, found in Lochrutton, and struck to commemorate coronation of William IV. and Adelaide; a very fine greenstone celt found in lower Dumfriesshire in 1905—size, $5\frac{1}{2}$ by $3\frac{1}{4}$ by $\frac{7}{8}$ by $1\frac{3}{4}$ inches.

JANUARY 26TH.

- Dr Martin—Short cross sterling or penny of Henry II. found in digging a grave in Holywood Churchyard.
- Mr C. Cumming, Dumfries—Two similar coins found there also, one in 1902 and the other in 1904.
- Miss M. Carlyle Aitken—Brass coin found in a fig.
- Mr Frank Millar, Annan—Photo of Gretna Green marriage certificate.
- Mr Harry F. Edgar—Upwards of 1000 casts of cameos, medals, coins, etc.
- Mr James Reid—A number of very fine stereoscopic photograph views.

FEBRUARY 2ND.

Town Council of Lochmaben—A number of interesting relics belonging to the Burgh of Lochmaben.

FEBRUARY 16TH.

The Secretary—"The Scots Gardener." 2nd edition, 1721, and "Flora, Ceres, and Pomona," by John Rea, 1665.

LOCKERBIE MEETING.

February 24th.

Valuable exhibits were shown by Colonel Rogerson of Gillesbie, Colonel Irving of Bonshaw, Miss Wallace, Lochvale, Lochmaben; Mr John Maxwell, H.M. Travelling Commissioner, Gold Coast; and the Secretary.

MARCH 16TH.

- Mr James Lennox—Limestone celt found in Cummertrees; stone whorl found at Rockhall, Torthorwald; a shilling and two sixpences of Queen Elizabeth found respectively in Cummertrees, Mouswald, and Torthorwald, dated 1575 and 1566.
- Mr R. Service—Dried flower of Physianthus albens, to which was caught, by its long tongue, one of the Sphinx Moths, from the Transvaal.
- Mr W. M'Cutcheon-Cocoa nut emptied by tits.
- Misses Henderson, 92 Queen's Place—Pair old shoe buckles, old knife and fork; walking stick, which belonged to Provost John Crosbie, Provost of Dumfries in 1712 and following years; and the following Jacobite relics:—Teapot used at "Prince Charlie's" table when in Dumfries in 1745, and claret jug from which the Prince drank.

APRIL 20TH.

- Mrs Thompson, Inveresk, Dumfries—Water-colour paintings of wild flowers.
- Mr Dermid M. Ross, Duntrune-Roman and other coins.

Мау 4тн.

- Mr R. Service—Stone mallet, sent by Mr Douglas, Barstibly, and found on his farm; piece of vitreous silica got at extreme point of living rock.
- Mr W. Dickie-Cast adder's skin found on Skeoch Hill.
- Mr J. Rutherford, Jardington—Equatorial star-finder, designed by himself.

DONATIONS AND EXCHANGES.

- Mr John M'Kie, R.N., Kirkcudbright—A set of photographs relating to Billy Marshall, the Galloway Gypsy.
- Mr H. Penfold—"Guide to Brampton," written by himself.
- Mr J. S. Thomson—Photograph of record of earthquakes in India in March, 1905, as recorded in Paisley Observatory.
- Mr George Irving, Corbridge-on-Tyne—Plans of Birdoswald Camp and Hoddom Bridge.
- Mr James Barbour—Engravings of the Insignia of the Burgh of Dumfries, drawing of the old house of the Corsan family, St. Michael Street, Dumfries; drawing of the arms of the Corsans; impression from plate of old form of burgess ticket for the burgh of Dumfries; drawing of old kiln for grain; photograph of Lochrutton Crannog, taken during the society's excavations; plan of Old Bridge, Dumfries, showing its original length; photograph of Yuma Indians; and photograph of a shield with the war cry of the burgh of Dumfries—"'A Loreburn."
- Mr Frank Millar, Annan—Photograph of form used at Alison's Bank, Gretna, for irregular or "Gretna Green marriages" before John Murray.

A number of exchanges have also been received from various societies with which this society is in correspondence.

NOTICES.

Ordinary Meetings of the Society are generally held on the 1st and 3rd Fridays of each month of the winter session, which begins in October. Papers on Natural History Antiquarian, and Scientific subjects, with occasional lectures, are given at these meetings.

Exhibits cognate to the work of the Society are also shown at these Meetings, and the co-operation of members in increasing the number of exhibits is solicited.

Field Meetings are held during the Summer Months as may be arranged.

The Society's "Transactions" are published annually, and are distributed among the members free of charge. Non-members can purchase copies from the Treasurer, Mr M. H. M'Kerrow, 30 St. David Street, Dumfries, from whom any back numbers in stock can be purchased.

The Society's Library, which includes a number of Natural History, Archaeological, and Scientific Works, and a series of the "Transactions" of many of the leading learned societies, with which this society is in correspondence, is available for reference in the Ewart Public Library, Dumfries. Members of the Society have the privilege of borrowing these books on application to the Librarian at the Library.

The Society's Museum and Herbarium, which contains an almost complete collection of specimens of the local flora, are available for reference in the Library.

"The Reliquary," "The Scottish Historical Review," and "The Annals of Scottish Natural History" are circulated quar242 Notices.

terly among the members who desire them, the postage only being payable by the members of each circle. Particulars can be had from the Secretary.

A Photographic Committee has been formed for the purpose of securing a Photographic Record of Dumfries and Galloway. Photographs will be welcomed, and can be sent to the Secretary of the Committee, Mr W. A. Mackinnel, The Sheiling, Dumfries.

The Society will be glad of the adhesion of ladies and gentlemen interested in the various departments of its operations, and the Secretary will be glad to hear from any who may desire to become members, with a view to their nomination. The annual subscription is 5s; where there are more than one member from a family each one after the first pays 2s 6d.

RULES.

Rules of the Dumfriesshire and Galloway Natural History and Antiquarian Society, as submitted for approval and adoption by the Council, and adopted at the Annual General Meeting held on October 12th, 1906.

- I. The Society shall be called the "Dumfriesshire and Galloway Natural History and Antiquarian Society."
- II. The aims of the Society shall be to secure a more frequent interchange of thought and opinion among those who devote themselves to the study of Natural History, Archæology, and kindred subjects; and to elicit and diffuse a taste for these studies.
- III. The Society shall consist of Ordinary, Honorary, and Corresponding Members. The Ordinary Members shall be persons proposed and elected at any meeting of the society by a vote of the majority present. The Honorary and Corresponding Members shall be persons distinguished for attainments connected with the objects of the Society, and elected on the recommendation of the Council.
- IV. Ordinary Members shall contribute annually five shillings in advance, or such other sum as may be agreed upon at the annual general meeting. When more than one person from the same family join the Society all after the first shall pay half fee. By making a single payment of £5 any one duly elected may become a member for life.
- V. The Office-Bearers of the Society shall consist of a President, Four Vice-Presidents, Secretary, Treasurer, Librarian, Curator of Museum, and Curator of Herbarium, who, together with not more than Three Honorary Vice-Presidents, and Ten other Members, shall constitute the Council, holding office for one

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year only, but being eligible for re-election, subject to the following conditions:—One Vice-President and Two Ordinary Members of Council shall retire annually according to seniority in their respective offices, and shall not be eligible for re-election to the same office for one year. Three shall for a quorum.

- VI. Meetings of the Society shall be held as may be arranged by the Council.
- VII. The Annual General Meeting shall be held in October, at which the Office-Bearers and other Members of the Council, together with Two Auditors, shall be elected, Reports (General and Financial) submitted, and other business transacted. The Council shall have power to make arrangements for discharging the duties of any vacant office.
- VIII. A Member may introduce a Friend to any Meeting of the Society.
- IX. The Secretary shall keep the Minutes of the Society's proceedings, shall conduct the Ordinary Correspondence of the Society, and submit a Report at the Annual General Meeting, which report shall, *inter alia*, contain a statement of the attendance of Members at the Council Meetings. He shall call all Ordinary Meetings, subject to the instructions of the Council, and, on receiving the instructions of the Council or President, or a Requisition signed by Six Members, shall call a Special Meeting of the Society. On receiving the instructions of the President or a Requisition signed by Three Members of the Council, he shall forthwith call a Meeting of that body.
- X. The Treasurer shall keep a List of the Members, collect the Subscriptions, take charge of the Funds, and make payments therefrom under the direction of the Council, to whom he shall present an Annual Account, to be made up to 30th September in each year, and to be audited for submission to the Annual General Meeting.
- XI. Members whose subscriptions are in arrear for two years and have received notice from the Treasurer shall cease to be members.

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XII. The Society, unless otherwise arranged, shall have the power to publish in whole or in part any paper read before it in its "Transactions" or otherwise. The "Transactions" of the Society shall be published from time to time, as may be convenient, and shall be distributed to all Members contributing five shillings per annum and all Life-Members. Contributors of Papers shall, after giving timeous notice to the Secretary before publication, be entitled to receive ten copies of their papers, as and when published.

XIII. Alterations of any Rule, or the addition of New Rules, shall only be made with the consent of a majority of those present at the Annual General Meeting, and notice of proposed alterations must be given to the Secretary a month previous to the meeting.

LIST OF MEMBERS OF THE SOCIETY

DURING 1906.

Those who joined the Society at its reorganisation on 3rd November, 1876, are indicated by an asterisk.

LIFE MEMBERS.

Duke of Buccleuch and Queensberry, K.G.,
K.T10th Jan., 1895.
Earl of Mansfield, Scone Palace, Perth10th Oct., 1897.
F. R. Coles, 1 Oxford Terrace, EdinburghI1th Nov., 1881.
Wm. D. Robinson Douglas, F.L.S., Orchard-
ton
Thomas Fraser, Maxwell Knowe, Dalbeattie2nd March, 1888.
Alex. Young Herries, Spottes, Dalbeattie.
J. J. Hope-Johnstone, Raehills, Lockerbie3rd May, 1884.
Wm. J. Herries Maxwell, Munches1st Oct., 1886.
Miss M'Kie, Moat House, Dumfries14th Dec., 1894.
Samuel Smith, P.C., 20 Chapel Street, Liver-
pool17th Jan., 1896.
Sir Mark J. M'Taggart Stewart, Bart., South-
wick7th June, 1884.
Captain Wm. Stewart, Shambellie8th Nov., 1894.

HONORARY MEMBERS.

Baker, J. G., F.R.S., Royal Herbarium, Kew .	2nd May,	1890.
Brown, J. Harvie, F.L.S., Larbert.		
Carruthers, Wm., F.R.S., British Museum.		
Chinnock, E. J., LL.D., 41 Brackley Road,		
Chiewick W	5th Nov	1880

Davidson, Dr Anstruther, Los Angelis6th March, 1891. M'Andrew, James, 69 Spotteswoode Street, Edinburgh.
M'Millan, Alex., Castle-Douglas. Murray, A. D., Newcastle
Sharp, Dr David, F.R.S., Cambridge.
Shirley, G. W., Dumfries28th Oct., 1904.
Taylor, Robert Hibbert, M.D., Liverpool2nd June, 1888.
Wilson, Jos., Liverpool29th June, 1888.
ORDINARY MEMBERS.
Agnew, Sir A. N., Bart., of Lochnaw, Stranraer9th Jan., 1891.
Aitken, Miss M. Carlyle, 21 Dunbar Terrace,
Dumfries
Andson, Rev. W., Newall Terrace, Dumfries3rd Oct., 1886. Armstrong, T. G., Timber Merchant, 24 Rae
Street, Dumfries 9th Sept., 1905.
Armstrong, F., Burgh Surveyor, Dumfries6th Oct., 1905.
Arnott, S., Sunnymead, Maxwelltown
Arnott, Mrs S., Sunnymead, Maxwelltown5th Jan., 1906. Atkinson, Mrs, The Ladies' Club, Castle
Street, Dumfries28th Oct., 1904.
Barbour, James, St. Christopher's, Dumfries3rd Dec., 1880.
Barbour, Robert, Belmont, Maxwelltown4th March, 1887.
Barbour, Robert, Solicitor, Maxwelltown11th May, 1889.
Barker, John, Redlands, Dumfries23rd Sept., 1905.
Beattie, Thos., Davington, Langholm30th May, 1896.
Bell, Richard, of Castle O'er, Langholm30th May, 1896.
Bell, Miss, 26 Castle Street, Dumfries25th Nov., 1894.
Bell, T. Hope, Morrington, Dunscore22nd Oct., 1897.
Blacklock, J. E., Solicitor, Dumfries8th May, 1896.
Borland, John, Auchencairn, Closeburn7th Sept., 1895.
Bowie, J. M., The Hain, Dalbeattie Road,
Maxwelltown
Browne, Sir James Crichton, 61 Carlisle Place,
Mansions, Victoria Street, London, S.W3rd Sept., 1892.

Brown, Stephen, Boreland, Lockerbie10th June, 1899.

Brown, T. M., Closeburn, Thornhill6th Aug.,	1891.
Bryson, Alex., Irish Street, Dumfries6th Feb.,	1891.
Cairns, Rev. J., Ivy Lodge, Albany, Dumfries6th Feb.,	1891.
Campbell, Rev. J. M., St. Michael's Manse,	***
Dumfries	
Carmont, James, Banker, Dumfries6th Feb.,	
Clarke, Dr, Charlotte Street, Dumfries6th June,	
Charlton, John, Huntingdon, Dumfries15th Dec.,	
Chrystie, R., Dentist, Irving Street, Dumfries3rd Nov.,	
Chrystie, Miss, Irving Street5th Jan.,	
Coats, W. A., of Dalskairth18th Sept.,	
Copland, Miss, The Old House, Newabbey5th July,	
Cormack, J. F., Solicitor, Lockerbie4th June,	
Corrie, John, Burnbank, Moniaive6th Aug.,	
Cowan, John, Glenview, Maxwelltown15th Dec.,	1905.
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*Davidson, James, Summerville, Maxwelltown3rd Nov.,	1876.
Davidson, J., Hillhead, Bankend Road, Dum-	1005
fries	
Dewar, R. S., 35 George Street, Dumfries3rd Nov.,	
Dickie, Wm., Merlwood, Maxwelltown6th Oct.,	1882.
*Dinwiddie, W. A., Bridgebank, Buccleuch	
· Street, Dumfries3rd Nov.,	
Dinwiddie, R., Overton, Moffat Road, Dumfries9th Aug.,	
Dods, J. W., St. Mary's Place, Dumfries2nd March,	
Drummond, Bernard, Plumber, Dumfries7th Dec.,	1888.
Drummond, J. G., Sandon, Moffat Road,	
Dumfries17th Nov.,	1905.
Dudgeon, C. R., Cargen10th Feb.,	1905.
Duncan, Jno. Bryce, of Newlands, Dumfries11th Feb.,	
Dunlop, Rev. S., Irongray Manse, Dumfries10th June,	1905.

Edgar, H., Ferguslea, Maxwelltown20th Jan.,	
Edie, Rev. W., Greyfriars' Manse, Dumfries15th Dec.,	1905.
Farish, W. R., Amisfield House, Amisfield,	
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Dumfries15th Dec.,	1505.

Gilchrist, Mrs, Linwood, Dumfries
Halliday, T. A., Leafield Road, Dumfries
Hunter, Rev. Joseph, 125 Mayfield Road, Edinburgh

Johnson-Ferguson, Sir J. E., Bart., of Spring- kell, Ecclefechan
Johnstone, John T., Victoria House, Moffat4th April, 1890. Johnstone, Mrs, Victoria Terrace, Dumfries17th Feb., 1896. Johnstone, W. S., Victoria Terrace, Dumfries11th Feb., 1898.
Kidd, Rev. Thos., U.F. Manse, Moniaive29th June, 1895. Kirkpatrick, Rev. R. S., The Manse, Govan17th Feb., 1896.
Laidlaw, John, Plasterer, Lockerbie18th Oct., 1901. Law, Rev. James, South U.F. Manse, Dumfries2nd June, 1905. *Lennox, Jas., F.S.A. Scot., Edenbank, Max-
welltown
Malcolm, A., Redbank, Dumfries
Dumfries
Matthews, Wm., Dunelm, Dalbeattie Road, Dumfries
Dumfries
shire
Maxwell, John, Tarquah, Maxwelltown20th Jan., 1905. Milligan, J. P., Aldouran, Castle-Douglas Road, Maxwelltown17th Oct., 1905.
Milligan, Mrs, Aldouran, Castle-Douglas Road, Maxwelltown
Millar, John, Elmwood, Moffat24th Feb., 1906.

Millar, William, Elmwood, Moffat16th June, 1906.
Moffat, James, Bank of Scotland, Annan.
Mond, Miss, Aberdour House, Dumfries9th Sept., 1905.
Murdoch, W. J., Cluden Bank, Holywood21st Dec., 1906.
Murphy, Rev. J., Park Road, Maxwelltown5th Jan., 1906.
Murphie, Miss Annie, Cresswell House, Dum-
fries
Murray, R., George Street, Dumfries5th July, 1884.
Murray, Mrs, George Street, Dumfries6th April, 1883.
Murray, Wm., Murraythwaite, Ecclefechan8th Feb., 1895.
Murray, Mrs, Murraythwaite, Ecclefechan29th July, 1905.
M'Call, James, of Caitloch, Moniaive29th June, 1895.
M'Cargo, James, Kirkpatrick-Durham24th April, 1896.
M'Connel, Miss, Milnhead, Kirkmahoe19th Feb., 1904.
M'Connel, Miss L. H., Milnhead, Kirkmahoe25th Nov., 1904.
M'Cormick, Andrew, Solicitor, Newton-Stewart3rd Nov., 1905.
M'Craken, Miss, Fernbank, Lovers' Walk9th Nov., 1906.
M'Cutcheon, Wm., B.Sc., Inverie, Park Road,
Maxwelltown
Macdonald, J. C. R., W.S., Dumfries6th Nov., 1885.
M'Gowan, B., Solicitor, Dumfries26th Oct., 1900.
M'Jerrow, David, Town Clerk, Lockerbie22d Feb., 1906.
Mackenzie, Colonel, of Auchenskeoch25th Aug., 1895.
M'Kerrow, M. H., Solicitor, Dumfries19th Jan., 1900.
M'Kerrow, Matt. S., Boreland of Southwick9th Jan., 1890.
M'Kie, Thos., Moat House, Dumfries2nd Aug., 1890.
M'Kie, John, R.N., Anchorlea, Kirkcudbright4th April, 1881.
MacKinnel, W. A., The Sheiling, Castle-
Douglas Road, Dumfries22nd Feb., 1906.
MacKinnel, Mrs, The Sheiling, Castle-
Douglas Road, Dumfries22nd Feb., 1906.
M'Kinnon, Rev. Albert, Lochmaben9th Nov., 1906.
M'Kinnon, Mrs, Lochmaben9th Nov., 1906.
M'Lachlan, Mrs, Dryfemount, Lockerbie26th March, 1906.
M'Lachlan, Jas., M.D., Lockerbie25th Oct., 1895.
Voilgon Coorgo II D. Wollfold Berginkill
Neilson, George, LL.D., Wellfield, Partickhill

*Nicholson, J. H., Airlie, Maxwelltown9th Aug.,	1904.
Ovens, Walter, of Torr, Auchencairn13th March,	1896.
Pairman, Dr, Moffat	1905. 1906. 1901. 1905. 1885. 1900. 1889.
Rae, E. B., Town Clerk, Lochmaben	1906. 1882. 1886. 1895. 1906.
Saunders, Wm., Rosebank, Lockerbie. Scott-Elliot, Professor G. F., F.L.S., F.R.G.S., of Newton, Dumfries	1890. 1887. 1890. 1898. 1906. 1901. 1876.
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Smith, Miss, Llangarth, Maxwelltown
*Thomson, J. S., Jeweller, Dumfries3rd Nov., 1876. Thomson, Wm., Solicitor, Dumfries1st Oct., 1898. Thomson, Miss, c/o Miss Dunbar, Langlands, Dumfries.
Thompson, Mrs H. A., 26 Castle Street, Dumfries
Turner, Alex., Chemist, Dumfries17th Oct., 1905.
Veitch, W. H., Factor, Hoddom26th Oct., 1900.
Waddell, J. B., Victoria Terrace, Dumfries11th June, 1901. Waddell, Mrs, Victoria Terrace, Dumfries11th June, 1901. Wallace, M. G., Terreglestown, Dumfries11th March, 1898. Wallace, Miss, Lochvale House, Lochmaben7th Oct., 1892. Watt, James, Crawford Villa, Johnstone Park,
Dumfries
Dumfries
House, Dumfries
Whitelaw, J. W., Solicitor, Dumfries6th Nov., 1885. Whitelaw, Rev. H. A., U.F. Manse, Albany, Dumfries20th May, 1904.
Wightman, Abel, Lockerbie

Wilson, Mrs, Castledykes Cottage, Dumfries24th May,	1905.
Wilson, Miss, Castledykes Cottage, Dumfries24th Feb.,	1906.
Wilson, J. R., Solicitor, Sanquhar2nd Oct.,	1885.
Witham, Colonel J. K. Maxwell, C.M.G., of	
Kirkconnel, Dumfries7th March,	1890.
Witham, Miss Maud, Kirkconnel, Dumfries6th Feb.,	1890.

Yerburgh, R. A., of Barwhillanty, Parton, R.S.O., per F. A. Maryiate, 25 Kensington Gore, London, S.W.17th Feb., 1896.

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Vol. XIX.

THE TRANSACTIONS

AND

Journal of Proceedings

OF THE

DUMFRIES AND GALLOWAY

Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862

SESSION 1906-1907.



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DUMFRIES AND GALLOWAY

Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862.



SESSION 1906-1907.



Office=Bearers for 1907=1908.

President.

Professor G. F. Scott-Elliot, of Newton, Dumfries, M.A., B.Sc., F.R.G.S., F.L.S., &c.

Honorary Vice-Presidents.

JOHN F. CORMACK, Solicitor, Lockerbie. ROBERT SERVICE, M.B.O.U., Janefield, Dumfries.

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William Dickie, Merlewood, Dumfries.
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Hon. Treasurer.

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Rev. Wm. Andson, Ivy Bank, Dumfries.

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GEORGE W. SHIRLEY, Ewart Public Library, Dumfries.

Hon. Curator of Museum.

James Lennox, F.S.A., Scot., Eden Bank, Dumfries.

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Coins and Tokens—Rev. H. A. WHITELAW. Antiquities—Dr Martin.

Hon. Curators of Herbarium.

Professor Scott-Elliot and Miss Hannay.

Hon. Secretary of Photographic Committee.

W. A. MACKINNEL, The Sheiling, Dumfries.

Members of Council.

The President; Honorary Vice-Presidents; Vice-Presidents; Secretary; Treasurer; Hon. Librarian; Hon. Curator; Curators of Herbarium; and the following:—

Mrs Helen Atkinson, Castle Street, Dum'ries.
Rev. John Cahens, M.A., Ivy Lodge, Dumfries.
William M'Cutcheon, B.Sc., Inverie, Park Road, Dumfries.
James Houston, Marchfield, Dumfries.
John T. Johnstone, Victoria House, Moffat.
W. A. Mackinnel, The Sheiling Dumfries.
William Semple, B.Sc., Airlie, Dumfries.
Peter Stobie, Rae Street, Dumfries.
J. B. Waddell, Victoria Terrace, Dumfries.
Rev. H. A. Whitelaw, M.A., Albany Place, Dumfries.



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NOTICES.

All Correspondence connected with the general work of the Society should be addressed to the Honorary Secretary, S. Arnott, Sunnymead, Dumfries.

All Subscriptions and Correspondence connected therewith, and all Accounts, should be sent to the Honorary Treasurer, Mr M. H. M'Kerrow, 30 St. David Street, Dumfries.

Exchanges should be addressed to the Society, Ewart Public Library, Dumfries.

Ordinary Meetings of the Society are generally held in the Lecture Hall of the Ewart Public Library, Dumfries, on the 1st and 3rd Fridays of each month of the winter session, which begins in October. Papers on Natural History, Antiquarian, and Scientific subjects, with occasional lectures, are given at these meetings.

Exhibits cognate to the work of the Society are also shown at these Meetings, and the co-operation of members in increasing the number of exhibits is solicited.

Field Meetings are held during the Summer Months as may be arranged.

The Society's "Transactions" are published annually. These are distributed among the members for the Session they cover free of charge. Non-members can purchase copies from the Treasurer, Mr M. H. M'Kerrow, 30 St David Street, Dumfries, from whom any back numbers in stock can be purchased.

The Society's Library, which includes a number of Natural History, Archæological, and Scientific Works, and a series of the "Transactions" of many of the leading learned societies, with which this society is in correspondence, is available for refer-

8 Notices.

ence in the Ewart Public Library, Dumfries. Members of the Society alone have the privilege of *borrowing* these books on application to the Librarian at the Library.

The Society's Museum and Herbarium, which contains an almost complete collection of specimens of the local flora, are available for reference in the Library.

"The Reliquary," "The Scottish Historical Review," and "The Annals of Scottish Natural History," are circulated quarterly among the members who desire them, the postage only being payable by the members of each circle. Particulars can be had from the Secretary.

A Photographic Committee has been formed for the purpose of securing a Photographic Record of Dumfries and Galloway. Photographs will be welcomed, and can be sent to the Secretary of the Committee, Mr W. A. Mackinnel, The Sheiling, Dumfries.

The Society will be glad of the adhesion of ladies and gentlemen interested in the various departments of its operations, and the Secretary will be glad to hear from any who may desire to become members, with a view to their nomination. The annual subscription is 5s; where there are more than one member from a family each one after the first pays 2s 6d.

EDITORIAL NOTE.

The Society or Editor accepts no responsibility for the opinions stated in the papers published in these "Transactions and Proceedings."

The Editor desires to acknowledge his indebtedness to the "Dumfries and Galloway Standard," "Dumfries and Galloway Courier and Herald," and "Kirkcudbrightshire Advertiser," for reports of several meetings and discussions. He has also to express the thanks of the Society to Mr Andrew Watt, M.A., for the block of the Rainfall at Cargen, and to the "Standard" Press for the loan of the block of the Ruthwell Cross.

RULES.

Rules of the Dumfriesshire and Galloway Natural History and Antiquarian Society, as submitted for approval and adoption by the Council, and adopted at the Annual General Meeting held on October 12th, 1906.

- I. The Society shall be called the "Dumfriesshire and Galloway Natural History and Antiquarian Society."
- II. The aims of the Society shall be to secure a more frequent interchange of thought and opinion among those who devote themselves to the study of Natural History, Archæology, and kindred subjects; and to elicit and diffuse a taste for these studies.
- III. The Society shall consist of Ordinary, Honorary, and Corresponding Members. The Ordinary Members shall be persons proposed and elected at any meeting of the Society by a vote of the majority present. The Honorary and Corresponding Members shall be persons distinguished for attainments connected with the objects of the Society, and elected on the recommendation of the Council.
- IV. Ordinary Members shall contribute annually five shillings in advance, or such other sum as may be agreed upon at the annual general meeting. When more than one person from the same family join the Society all after the first shall pay half fee. By making a single payment of £5 any one duly elected may become a member for life.
- V. The Office-Bearers of the Society shall consist of a President, Four Vice-Presidents, Secretary, Treasurer, Librarian, Curator of Museum, and Curator of Herbarium, who, together with not more than Three Honorary Vice-Presidents and Ten other Members, shall constitute the Council, holding office for one

10 Rules.

year only, but being eligible for re-election, subject to the following conditions:—One Vice-President and Two Ordinary Members of Council shall retire annually according to seniority in their respective offices, and shall not be eligible for re-election to the same office for one year. Three shall form a quorum.

- VI. Meetings of the Society shall be held as may be arranged by the Council.
- VII. The Annual General Meeting shall be held in October, at which the Office-Bearers and other Members of the Council, together with Two Auditors, shall be elected, Reports (General and Financial) submitted, and other business transacted. The Council shall have power to make arrangements for discharging the duties of any vacant office.
- VIII. A Member may introduce a Friend to any Meeting of the Society.
- IX. The Secretary shall keep the Minutes of the Society's proceedings, shall conduct the Ordinary Correspondence of the Society, and submit a Report at the Annual General Meeting, which report shall, *inter alia*, contain a statement of the attendance of Members at the Council Meetings. He shall call all Ordinary Meetings, subject to the instructions of the Council, and, on receiving the instructions of the Council or President, or a Requisition signed by Six Members, shall call a Special Meeting of the Society. On receiving the instructions of the President or a Requisition signed by Three Members of the Council, he shall forthwith call a Meeting of that body.
- X. The Treasurer shall keep a List of the Members, collect the Subscriptions, take charge of the Funds, and make payments therefrom under the direction of the Council, to whom he shall present an Annual Account, to be made up to 30th September in each year, and to be audited for submission to the Annual General Meeting.
- XI. Members whose subscriptions are in arrear for two years and have received notice from the Treasurer shall cease to be members.

RULES. 11

XII. The Society, unless otherwise arranged, shall have the power to publish in whole or in part any paper read before it in its "Transactions" or otherwise. The "Transactions" of the Society shall be published from time to time, as may be convenient, and shall be distributed to all Members contributing five shillings per annum and all Life-Members. Contributors of Papers shall, after giving timeous notice to the Secretary before publication, be entitled to receive ten copies of their papers, as and when published.

XIII. Alterations of any Rule, or the addition of New Rules, shall only be made with the consent of a majority of those present at the Annual General Meeting, and notice of proposed alterations must be given to the Secretary a month previous to the meeting.



TRANSACTIONS AND PROCEEDINGS

OF THE

DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY & ANTIQUARIAN SOCIETY.

SESSION 1906-7.

12th October, 1906.

ANNUAL MEETING.

Chairman—Professor Scott-Elliot.

The Secretary and Treasurer submitted their annual reports, which were approved of. That of the former stated that fifteen ordinary, one special district, and four field meetings had been held, and that there had been a net gain of forty-four members during the session. An Abstract of the Accounts of the Treasurer appears at the end of this issue.

The Secretary submitted the Draft of the Rules, as revised by the Council, and, with certain amendments, these were approved of by the meeting. These were printed in the last issue of the "Transactions," and are again published in this volume.

On the nomination of the Council the following Office-Bearers were elected for the ensuing session:—President, Professor G. F. Scott-Elliot of Newton; Vice-Presidents, Mr Robert Service, Mr James Barbour, Dr James Maxwell Ross, and Dr J. W. Martin; Honorary Vice-President, Mr Robert Murray; Secretary, Mr Samuel Arnott; Treasurer, Mr Matthew H.

McKerrow; Librarian, Rev. William Andson; Curator of Museum, Mr James Lennox; Curators of Herbarium, Professor Scott-Elliot and Miss Hannay. Other Members of Council—Mr James Davidson, Rev. John Cairns, Mr William Dickie, Mr William McCutcheon, Mrs Helen Atkinson, Mr John T. Johnstone, Rev. H. A. Whitelaw, Mr J. B. Waddell, Mr W. A. Mackinnel, and Mr James Houston. Curator of Coins and Tokens, Rev. H. A. Whitelaw; Antiquities, Dr Martin and Mr Harry Edgar; of Natural History Specimens, Mr R. Service, jun. Auditors, Mr John Symons, Royal Bank, and Mr Bertram McGowan. Photographic and Antiquities Committees were reappointed.

The Treasurer intimated that Mrs M'Dowall had presented to the Society the Manuscript of the "History of Dumfries," written by her late husband, Mr William M'Dowall.

The Society accepted the gift with much gratification, and requested the Secretary to thank Mrs M'Dowall for the same.

26th October, 1906.

Chairman—The Rev. John Cairns.

PRESIDENTIAL ADDRESS. By the President, Professor G. F. SCOTT-ELLIOT, M.A., F.R.G.S., &c.

THE MIGRATIONS OF MAN.

Anthropology is at present suffering under an enormous accumulation of observations and an unusual multiplicity of authoritative authors. I will try to draw a few clear and definite conclusions from this bewildering mass of detail, but must ask you to hold me excused if I give but one side of various questions upon which there are still many irreconcilable opinions. To produce the full evidence for my conclusions and to refute those which are not mentioned would require not a paper but probably a whole series of closely reasoned volumes.

Even if we take the world as we find it, neither summoning continents from the vasty deep nor assuming great and sweeping changes of climate, then man's wanderings may be explained by certain very simple and obvious facts. He travelled not for pleasure but for food. Every improvement in his social state, every economic discovery, had this for its inevitable result that more people came into existence, and that, therefore, eventually some of them had to wander away.

There are certain places where one would expect but a small population, and living in a very savage state of civilisation. Thus, for example, the uttermost ends of the earth, such as the Arctic regions and the West Coast of Tierra del Fuego, are still the home of the Eskimo and of the Yaghan. Other "refuges" for the less developed forms of mankind are tropical jungles, arid deserts, and rugged mountain chains. In such country no human being would be content to live if it was possible to obtain subsistence anywhere else. The weaker races are inevitably forced into such refuges; stronger and more numerous peoples annex the pleasant places of the earth. The main streams of travelling mankind avoid these refuges, and inevitably follow certain welldefined roads, which are not difficult to discover. Sometimes there are great stretches of forest or of more or less fertile grass land, in passing which the human flood seems to lose any definite direction, and to percolate or diffuse away for great distances. These are best compared to wide river valleys or great alluvial flats, over which the water slowly and shallowly spreads itself. Yet the main stream exists nevertheless, and may be discovered issuing from this area of diffusion.

In America there is a very distinct main road of migration which is by way of Behring's Straits. The forefathers of the Eskimo when driven up into the north-east corner of Asia, found themselves in a desperate condition. To the north lay cold starvation in the Arctic, south and west were forests swarming with fierce savages better armed, more numerous than themselves, and yearly increasing in numbers. So they hardened their hearts, launched their frail skin canoes on the ocean, and paddled across to the New Continent, America, which was clearly visible to them looming blue in the distance. They might even have crossed by the ice in winter, stopping at the Diomed Islands which lie between.* Soon after came the ancestor of the American Indian (Homo Americanus of Keane).

^{*} Peschel Races of Man, Keane Man Past and Present, Ethnology.

They drove the Eskimo into their present desolate country* and proceeded to colonise America. The main stream would probably pass down the coast line as far as San Francisco, and offshoots, that is little parties of fishing and hunting folks, would journey up the salmon rivers, and gradually diffuse eastwards throughout the wonderful river systems of British North America. It is very probable that the invaders crossed the Rocky Mountains somewhere near San Francisco, and so reached the Prairies. There they developed into fierce hunting tribes, living mainly on the Buffalo, and, when population increased to an inconvenient degree, fighting ferociously with one another. Hence a further migration was necessary, and so first the small hunting clans and then larger tribes travelled southward. The road lies by Mexico, Bogota, and Peru; it is probably the old Inca highway, followed by Almagro, the first invader of Chile, which crosses by Tucuman to Paraguay and the Pampas of Argentina. In the rich natural pasture of those illimitable plains other vigorous hunting tribes developed, who chased the Guanaco and the Ostrich, and quarrelled with one another over their hunting grounds. Then the same forced migration became necessary, and continued until the Yaghan was driven by the Onas into the extreme south-west of Tierra del Fuego. In the jungle forests and intricate river systems of the Orinoco and Amazon, as well as in those of the Gran Chaco and of Southern Chile, there are still miserable hunting folk, often living in families or very small clans, which have diverged from the main highway and diffused into the worst conceivable dwelling places.

The great civilised States of Ancient Mexico, Bogota, and Peru, which were flourishing empires in the old Spanish days, are supposed, by many American anthropologists, to be entirely the work of Homo Americanus. These empires were densely inhabited, and indeed that of Peru probably had a larger population then than it has to-day: the country was intersected by post roads, and supplied by irrigation canals so as to produce great crops of maize, potatoes, and other indigenous plants. It had a firm and settled government. There were magnificent temples full of beautiful artistic work in gold and copper, and tended

^{*} An Eskimo population may once have existed in the Argentine Republic, but this is uncertain.

by lovely vestal virgins, who worshipped, and were occasionally sacrificed to the Sun or Son of Heaven, who was embodied in the Inca himself. Could such a civilisation be invented "out of his own head" by any original aboriginal American? If so, it is surely necessary to prove that there is no trace of any Asiatic affinity either in the people of those ancient empires or in their civilisation. It is also necessary to show that any contact with Asiatic civilisation is so unlikely as to be incredible.

It is impossible to prove either of these propositions. Japanese and Chinese ships have actually been brought to the shores of America. Indeed the Kurasiwo Drift and the Californian Current would make such accidents probable enough.* Moreover, as a whole, on broad and general lines, there is a distinct similarity between the civilisation of ancient China and that which is supposed to have existed in Peru. Not only so, but there is a whole series of odd and peculiar details which are common to both and which could scarcely have been developed independently. The skull of some of the semi-civilised Americans also resembles that of the Mongol† so that it seems more reasonable to think that ancient missionary enterprise extended from Japan to Mexico.‡ The Japanese themselves are supposed to have come from Korea.

As regards the Pacific Ocean generally, it is, itself a highway, for the Polynesian and other races have wandered in every direction almost to every island in the South Seas. The Maoris reached New Zealand from Samoa only some 22 to 28 generations ago; but that is not a very unique feat in canoe navigation. Canoes have been driven for 2700 kilometres out of their course, and several voyages at 700 to 800 miles in length have been recorded. Still, on the whole, Asia must have been the starting point of the South Sea migrations.

The Malay or Oceanic Mongol is a kind of sea tramp, whose wanderings are difficult to follow. Nevertheless, perhaps, one

^{*} Sittig Smithsonian Reports, 1895. Compare Bartholomew Physical Atlas Plate 14, and Chart in Guppy Observations of a Naturalist in the Pacific.

[†] Gann Journ. Anth. Inst., Vol. 35, 1903.

[#] Sittiy 1. c.

[§] S. P. Smith Trans. N. Z. Institute, 1889.

^{||} Jenks. Bontoc Igorot.

might say that his main route has been generally in a southwestern direction. Certain Malays reached even to Madagascar some three or four hundred years ago, and their descendants are the Hovas, the aristocracy of Imerina.* There are strong. steady winds during part of the year (January, February) from Japan to the Philippines. On the Asiatic Continent, China has generally been invaded from the northern corner. The great Wall stands across a regular highway, by which over and over again Mongols, Tartars, and Mandchus have come down to conquer and overwhelm the rulers of China. The effect of these invasions from the north and the surplus population of China itself has affected even Tonkin, Burma, and the Malay Peninsula, for Mongolian tribes have traversed the difficult mountain passes and invaded their north-eastern frontier.† Not only so, but Tibet, "the mysterious," has been invaded from China. I Thus from Tibet and Malaya the lines lead northward through China to the great Wall. But a very marked highway, of which we have historical records to a very distant period, is the line of the Siberian Railway. This runs from the Caspian in a general easterly direction; roughly it traverses good steppes or more or less fertile land, and lies between the forests of Northern Siberia and the deserts and mountainous country, which forms an effective northern barrier to Tibet. Along the line of advance of Russia, in the recent Japanese war, there have passed continual waves of wandering and savage herdsmen. Sometimes they reached Mandchuria, and there formed great populations. Sometimes they swerved northwards, so forcing other peoples towards Behring's Straits. Movements of this kind, no doubt, led to the discovery of America by Eskimo and Red Indian. Sometimes these invasions turned south before reaching Mandchuria, and, beating down all Chinese defences, spent and lost themselves in its hundreds of millions of coolies.

So far then from New Zealand, from Tierra del Fuego and from Tibet the roads of man's travel unite near Harbin and turn westward to the Caspian Sea. The story of British India is far

^{*} Grandidier L'Origine des Malgaches.

[†] Skeat and Blagden Pagan Races of the Malay Peninsula, and Sir W. Hood Treacher J. Soc. Arts, 22nd March, 1907.

 $[\]ddagger$ Sir Thos. Holdich Tibet the Mysterious.

too well known to require much discussion. Mongols have indeed tried to invade India by Tibet and the Himalayan passes, whilst Portuguese, Dutch, French, and English came oversea, but the real road to India is by the north-west frontier. It is by that route that Mongol, Aryan, Persian, Greek, and Mahomedan, after traversing the rugged defiles of the Khyber and other passes, suddenly overflowed and destroyed the wealthy and luxurious civilisations in the Ganges valley. By this route apparently Bacchus entered India before 600 B.c. Some of the aboriginal Negrittos (apes in the legend) fought for him; the descendants of his soldiers are supposed to be the Nysaeans, who were driven back into the Swat Valley.* The Indian branch of the Aryans apparently came by Kabul after a stay at Khiva.† Alexander the Great and the Mahomedan invaders also entered by the north-west.

Leaving out the Negritto, who still exists in Malaya, the Philippines, and the Andamans, the aboriginal race in India seems to be the Gauda Dravidian. Some authorities look upon them as a Caucasic people (notably Keane); but they are only known now as inhabiting "refuges," that is jungles and mountain fastnesses. In the Bhagavasta Parvana, the Bhil, who may be of this race, is described as "of dwarfish stature, a black complexion, with large ears, and a protuberant belly." The Bhil was, according to the legend, produced by rubbing the thigh of the dead King. "He immediately shouted eagerly 'What am I to do?' Everybody cried out, 'Sit down!'" Indeed he has been obliged to take a back seat ever since. There is apparently an affinity between the language of some Dravidian tribes in India and that of the Australian Black fellow. These last are supposed to have conquered a preceding race, which may have been Negrittos, like the extinct Tasmanians.§

There is a possibility then that man wandered into Australia from British India *via* the Malay Peninsula. As regards the Little Black or Negritto, the small dwarfish negroid black man who is an incorrigible vagrant with a penchant for poisoned

^{*} Sir T. Holdich Geog. Journ., January, 1895.

⁺ Sir C. A. Elliott Journ. Soc. Arts, March 3, 1905.

[‡] Barnes J. Soc. Arts, Feb. 8, 1907.

[§] Grierson Journ. Soc. Arts, April 13, 1906; also Ling Roth Aborigines of Tasmania.

arrows, he has not entirely vanished off the face of the earth. He exists in the Philippines and in the Malay Peninsula as well as in the Andamans, and the Tasmanians were also Negrittos. The African Negritto has been traced over a large portion of the Dark Continent and even into Europe. Near Mentone two skeletons were recently discovered which had a suspicious resemblance to him. Some authorities have stated that there is a Negritto element in the population of pre-historic and even of modern Egypt. The Queen of Punt was certainly a Bushwoman, whilst the Pygmies of the Congo, certain people in German East Africa, and on Mount Mlanji (British Central Africa), as well as the Bushmen of the Kalahari, all belong to the Negritto type.* Now if one remembers the suggestion thrown out by the late Sir W. Flower, "He (the Negritto) is thought to be an infantile, undeveloped, or primitive form, from which the African Negroes on the one hand and the Melanesian on the other, with all their modifications, have sprung," then this wide, scattered distribution is exactly what one would expect. Although later authorities have criticised this suggestion and added much recent observation which tends to hopelessly confuse the question, still it does afford an excellent working plan, and will probably be maintained until some other courageous anthropologist offers as good and definite an explanation.†

In Africa the main highways are particularly well marked. The North African Coast Road by Tunis and Algeria belongs, of course, to Europe, and will have to be mentioned later on. Now if we blot out the Sahara, Somaliland, and Congo forests (of the Pygmies), the Gaboon forests (of Gorillas and Chimpanzees), the Kalahari and Namaqualand deserts (of Bushmen), then two main highways stand out clearly. Both run together, descending the Nile Valley as far as Khartoum, and then they separate. The Niger route runs west, avoiding the Congo jungles on the south and the Sahara to the north, it passes over what is (or was) good fertile land into Northern Nigeria, where some 35,000,000 of people are said to exist to-day. The least

^{*} Haddon Report to British Association, 1904; seems to doubt the affinity of Bushmen and Pygmies, but other articles in the same volume uphold the view adopted here.

⁺ Meyer Negrittos.

developed and wildest negroes, mostly pagans, devoted to horrible Juju and Obi superstitions, have been driven either into the Malarial forests of the West African littoral or into the mountains east of the Benue and Niger, where small cannibal tribes still hold out.

Different tribes of Negroes have invaded West Africa at many different periods, where, of course, their descendants are almost hopelessly mixed up. But other races have also traversed this route from Egypt to Timbuctoo. Hamitic peoples such as Hausas and Fulahs (or crosses between Negro and Hamite) have occupied a large part of the best territory. There have also been Arab and Mahomedan invasions: indeed the last of these, the Dervishes, still occupy a very rich and fertile portion between Lake Tschad and Khartoum. There the shadow of slavery and atrocious cruelty still rests upon the Dark Continent. The other main highway of Africa is the line of the Cape to Cairo Railway, that is by the Nile, Tanganyika, Nyassa, and Rhodesia.

The Bushmen have been pushed back as far as South-West Africa by the Negroes.* Upon the footsteps of the Negro there followed such people as the Masai, the Galla, and the Somali, as well as the Wahuma or ruling class of Uganda. Of these the Gallas had reached Abyssinia in 1542.† The Dervishes also attempted to follow this ancient route south, but they were beaten back by the Abyssinians and finally driven west by ourselves after the great battle of Khartoum.

Other races, Sabaeans, Arabs, Portuguese, Dutch, and English have endeavoured to exploit Africa from the east, from such centres as Aden, Mombassa, Zanzibar, Mozambique, and Lorenzo Marques. So far as one can follow the somewhat mysterious history of the Sabaeans, they seemed to have worked by means of great chartered companies, managed from Zanzibar and Aden.‡ So like the great Arab slave traders of some fifteen to twenty years ago,\$ and, like the Imperial British East African Company, they claimed a suzerainty over Central and East Africa and traded in it, but they never either colonised or held it effectually.

^{*} To me the Hottentots seem only a cross between Bushmen and Negro. Compare *Haddon* and others *l. c.*

⁺ Blundell Geo. Journ., Feb., 1900.

[‡] Reinisch Geog. Journ., March, 1897.

[§] Hinde Fall of the Congo Arabs.

All these African main roads point either to the Isthmus of Suez or to the Red Sea. But the story of the peopling of Europe is the most fascinating of all. Of River Driftman, we have but a couple of teeth, which is an insufficient basis for any generalisation, but of the Canstadt or Neanderthal man, there are a certain number of skulls which have been considered a sufficiently strong foundation for the deduction that his descendants are still with us. Robert the Bruce, a certain Archbishop of Tours, Kay Lykke the Dane, a distinguished lunacy doctor in Paris, show, it is said, an affinity to this vigorous savage.*

We have also alluded to the Negritto man of Mentone, and one would expect Negrittos in the Meriterranean, but the most interesting of these prehistoric Europeans is the tall, long-headed, athletic savage who lived in the valleys of the Vézère and Dordogne in early neolithic times.

We know how he lived and hunted; we even know a little of his religion and beliefs. Most unfortunately, not a single lock of hair has been discovered in the repositories of any deceased Cromagnonite. If we assume that he had red or yellow hair and blue or green eyes, it is possible to produce a fairly satisfactory theory as to the balance of power in Europe at the first invasion of the Aryans (see page 23). The Cromagnonites had probably diffused throughout Europe and Africa north of the Sahara. They lived as small hunting clans; they had not even advanced as far in civilisation as the Apache and Red Indians of the Prairies; they may have domesticated the small, long-haired, long-toothed, and probably savage horse of the period; but they probably neither rode nor drove that animal.

A small, rather feeble race, the men of Furfooz seem to have entered Europe (Belgium) from the East at a very early period. These were the first round or broad-headed men: they had probably tamed the reindeer, and are supposed to be the ancestors of the Lapps.

It is in the highest degree improbable that a Cromagnonite would be dispossessed of his land by any sort of Lapp, unless the latter were in great numbers and possessed of much better weapons. As this last is unlikely, the Lapps were probably squeezed out to the North—that is, to the Baltic and beyond it; indeed, towards where they live to-day.

^{*} Quatrefages The Human Species, and Keane 1.

But these round-headed people from the East were only the first hint of a very serious danger. Round-headed people from Asia continued to invade Europe almost incessantly from that date until 1600 A.D., or even later. Where did they come from?

Somewhere in Central Asia, sheep and goats, cattle and horses were already grazing upon the waving grasses and beautiful rolling downs of the boundless Steppes. The day of the wandering herdsmen had begun. At first the world seemed inexhaustible. There is a fine magnificence in Abraham's offer to Lot: "If thou wilt go to the left hand, then I will go to the right." Indeed, so long as the country was unoccupied they simply wandered straight on, eating the grass down to the roots at each halting place.

But, of course, this could not continue indefinitely; to the north the bleak and inhospitable forests of Russia and Siberia, full of savage beasts and ferocious hunters, were impossible when considered as grazing grounds.

Thus they had eventually to turn either East, South, or West. The perpetual production of news flocks and herds, and the increase in military strength and in skill of the herdsmen, necessarily involved an overflow from the original home. The eastward moving herds passed, as we have seen, by the route of the Siberian Railway. Those which broke out southwards had great difficulties. They had to find their way through mountain defiles, across arid deserts, but they succeeded; for these wandering herdsmen descended in later times upon Asia Minor, which was then a civilised and settled country, with rich towns and fruitful cultivation. Countless millions of nibbling sheep, of omnivorous goats, and of hungry cattle entered and wandered throughout the land. They, with their fierce and warlike owners, destroyed every green thing; they first isolated and finally ruined every luxurious city, and after centuries of destruction produced the Asia Minor of to-day.*

Those that turned West, the Celtic Aryans, entered Europe by the Crimea. On that same fertile black soil, which now produces the wheat of Odessa, they advanced in successive hordes towards the mouths of the Danube. Avoiding the moun-

^{*}Compare Ramsay Geo. Journ., September, 1902.

tainous country to the south, they wandered up the Danube valley, where their cattle grew fat and throve exceedingly on the marshy pasture lands and luscious grasses. They were now on the well-known historic route to Vienna, and were soon definitely committed to one direction.* The Transylvanian Alps, covered with forests (to the North), and the mountains of Bosnia, the Tyrol, and Switzerland (to the South), were quite impossible for flocks of sheep and herds of cattle, and for clumsy waggons with axle and wheel of one piece of wood. Thus they were forced to go on as far as Passau. Then our forefathers, the Celtic Aryans, found themselves in a dangerous and difficult position. To retreat was impossible, for other Aryan hordes were following after them. They were in the midst of an amphitheatre of gigantic mountains, full of ravines, precipitous valleys, and probably covered by dense forests of oak and of pine. Demolins has given a very graphic and interesting sketch both of their journey and of their difficulties at this stage.

They were no doubt a purely pastoral people, probably ignorant of and despising agriculture. (It must be remembered that in this respect they were very inferior to most modern savages.) But under these difficult conditions they must, perforce, have advanced a step higher in the scale of civilisation. They would separate in small parties, clearing part of the forest and building villages in every suitable valley. They would then live like modern savages, that is, cultivating a little, keeping a few animals, and trading a little; they probably invented, or stole, herds of swine, which could live on chestnuts and acorns; their voung men would be kept in good, hard condition by more or less amicable inter-village fighting; but a sort of family feeling would be maintained, for the whole tribe would have to unite occasionally to drive back savage hordes of Slavs, Mongols, and other barbarians, who also had advanced by the Danube route. We will leave them there, acquiring civilisation, building lake villages, and sending exploring expeditions through the historic defile which leads to Belfort and France.

But probably ages before they started from Central Asia the Mediterranean had been to some extent colonised by a people of a very different type. This Mediter-

^{*} Demolins Les grandes Routes des peuples.

ranean race has been called by a great variety of names, such as Berber, Iberian, Pict, and Dolmenbuilder. The last is the best name, for they were monumental masons on a gigantic scale, and this explains how we are able to trace very exactly both their route and their settlements. They were a short, rather feeble, long-headed, and dark people, with a passion for petite culture or petty cultivation. They cultivated the soil, and apparently were the first to irrigate the fertile alluvials of Egypt and Southern Europe. I have noticed that a partiality for leeks, onion, and especially garlic, characterises almost all the countries where they still persist from Wales to Spain, Southern Italy, and Egypt. The important point to observe is that they lived in large populations; they were the first city folk; they had no metal tools, but used wooden picks, stone adzes, and wooden ploughs, such as one can still see in Portugal. It is very probable that they were a douce, patient, peaceable folk, horribly oppressed by priests and kings, and very likely they were fond of great human sacrifices. They probably invented the alphabet, and indeed all Egyptian and Greek science, for they are at the foundation of both the ancient Egyptian and the Greek race.* They spread by the great North African highway from Egypt to Tripoli, Tunis, Algeria, and Morocco. The savage Blonde Cavemen of Morocco were probably driven into the Atlas Mountains. Then the Dolmenbuilders crossed into Spain. So far, then, their route is just that followed by Carthaginian conquest, and at a much later date by the fanatical Mahomedan cavalry, more fierce and destructive than any other invaders. But the Dolmenbuilders penetrated into France, where Brittany is full of their monuments, and then crossed into Britain, where they built no less than 200 stone circles as well as innumerable "long" barrows. Stonehenge was an important settlement, which is said to date from 2000-1800 B.C. They reached Holywood, which is a typical example of their work. Indeed they seem always to have selected good land, and the misty peat mosses and rugged forests of stern Caledonia would not attract them. There are many of us who are descended from the Dolmenbuilders, for in Devonshire, Western Wales, and the West Highlands one finds short, dark people with

^{*} Sergi The Mediterranean Race.

long heads and oval faces, and whose resemblance to Spaniards is very remarkable. Indeed it has led to a tradition that they are the descendants of ship-wrecked sailors of the Spanish Armada. I doubt this, first, because Tacitus notices the Spanish appearance of the Welsh Silures, and also because a careful and elaborate account of the destruction of that fleet tends to show that exceedingly few sailors escaped.* So at that time our country was more or less civilised: the good lands were cleared of forest, and, no doubt, a certain amount of art, luxury, and wealth existed, which continued until a period of which it is not very easy to fix the date. First copper and then bronze was invented, and soon came into common use. The dates given by the various authorities cannot possibly be reconciled, but the tendency now seems to be to place them always farther back. Flinders Petrie states that iron was known in Egypt in 3400 B.C.† Montelius, a high authority, points out that bronze daggers were known in Germany 3000 B.C.‡ From 2800-2000 B.C. bronze was used in Crete (Evans); § it had reached North Italy in 2000 B.C. (Montelius), and also Britain (Read)|| or at anyrate by 1400 B.C. (Evans). Taylor's dates for the bronze age of Geneva (1500 B.C.) and for Greece and Troy (1300 B.C.) are probably too modern.x

Trade had long existed in the Mediterranean, and, by 2000 B.C., Scandinavia had commercial relations with the Mediterranean. Somewhere about this date then our Celtic Aryans in Switzerland had been supplied with bronze weapons, and in consequence began to increase in numbers and in military strength. Then these tall, dark round-headed Celts began to descend upon Central Europe: they probably collected stores of provisions and of cattle, and then, forcing their way through the defiles of the mountains, swept right across France. What happened to the original Cavemen, the tall, blonde, or red-haired Cromagnonites? They were probably driven into Scandinavia and towards

^{*} Spottiswood Green Geo. Journ., May, 1906.

⁺ British Assoc. Rep., 1903.

[#] Montelius Journ. Anth. Inst., Vol. 3, N. S., p. 91.

[§] Evans Man 146 (1901).

^{||} Read Man 7.

[₽] Evans Man 6 (1902).

x Taylor Origin of the Aryans.

the Baltic: indeed it is very likely that, at a very ancient date some sort of suzerainty was established by the invading race, perhaps similar to that by which we hold British India. In consequence these Nordic savages learnt to speak Aryan after a fashion, and so the Teutonic group of nations came into existence. The first or Gaelic-speaking Celts swept right across Europe and into England, Wales, Ireland, and Scotland. They utterly blotted out the civilisation of the Dolmenbuilders and destroyed even the tradition of it. But they did not entirely kill out the Dolmenbuilders themselves. Indeed, why should they do so? The latter were far more valuable than domestic cattle: they made, no doubt, excellent serfs and slaves, and in consequence their descendants still exist to-day. The Gaels were followed by the Welsh-speaking Celts, who also invaded Britain, but Europe was doomed to experience a still more terrible invasion. The Nordic race, the descendants of the Cavemen, had learnt to sow corn and to keep cattle: they had obtained good weapons and had increased rapidly in numbers. At last they swept down upon the Aryans in France. Tall, fair-haired, bigbodied Gauls, Goths, and Belgae began to carry desolation, destruction throughout Central Europe. In connection with this question there is a point of some interest to us Scotchmen: who were the tall, savage, red-haired Caledonians described by Tacitus? Everyone knows what idea the word Aberdonian conveys to us. He is a tall, reddish-haired man with strongly marked features, and a long head, but surely that is almost exactly the impression which the description of Tacitus' Caledonians leaves upon the mind. So it is quite possible that in Northern Scotland this detachment of the Nordic race kept off Dolmenbuilder, Gael, Welsh, Roman, and Saxon, and that it has remained there until our own times. It is, of course, impossible to decide this question definitely, for Saxon, Dane, and Norwegian, one Nordic people after another, continued to invade Europe, and especially Britain, for centuries afterwards. Indeed there never were two races so incompatible in temper as the Teuton and the Celt, and almost the whole of European history tells of their raids and invasions from the earliest, which was before Cæsar's day, until the war of 1870.

Thus the population of Europe to-day consists, roughly speaking, of three main elements. Nordic in the Baltic and

North Germany, Celtic Aryan or "Alpine" in the middle, and "Dolmenbuilder" along the Mediterranean and in Western Ireland and Great Britain. Northern Italy was also invaded and conquered by Aryans, who traversed the Alpine passes.* But throughout this tangled and confused story of bloodshed and of conquest it is clear that two main highways stand out distinctly enough. There is the Danube Valley route, by which Aryan, Croat, Magyar, and Turk have pressed into Central Europe, and there is also the North African highway leading by Spain to France and England.

Now if one marks on a map of the world all these various migrations, these highways of man, then it very soon appears that they all lead to a very interesting district. Its boundary may be roughly described as follows:--From the head of the Persian Gulf to the Isthmus of Suez, then along the Eastern Shore of the Mediterranean to the Gulf of Iskanderun, across Asia Minor to Trebizond and the Caucasus, by the Northern Slopes of the Caucasus to the Caspian Sea, along the South Border of the Caspian to Balfrush, and thence back to the mouth of the Euphrates in the Persian Gulf. This tract of land where three continents meet is the most interesting place in the whole wide world. It is a meeting-place of Floras, for it contains not only temperate forests of oak, of cedar, and of cypress, but Alpine plants, grassy steppes, arid deserts, Acacia scrub, and also soil so fertile and so inexhaustibly bountiful that the first gardener digging with a fire-hardened stick could rely upon an enormous harvest. Mangroves and the tropical forests with bamboos are at anyrate not far away. There are seashores swarming with shellfish, mighty rivers for the fisherman: it was once full of wild animals of almost every description. It is the original home of nearly all our useful plants and of most domestic animals, at anyrate of those belonging to the old world. It is the zone of religions; it contains Babylon and Nineveh; Persia and Egypt border it, and, besides all this, the great highways by which vagrant man has wandered even to the uttermost ends of the earth converge and terminate here. So the original home of mankind must surely be exactly where it is placed in the oldest book of the world.

^{*} Ripley Races of Europe, and Sergi l. c.

9th November, 1906.

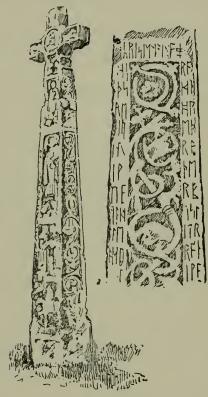
Chairman-Dr James Maxwell Ross, Vice-President.

It was agreed to record in the minutes an expression of regret at the death of Mr Frank Reid, St. Catherines, Dumfries.

Mr W. A. Mackinnel, the Photographic Secretary, described the leading photographs exhibited from the Society's collection, and made a statement regarding the work of the committee.

How the Ruthwell Runic Inscription was Deciphered. By Dr E, J. Chinnock, LL.D.

The decipherment of this Runic Inscription is one of the most interesting of literary discoveries. After various abortive attempts had been made by such scholars as the Icelanders, T. G. Repp and Professor Finn Magnusen, it was at last elucidated by Mr John M. Kemple, who in 1840 published an essay on "The Runes of the Anglo-Saxons." To this he appended six quarto plates of Runic alphabets, the best being a representation of the Ruthwell Cross from the plates of Hickes, Gordon, and Duncan. He also translated the Runic carvings. He showed that the cross is a Christian memorial, and that the letters are 20 lines, more or less complete, of a poem in the old North English dialect (commonly called the old Northumbrian) on the Holy Rood or Cross of Christ. In 1823 the German professor Blune found in the old Conventual Library at Vercelli, near Milan, an ancient skin-book in the old South English or Wessex dialect of the 10th century, containing homilies and poems. The Record Commission entrusted to Mr Benjamin Thorpe the task of copying and publishing the verses. One of the pieces, entitled by Mr Thorpe "The Holy Rood, a Dream," contains 314 lines. In 1842 Mr Kemble's notice was arrested by certain lines, and on comparison he found that they were the identical inscription which he had previously deciphered on the Ruthwell obelisk. So exact had been his text and version that the discovery of the manuscript copy led him to correct only three letters. It was now evident that this poem was in substance a work of the 7th century, and was originally written in the North English dialect. But its author was still a mystery. A daring conjecture thereanent was first made in 1856 by the Rev. Daniel H. Haigh, who in an article on the Bewcastle Cross said that there was only one man who could have written the poem from which this inscription was taken, and that was the great Caedmon. By the help



of the Vercelli skin-book and the casts taken by Mr Haigh from the cross, the late Professor George Stephens of Copenhagen was able to amend the text and add some words to the carving, and he says that he also found the name of the immortal bard. For he says at the top are the words Cadmon mae fauetho (Caldmon fawed or made me). In the 7th century, the date of the Ruthwell Cross, the South of Scotland formed a part of the

Kingdom of Northumbria, which was inhabited principally by Angles. Ethelfrid, the first victorious King of all Northumbria, was probably the first who extended the dominion of the Angles over Annandale and Nithsdale, which had previously belonged to the Picts. His successor, Edwin, extended these conquests considerably in what is now called Galloway, and also northward even beyond the Forth, on the banks of which Edwinsbury or Edinburgh will, by its name, preserve the name of its founder for ever. Oswald and Oswin confirmed and extended these conquests for the Northumbrian Kingdom. At Whitby, in Northumbria, in this century was born Caedmon, the first of the many great poets who have enriched the English language. It seems to have been customary at that time to inscribe passages taken from his poem called "The Dream of the Holy Rood" on ecclesiastical monuments in England. The Angles would be quite as well acquainted with the Runic alphabet of the fathers as with the Roman letters. This accounts for the Anglian verses of Caedmon being inscribed in Runic characters. There is no trace of this kind of writing having been used in Germany or by the Saxons and Franks. It was the exclusive possession of the Goths and their descendants, the nations round the Baltic, viz., the Norwegians, Swedes, Danes, Angles, Jutes, etc. From my knowledge of Anglo-Saxon, and on consultation of the Anglo-Saxon Dictionary and Grammar, I had come to the conclusion that the late Professor Stephens was under a delusion when he imagined he had found the words "Caedmon mae fauetho" (Caedmon made me) at the top of the monument. No such word as fauetho exists in any of the dialects of Anglo-Saxon. The inscription is written in the Northumbrian dialect of Anglo-Saxon, from which the Scottish language has been developed, as the English is the development of the Mercian or Midland dialect. No such form as fauetho is recognised by Grammarians. In order to corroborate my own decision of the worthlessness of Stephens' alleged discovery, I wrote to Dr W. W. Skeat, Professor of Anglo-Saxon at Cambridge, asking his opinion. He replied (7th January, 1901):---"I think there must be some mistake about Prof. Stephens' discovery. I do not find that anyone has ever taken it seriously. Nor do I know where to find authority for the alleged verbal form fauetho. It is evident, therefore, that the late George Stephens discovered a word that never existed." Full particulars can be obtained by consulting Haigh's "Conquest of Britain by the Saxons," Stopford Brooke's "History of Early English Literature," Sweet's "Anglo-Saxon Reader," Stephens' "Runic Monuments of Scandinavia and England."

STANDING STONES OF LAGGANGAIRN. By Miss Fleming-Hamilton, Craighlaw.

These stones are on a small hillock or rising ground close to the upper waters of the Tarff-actually in New Luce parish, but only just across the march from Kirkcowan parish, and it was from this side I visited them, and took photographs in August, 1904. They are most inaccessible, quite three miles from any road, over a very rough and wet moor, and not less than eight miles from Kirkcowan village. Sir Herbert Maxwell says in "Topography of Galloway" that they stand close to the old pack-horse track from Kirkcowan to New Luce, and the line of this route is shown on all but the very newest maps; however, it is practically untraceable now. Sir Herbert gives the meaning of the name as "Lagan-y-carn" (hollow of the cairns), and about a quarter of a mile off is the farmhouse of Kilgallioch, which he translates "Church of the Standing Stones," so that they were evidently considered remarkable in very early times. I am sorry the photos are so small, but it was impossible to take any large apparatus to such an out-of-the-way spot. However, I think they show clearly the character of the crosses carved on the stones. They are what, I believe, is called the Greek Cross all sides equal—and bear smaller crosses formed simply of two incised lines on the angles. I do not know of any similar ones, at anyrate in Galloway. The story related of them is that there were originally three, but that the farmer at Laggangairn took one to make a new lintel for his house. Vengeance, however, fell swiftly; his collie dogs went mad, and bit him; he also went mad, and no help being available in that desolate region, his wife and daughter settled the matter by smothering him between two "cauf beds." Sir Herbert says they placed the stone over his grave. I could not find it, however, and the shepherd at Kilgallioch, who was only newly come, could not assist me. At Kilgallioch itself are three remarkable Holv Wells, called "The Wells of the Rees," but they lie in such a hollow it was not possible to get a satisfactory photograph.

HAVE BEES A COLOUR SENSE? By J. T. RODDA, Eastbourne.

The writer of the paper had been experimenting, and his study of the subject seemed to confirm the results of Lord Avebury's experiments, described as follows:-In order, then, to test the power of bees to appreciate colour, I placed some honey on a slip of glass, and put the glass on coloured paper. For instance, I put some honey in this manner on a piece of blue paper, and when a bee had made several journeys, and thus became accustomed to the blue colour, I placed some more honey in the same manner on orange paper about a foot away. Then, during one of the absences of the bee, I transposed the two colours, leaving the honey itself in the same place as before. The bee returned as usual to the place where she had been accustomed to find the honey; but, though it was still there, she did not alight, but paused for a moment, and then dashed straight away to the blue paper. No one who saw my bee at that moment could have had the slightest doubt of her power of distinguishing blue from orange. Again, having accustomed a bee to come to honey on blue paper, I ranged in a row other supplies of honey on glass slips placed over paper of other colours—yellow, orange, red, green, black, and white. Then I continually transposed the coloured paper, leaving the honey on the same spots; but the bee always flew to the blue paper, wherever it might be.

I have received several replies from able experts expressing the view that bees may have visited the blue paper laden with honey in preference to other colours in Lord Avebury's experiments. I have found but few experts who have made experiments with different coloured flowers, so as to enable them to give an absolute decision. All the experiments are fully described in "Ants, Bees, and Wasps,' "On the Senses, Instincts, and Intelligence of Animals,' by the Right Hon. Sir John Lubbock, Bart., F.R.S., M.P., F.L.S., D.C.L., LL.D. Also in his reply to Professor Platean in "The Linnean Societies Journal"—Botany, Vol. 33—"On the attraction of Flowers for Insects,' read 4 Nov., 1897.

These experiments are so very conclusive and coincide

with the deductions I am able to make from the study of the technical press, that there is no alternative but to rely on the facts elucidated by such careful painstaking and exact experiments. G. W. Bulman, Esq., M.A., B.Sc., has recorded several tables of observations in the "Zoologist," June, 1902. Also in a paper on insects and flowers read at the Eastbourne Natural History Society, December 19, 1902, giving numerous observations and facts which should be accepted as a definite decision, he concluded his paper by saying:-"These facts prove conclusively that whatever the bee's taste may be, it does not specially select blue flowers for its visits." Out of 50 replies received from scientific and natural history societies, I have obtained but two who have tried to condemn the bee as colour blind and devoid of reasoning powers. The second problem raised in this discussion, viz., "Can Insects Reason?" has elicited a number of affirmative replies, accompanied by many illustrations and anecdotes from observers who are able to prove that ants and bees are attracted by colour; this problem should not be indexed as insoluble.

Mr Marr said that, although he was a beekeeper of twenty years' experience, he had never found that bees had any preference for any colour. He had taken particular interest in watching them at various seasons of the year, and it was possible, if one was just an ordinary, spasmodic observer, he might find that the bees preferred blue one day for the simple reason that they were visiting blue flowers, but the next day perhaps they might be visiting yellow flowers. The bee would go to the flower that contained the most honey. He had experimented, and beekeeping friends of his had experimented, and they found no conclusive evidence that bees preferred blue.

Mr Sinclair, who had kept bees for a longer period than twenty years, corroborated all that Mr Marr had said. So far as he had seen, bees had no preference for any colour.

The Chairman said that, although they had no preference for any particular colour, he did not know that that disproved the theory that they had colour sense.

Mr Service was of opinion that they had no colour sense, but they had an intense sense of locality.

Mr Marrs said that he had experimented with coloured hives. In the absence of the bees from a blue hive he would

remove it and put a white or red one in its place. The bees never for a moment hesitated to enter the hive, and if they had had a sense of colour they would have known a white hive from a blue one.

Observations on Seed Distribution of Some Bulbous Plants. By Mr S. Arnott, F.R.H.S.

Among the many interesting studies in connection with plant life is that of the means by which the seeds are so distributed as to avoid to a great extent the struggle for existence between plants of the same species—a struggle which would be vastly greater were the seeds scattered close to the parent plants. One could write a lengthy paper upon the subject, but the following brief observations upon one part of it alone will possibly be useful in bringing the whole question before the minds of some who may have an opportunity of studying it in a greater or lesser degree. I am not going to discuss the plants which generally find ready means for the dispersal of their seeds by the agency of the wind or through the means of birds, but to refer to one or two examples of plants whose seeds are not of a nature to be windborne, and which are not appreciated by the birds or by any of the other creatures which convey seeds from place to place, either through their use as food or from their possessing certain contrivances which enable them to adhere to the skin, fur, or feathers of these creatures. Nor do I intend to speak of those which have, by means of the contrivances which cause a sudden opening of the seed capsules, a means of scattering these seeds to a greater or less distance from the parents. The plants to which I refer are some of the bulbous plants which have flowers elevated on stems of some length, and which have not any power of distribution save that given by the possession of these stems. As an example, one may take one of the Alliums of Garlies, and one, also, which is of a highly succulent character, and yet remarkably free from the tough fibrous matter which gives strength to the flower stems of some plants. The plant is Allium triquetrum, one full of sap and of a very soft nature. Its flowers are arranged in a small raceme at the end of the stem, and droop downwards by means of a slight thinning and weakening of the latter near its extremity. From the soft character of

the stem, the weight of the flowers and the seed capsules afterwards produced would cause it to collapse to the base in a short time were it not for the way it is strengthened by its triangular form. It looks like a miniature triangular girder set on end, and is sufficiently strong to maintain the flowers themselves. As the seeds begin to form and the capsules increase in weight, the stems gradually fall forward in the direction in which the flowers are arranged, and eventually lie in a horizontal position with the capsules resting on the ground, where they gradually open and the seeds fall to the soil. In a group of plants it will be found that the flowers are all turned towards the light, so that, if in an open position, the stems, in falling, fall outward, with the result that the seeds are deposited at distances from a foot or less from the parent. The triangular form of the stem keeps it from doubling up at any point save in the soft base. What is noticeable about this plant which makes this distributing method more valuable is that it also increases rapidly by offsets from the bulb, and has thus a greater need for dispersing its seeds to prevent undue competition among its offspring. A somewhat similar arrangement exists among such Alliums as bear bulblets on the top of the stem, with the exception that the necessary rigidity of the stem is often secured by other means, such as a cylindrical formation of the stalk, which is either smooth and hollow, smooth and stiff and with interior fibres or corrugated, the latter arrangement frequently existing among plants with hollow stems also. It will be observed that in many cases these stems, from their greater substance and rigidity, last longer than the leaves, and do not fall down until the seeds are ripe or nearly so. Besides the Alliums, such bulbous plants as Narcissi, Snowflakes, and even the Snowdrops are spread by this means, although, of course, the distance varies according to the length of the stems. In this short note I have endeavoured to keep it free from technical terms, and to state the facts so as to induce others to take their own observations when opportunity offers.

23rd November, 1906.

Chairman-Mr R. SERVICE, V.P.

THE CLIMATE OF THE BRITISH ISLES. By Mr Andrew Watt, M.A., of the Scottish Meteorogical Society, Edinburgh.

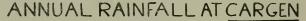
After some introductory remarks, it was pointed out that, though our climate was not perhaps an ideal one, the truth was that the British Isles enjoyed milder temperature conditions than any other lands within the same latitudes. We were apt to forget how far north our islands lie, and that John o' Groats is within 600 miles of the Arctic Circle. Compare, for example, the enormous range that prevails in Southern Siberia with the moderate variations of temperature under which we live. Lake Baikal—in the latitude of England—is frozen over for three or four months every winter, yet during the short hot summer the country round yields a magnificent wheat crop, which ripens with almost magic rapidity. So Vladivostock—an ice-bound port in winter—is further south than the Channel Islands. Compare also Labrador with its inhospitable climate, and consequently scanty population.

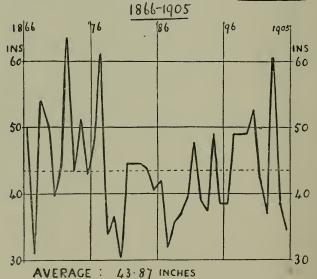
The secret of the comparative mildness of our climate was to be found in our insular position. Land and water behaved in quite different ways towards the heat radiated by the sun. Land absorbed the heat rapidly and gave it out rapidly, whilst the transactions of water were of a much more sluggish character, the heat being stored up slowly and parted with slowly. Thus in the interior of every continent the summers were much warmer and the winters much colder than on the coasts. Lands entirely surrounded by the sea were, of course, even more favourably situated.

But of supreme importance was the fact that our prevailing winds were from the south-west, and those blowing from off the tropical and sub-tropical waters of the Atlantic were warm winds. So, too, the south-west wind was the prevailing one on the eastern shores of the Pacific, and the eastern shores of the northern parts of both the great oceans were much warmer than the western. The influence of the Gulf Stream on our climate was not to be overlooked, but it was a greatly over-rated factor.

Temperature variations within the British Isles were discussed in detail. Height above sea-level was an important consideration. We spoke in a vague way of the mild climate of Devonshire, having in our minds such places as Dawlish, Torquay, and Dartmouth; but on the high land in the middle of Dartmoor the winter climate was as rigorous as that of Braemar. But there was no such range of climate as was to be met with on high mountains in tropical countries. On the famous railway in Peru, which crossed the Andes at a height of 15,000 feet, as great a variety of temperature conditions might be experienced in a few hours as would be met with on a journey at sea-level from the Equator to a point within the Arctic Circle.

Just as in the case of the great continents, the coasts of our islands enjoyed more equable temperature conditions than inland





HIGHEST: 63.50 INCHES IN 1872 LOWEST: 30.77 INCHES IN 1880 districts: there was less difference between day and night throughout the year, and less difference between summer and winter. In severe frosts the lowest temperatures were met with in the valleys rather than on the hills. In the great frost of January and February, 1895, it was noteworthy that at times the summit of Ben Nevis was warmer than any other spot in Scotland for which observations were available. Such "inversions" of temperature were of common occurrence in Switzerland, where they had passed into a proverb, and there the villages were built on the slopes of the mountains rather than in the valleys.

The main features of the climate of our islands as regards temperature might be determined from observations made at a comparatively small number of points; but in the case of rainfall that was far from being the case. The orographical features of the country showed extraordinary diversity, and places quite close together might have very different rainfalls. Thus, Cargen lay nearer to Criffel and the Galloway hills than Dumfries, and had a heavier rainfall. The registration of rainfall was a simple matter, and the Natural History and Antiquarian Society might do good work by encouraging rainfall research in the south of Scotland. It would, for example, be of great interest to have a string of rain gauges at intervals up the Nith valley. The lecturer would be glad to be put in touch with anyone who desired to establish a gauge.

The general distribution of rainfall over the islands was described. The west coast was much wetter than the east, and where, as in Wales, in the Lake District of England, and in the West Highlands of Scotland, considerable mountains opposed the passage of the moisture-laden winds from west and southwest, the rainfall was very heavy. Some places on the east coast of Scotland and England had 25 inches or less per annum, Glasgow and Dumfries about 38 inches, Fort-William about 78 inches, whilst the average rainfall on the summit of Ben Nevis had been no less than 160 inches. The rainfall at the Stye, on the lower slopes of Scafell, was even heavier.

Rainfall varied much from year to year, but it was difficult to show that there were decided rainfall cycles, though there was possibly a faintly marked period of eleven years. During the last half century 1887 had been the driest year in all three kingdoms. In England and Wales the wettest year had been

1872, in Ireland 1903, whilst in Scotland 1877 and 1903 had been almost equally notorious. There was less variation from year to year in Ireland than in Great Britain, and, roughly speaking, it might be said that it rains oftener in Scotland than in England, and oftener in Ireland than in Scotland.

The distribution of sunshine could not be pictured so fully as that of rainfall, but it appeared probable that, as regards Scotland, the north-eastern and south-eastern counties were the sunniest. The explanation was simple, for the Grampians and the southern uplands intercepted the westerly winds, which were largely dessicated of their moisture or cloud-forming element by the time they had reached the east coast. The south coast of England was the actually sunniest part of our islands, and a comparison of the sunshine records of, say, Hastings, with those of Davos Platz, the famous health resort in the Upper Engadine, was of interest. The two places had almost the same annual allowance of sunshine, but during the winter half-year it was much sunnier in the Swiss Highlands, and during the summer half-year much sunnier in the south of England.

The question whether our climate had changed within historic times was a difficult one, and no answer was attempted. That secular changes had taken place we knew from geology. An argument in favour of the view that our climate was growing milder was often based on the fact that the Thames is now never frozen over. In the 16th and 17th centuries we read of that river being ice-bound for two or three months at a time, of "frost fairs " on the river at which oxen were roasted whole. Thus Evelyn, the diarist, makes such a definite statement as that "coaches plied from London to Westminster" on the ice. But now the Thames has not been fairly frozen over for nearly a century. Our winters may have grown milder, but one cannot recognise in such an argument any proof of it. The Thames near London was a very different river, and one much more difficult to freeze, since the removal of Old London Bridge about eighty years ago. The old bridge with its many arches acted as a sort of half-tidal dam, greatly lessening the rise and fall of the river, and therefore making the water much easier to freeze.

In France records had been kept of the date of the vintage each year as far back as the 14th century. An examination of

these records gave no evidence of either a deterioration or an improvement in the climate, though there appeared to be fairly well-marked oscillations. Again, in Russia we have a country where internal trade depends largely on its navigable rivers, which are frozen during the winter months. The dates of the opening and closing of the rivers to navigation are known with tolerable certainty for the last two hundred years, and it appeared as though exceptionally cold years occurred at intervals of from thirty to thirty-five years and exceptionally warm years with a similar period. Probably in our islands also there were such oscillations, but accurate instrumental observations were an affair of the last half-century, and that was too short a time on which to base an opinion.

In the course of his remarks, Mr Watt pointed out that exact statements as to our climate were made possible only by the painstaking work of observers in various parts of the country. In the south of Scotland the Cargen observations and those by Mr Andson in Dumfries were of great value.

The lecture was freely illustrated, many of the lantern slides being from original diagrams. Of special local interest was a slide showing the annual rainfall at Cargen for the last forty years.

7th December, 1906.

Chairman—The President.

Notes on Trees. By Mr W. J. Maxwell.

The following are some notes on various kinds of trees now available for planting, which I hope may not be without interest. A few days ago I measured some trees growing at Terregles. I find that a Douglas Fir, one of several of the same age and size which was planted in 1886, has reached the height of 53 feet, with a girth, at about 4 feet from the ground, of $4\frac{1}{2}$ feet. Picea nobilis, planted in 1885, have attained about the same dimensions. A Thuya gigantea, supposed to have been planted about 1882, but perhaps really five or six years earlier, is 61 feet high and 6 feet 10 inches in girth, with very wide-spreading branches

near the ground, some of which, taking root, are rising round it like independent trees. Another Thuya gigantea, undoubtedly planted in 1882, but in harder, poorer soil, is 46 feet high, with a girth of 4 feet 8 inches. Larch planted in 1886 are 56 feet high, and 34 feet in girth. Far surpassing these are specimens of Picea grandis, planted in 1882, and then two or three feet high—now 62 feet high, and 61 feet in girth—60 feet of additional height in 24 years, and taking their thickness with them. And here I should like to draw special attention to this noble tree, for Picea grandis is truly a noble tree, worthy of its name, sound and hardy of constitution, a thing of beauty at all seasons, but especially in early summer, when the fresh young shoots so lavishly thrown out, show up in their brilliant green in contrast to the darker foliage behind. Beautiful in form and colour and in luxuriance of growth, it is an admirable tree for ornamental planting, and should prove a good forest tree as well. If plants could be obtained more cheaply, we might have plantations of Picea grandis mixed with Douglas firs, in sheltered spots, which in beauty, rapidity of growth, and quantity of timber produced would surpass anything we have now, and would yield pretty good timber too, though not equal to Larch for outside use.

Picea Nordmanniana, much more generally grown, is very similar in appearance and growth in its early stages, but sadly lacks the robust constitution of Grandis. I have found Nordmanniana a most disappointing tree.

The only large specimen of Abies Menziesii at Terregles dates from about 1840. It is $74\frac{1}{2}$ feet high, with a girth of $15\frac{1}{2}$ feet. I think its rate of growth is much the same as that of Abies Douglasii, and its timber is much the same. Here I may remark that in exposed places the variety taxifolia of Abies Douglasii may be found more satisfactory than the ordinary type. Slower of growth, but of sturdier habit and less liable to lose its top, it seems better fitted for roughing it.

In rapidity of growth the trees above-mentioned all far surpass the Pines, austriaca, laricio, and sylvestris, and the latter have no chance when planted with them; but the Pines will thrive, and root themselves so as to resist the fiercest gale in the most exposed situations, while the others need shelter from the blast.

The Larch is, no doubt, our most useful tree for estate purposes, but in view of the ravages of Larch disease, and the new pest with which it is threatened, the Larch saw-fly, it seems imprudent to trust to it so much as has been the custom. I have seen no signs of this terrible insect so far, but the plague may soon reach us, and the prospect is alarming. As the Larch saw-fly generally commences operations on the tops of the highest trees, it seems only too obvious that any human effort short of burning whole plantations will probably be powerless to check its advance. The remedies suggested by our watchful Board of Agriculture, such as gathering the insects from the ground in the pupa state, and scraping or burning the surface of the ground, certainly seem to me impracticable on a sufficiently large scale to be of any use. Birds may help us, but the larva of the Larch saw-fly much resembles the destructive gooseberry caterpillar, and I have never seen any bird but one feeding on them. That one bird was the cuckoo, which I observed some years ago regularly frequenting the gooseberry bushes in my garden when we had a plague of those saw-fly caterpillars.

During the past year young Silver Firs have suffered severely from a species of Aphis attacking the young shoots and leaves. Numbers of young Silvers of all sizes up to 10 or 12 feet high have been killed, and much larger trees badly damaged. The remedy for this and other Aphis plagues is the importation of lady birds, if a sufficiently hardy species can be found somewhere. I believe the fruit growers of California imported four or five different species from New Zealand with most successful results.

There seems also to be a new disease on the Ash. We have long been familiar with a sort of black canker which attacks the branches, and proves fatal in a year or two, but very recently numbers of Ash trees have been dying from some disease which shows no symptom except the withering and falling of the leaves in summer, and a marked brittleness in the wood. The twigs of a healthy Ash, are, of course, tough and supple; those of an affected tree snap like sticks of sealing-wax.

In conclusion, I should like to recommend the London Plane, Platanus orientalis, or more general use for ornamental planting, and especially in our own town of Dumfries. It is hardy enough to stand our hardest winters, and though it does

not grow with quite the graceful luxuriance it develops in more southern climes, it does very well. The only large specimen I have seen in this district is at Kirkconnell, Troqueer, a tree about 60 or 70 feet high, with a girth of 9 feet 8 inches; but I have one at Terregles Banks, planted in 1884, thriving well, and there are several about Terregles. It is specially suited for planting in towns from its shedding its bark, and so resisting smoke.

Dr Borthwick said that in addition to that ordinary ash canker, there was only one tree he had ever examined which was evidently suffering from a disease that formed no particular signs outside, but, on examining it at any time of the year, either with root wood, twigs, or leaves, wherever there were living cells, there he found some kind of organism in active movement. Whether it was a bacterium or not he could not say. Possibly that cause may have had to do with the case referred to by Mr Maxwell.

Mr Wellwood Maxwell of Kirkennan asked if the ash in question had anything apparent on the bark to indicate the disease. The bark of a healthy young ash was clean, but one sometimes saw an appearance like a scale on an apple tree. Was that present in this case?

Dr Borthwick said he knew the white scale, or insect scale, referred to, and he could not say whether it was present or not, but the bark had not a healthy appearance, and that was what led him to examine the tree first. The growth, too, had ceased, and another conspicuous point was the way in which it lost its leaves very early in the year, and also portions of the twigs fell with the leaves.

Mr Maxwell, Terregles Banks, in reply to the Chairman, said regarding the value of the grandis that the timber of these silver firs was much of the same order as their own silver fir.

The Japanese Larch. By Mr W. Murray of Murraythwaite.

Mr W. Murray gave a note on the Japanese Larch. It had to do with a cover which had already been brought before the Society in recent years. It was a cover of about four or five acres planted in 1899, the trees at the time being of the age of three years. He had had it measured fairly well, and found that

the highest trees in the cover were about 18 feet 6 inches high, and, these being now ten years old, that gave an average yearly growth of a foot and a little over ten inches. The average height of the trees in the cover was 15 feet, which gave an average yearly growth of 1 foot 6 inches. It appeared to him that the rate of growth was accelerated during the last two or three years, because in 1903 some of the trees were exhibited by Mr Barr, of Messrs Kennedy & Co., at the Highland and Agricultural Society's show in Dumfries, and at that time, after seven years' growth, the average height of the cover was 10 feet. Since then most of the trees in the cover had grown 5 feet, so that the rate of growth had been accelerated by about 4 or 5 inches per annum.

Captain Walker said he had had experience with the Japanese Larch, and thought them very risky indeed. If there was a rabbit within half a mile it would eat them. That was a great drawback. Another thing he found was that in high ground they would not stand early morning frost. They must be saved from the early morning frost, or else, in his experience, they invariably lost their tops.

Copse Woods. By Mr Wellwood Maxwell.

Mr Maxwell prefaced his paper on "Copse Woods" by some explanations as to the growth of Japanese Larch at Kirkennan. I happened, he said, to be in Japan a little over twenty years ago, and sent home a packet of seed to my father. It was sown in 1885. About fifty of them came up; most of them are at Munches, and I have three of them at Kirkennan. Unfortunately, one or two rabbits had been left "within half a mile," and destroyed the rest. The highest one I have, which was sown in 1885, is now 45 feet high, and the girth, breast high, is 25 inches. I have two others 25 feet high, and off one of these I have brought a sample of cones, the first I have seen on Japanese Larch in this country, and there is also a sample from the ordinary Larch for comparison.

There is perhaps a greater area of copse wood in this country than any other class of wood, and in no class has there been a greater fall in value. These woods were mostly managed on a rotation of 20 to 25 years, and used to yield a very fair return, 46

equal to from 8s to 10s an acre per annum, and sometimes more. I know of one copse wood of about 50 acres, which, when cut 40 years ago, vielded £1400 to the estate, or £28 per acre. This wood was sold two years ago, when 38 years old, for £300, or only £6 per acre. To what is this great fall in value due? Chiefly to foreign competition. I will explain how. The chief species in a copse wood in this district are oak, ash, birch, and hazel. The oak was valuable for its bark, which, 30 years ago, brought £6 10s to £7 a ton. Women and boys could be got in numbers to peel for 1s to 1s 3d per day; now it is almost impossible to get them at all, and the wage is more like 2s to 2s 6d. The price of bark, on the other hand, has come down to £4 10s. This year, I am told that even that price was difficult to get. The result of this rise in labour and fall in price is that it is doubtful if it any longer pays to peel the bark off oak copse wood. The bark, as you know, was used for tanning hides in making leather, which is now done more economically with the aid of chemicals and other substances imported from abroad; whether the leather is as good and durable I am unable to say, but I have my doubts. But this I know, that this source of a considerable supply of labour to some country districts has been destroyed, never, I fear, to return. The value of the oak was not very great. The best went for pit props, which are now about half the price of 30 years ago; and the remainder for firewood. Ash, birch, and hazel were used for making bobbins for the cotton and wool mills, and brought as much as 12s a ton in the wood. Everything was of use down to $1\frac{1}{4}$ in. diameter. Bobbin mills were common in this country, but many have ceased to exist. Now bobbins are made almost exclusively out of larger trees. Some makers will take nothing but ash, but that must not be less than 3 in. diameter; but at the large works, such as Coats, of Paisley, the wood is almost all from abroad, and is, I understand, chiefly birch. The small rods, which were too small even for bobbins, went for barrel hoops, and brought 16s to 18s per ton, but this is a trade which has entirely disappeared from the district. What wood is still used in this country for barrel hoops is imported from France, but iron hoops have been the chief cause of the destruction of this industry. When Kirkennan copse wood was cut some 30 years ago under the management of my father, he had two acres carefully measured, the crop

kept separate, and weighed so as to ascertain the exact value, and it may interest you to hear the results.

			FIRST ACRE.						
Т.	С.	Q.							
23	3	3	Bobbin wood at 14s				£16	4	6
0	19	0	Hoops at 16s				0	15	0
0	10	0	Bark at £6				3	0	0
			Firewood and props				3	10	0
							£23	9	6
Pd. cutting and carting bobbin wood and hoops £8 8 0									
Pd.	chip	ping b	park, carriage and cutting	•••	2 0	0	10	8	0
			Net balance				£13	1	6
			SECOND ACRE.						
т.	C.	Q.							
10	2	2	Bobbin wood at 14s				£7	1	8
3	4	3	Hoops at 16s				2	11	8
0	16	0	Bark at £6					16	0
U	10		Firewood and props					18	3
							£16	7	7
Cutting and carting bobbin wood and hoops £4 13 0									
Cutting, chipping, and carting bark 3 4 0									
							7	17	0
			Net value				£8	10	7

Compare this with what was got for the wood on Lochanhead estate about ten years ago, which was at the rate of £4 an acre, a price which I fear it would be impossible to get to-day for the very best copse of 20 to 25 years' growth. If the Kirkennan wood, which was of 25 years' growth in 1875, vielded in the one case about 10s 6d an acre per annum, and in the other about 7s an acre per annum, whereas the Lochanhead wood of 25 years old would only be 3s 3d per acre per annum, and the wood I mentioned at the beginning of my paper 3s 2d per acre per annum, as against about 22s per acre per annum of 40 years ago; it is evident, then, that wood of this class has ceased to be a remunerative crop, and the question comes—what should be done with our existing copse woods? No single answer can be given to this question; each case must be considered on its merits. Professor Schlich, in a recent book on British forestry, deals with this question, and suggests that perhaps the best way is, when the copse has been cut over, to plant a few trees of different kinds wide apart between the stools. and, by taking a little care during the first few years, to see that these young trees are not smothered by the luxuriant growth from the stools, very good results are being obtained. In a small way I have been experimenting on how to deal with copse woods for 18 years, and I am bound to say that I think the least satisfactory portion is that treated as proposed by Professor Schlich. It may be, however, that this is my fault, but I found that there was great difficulty in maintaining a proper balance between the stool shoots and the young trees. When I planted larch at about 6 ft. apart among the stools, I found they either got overtopped or too When I planted Douglas at about 9 ft. apart much drawn. among the stools, I have found that after 10 or 12 years the Douglas are getting too complete a mastery over the stool shoots, even though these have been thinned out to one or two on a stool to allow of greater vigour, and the result will very soon bepure Douglas, which will never make clean timber, because they are not close enough of themselves, and the hardwood was not dense enough to kill off the bottom branches of the Douglas. My first experiment was, however, in 1888, to cut a portion about 2 acres clean over. Unfortunately, a few standards of oak and birch were left, which would have been much better removed, as they have spread, taken up too much room, and caused breaks in the canopy. At this time I had just read an account of the Taymount plantation on Lord Mansfield's property in Perthshire, which was planted with Douglas 12 ft. apart, and filled in with larch to 6 ft. apart. The result of this was that the Douglas killed out the larch, and became themselves much too rough to form a good timber crop. I therefore decided to put in my Douglas 12 ft. apart, and fill in with larch to 4 ft. The result in this case has been not that the Douglas have suppressed the larch, but that the larch has suppressed the Douglas in a large number of cases, and still what Douglas have got through have not lost their side branches, as is necessary they should do to make clean timber. The only portion where the Douglas have gained the complete mastery is a small bit where the planting was commenced, and where my forester put in double the number of Douglas I intended, and even here the Douglas have not clean stems. I have made some measurements of trees in this plantation, and find the average height to be about 40 ft. The biggest larch I could find is about 50 ft. high, with a circumference of 30 inches at breast height of the girth measurement. This tree will contain about 7 or 8 ft. of timber, not a bad growth for 18 years. There are many others of 45 ft. high, with a circumference of 24 inches at breast high. largest Douglas is about 45 feet high, and 24 inches circumference. I have, unfortunately, no correct record of the value of the copse cut off this portion, but, taking it as the same as the best acre measured in the seventies as £13 an acre, or £26 for the two acres, the cost of planting up the wood, I estimate to be about £8 an acre, including fencing; or, say, £16 for the two acres. The first thinning was done in 1901, when, as much as possible, all the diseased larch were removed, and the net price realised was £20. In the next year, 1902, a gale in September blew down a good number of the trees, more especially in one corner, and a fortunate sale of the poles brought in another £14 10s, making £34 10s in all. The cost of planting £16 at compound interest at 4 per cent. for 14 years comes to £28 5s, so that I am justified in saying that my original outlay has been repaid me, and I have now a young wood of 18 years which is growing well, and becoming more valuable every year. Other portions of the wood, where ash and oak predominate, have been thinned out, leaving always the best with a view to their growing into a larger and more valuable class of wood, and, where the stools were not too old, these promise fairly well, but of their value it is too soon to speak. Two years ago I thinned some oak a second time, taking out also some birch which had ceased to improve, and this has been underplanted with silver fir in the denser portions, and Douglas in the more open parts. These are already making good growths. I have also small portions which were cut clean over, and where three years ago Douglas were planted 4 ft. apart, or 2720 to the acre, which, so far as my experience goes, is the smallest number that should be planted to the acre to get good, clean timber. A writer in a local newspaper this autumn wrote an article recommending very highly the planting of Douglas and other newer-imported varieties of trees at 9 ft. apart, as a means of restoring the value of British woodlands. This gentleman evidently had no personal or practical experience, or he would not have made such a suggestion. I unhesitatingly say if Douglas are planted so far apart as 9 ft. without equally quick-growing shade bearing species between them, the results will be as disastrous for British foresters in the future as the wide planting of the common spruce has been in the past. The only way to get clean timber is by crowding in early youth. By far the larger portion of my copse wood, however, has been treated only by a gradual thinning out of the poorer and weaker growths, leaving the stronger, and in some parts I am hopeful this may eventually produce a fairly valuable crop. The great difficulty is to get a sufficient number of really good trees evenly distributed over the ground. As I said before, it is too soon to make any definite statement as to which method is the best, but I am inclined to the belief that cutting clean over and replanting, while the more costly to begin with, will vield the best and quickest return. I have endeavoured to show that, while copse woods used to be a valuable property, they have now ceased to be so, and there appears to me to be here an excellent example of what a Government experimental station might be established to do. At such a station experiments like those I have tried to describe could be carried on upon a much more extended and systematic scale than I have been able to carry them on. And if these experiments proved profitable, there might again be opportunities of employment in country districts where none now exist. Who knows but that it might help the return to the land.

Captain Walker said Mr Wellwood Maxwell had spoken of clean Douglas mixed with larch, and he wished to ask him if he did not consider that Menzies spruce mixed with Douglas would give cleaner Douglas than any tree that could be suggested at a moderate price.

Mr Maxwell replied in the affirmative.

Records of the Growth of Trees at Dormont, Lockerbie.

By Major Carruthers.

Major Carruthers, Dormont, Lockerbie, contributed valuable records of the growth of trees at Dormont. These are as follow:—

Average- increase per ann'm		inches.	• • • • • • • • • • • • • • • • • • •	1.05	1:17	7.
Age of Tree.			120 120 120 120 81 81 81	81 57 57 120 120 120 120	S1 81 46 46 46	120 120 120
breast high.	1906	ft. in. 8 9½ 8 10 10 22 11 22				& 1.7.70 € 6.00 4 € 6
Girth at 3 ft.	1876	fc. in.	7 0 7 6 6 4 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		ಸ್ 4 ಎ ಬ	00 0 00 0 00 0
Girth at 3 ft.	1871	ft. in. 7 5 6 7 7 4		6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		7-004 8800
Girth at 3 ft.	1866	f. jn 7 33 7 23	7.00 0 4 4 8 8 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10		4 & 73 &	7 6 6 0 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Girth at 3 ft.	1861	ft. in. 7 1 6 1 7 0 8 10	00000000000000000000000000000000000000			7 0 5 10 6 1 4 4½
Girth at 3 ft.	1856	ft. in. 6 9 5 111 ³ 6 7 ³	6 33 5 10 5 10 2 2 11 3 0 8		වැට මාදු	6 6
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Year. Planted.		Not	1786	1849	1825 1860 ",	1786
No.		n -016	4292 010 110	01854 −01884R		-01004
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		: :::		111 111		::::
Name.		 2nd stem 		111 ::::	Sweet Chestnut "" "" "" ""	Fir*
		Oak ¹	Cs	". Beech	Sweet	Scots Fir

Average increase per ann'm		inches.)e :	- ·		.79	1.00	1.09	6. 1 2. 1	d d d	1.3
Age of Tree.		120 120 120 81	48 48	120 120 81	81 46 46	120	120	81 50 48 50 50 46	120 120 81	81	50
Girth breast high.	1906	ft. in. S 3½ 9 4½ 6 4	4 8 ¹ / ₂	7 64 7 111 8 7	7 11 4 0 6 1	7 103	10 11	0 7 6 7 7 8 11 10 0 4	12 10 10 10 10 10 10 10 10 10 10 10 10 10	5 4	5 5
Girth at 3 ft.	1876	ft. in. 7 1 6 9 7 8		7 4 4		s 9			5 0		
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Girth at 3 ft.	1866	ft. in. 6 9 6 10 4 2½ 4 2½		6 7 6 83 4 5		5 11	9 8	4 ∞	8 9 7 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3	2 21
Girth at 3 ft.	1861	ft. iii. 5 5 11 3 7 7 9 9	0 74	6 5 6 4 ¹ / ₂ 3 10	\$ 0 0 2‡	5 7	* 8	3 93 0 94 0 11 0 113 0 103	7 7 6 0 3 33	ς) ∞	1 9
Girth at 3 ft.	1856	ft. in. 5 11 3 2		3 2	3 11	5 21 21	7 11	2 11	6 10½ 5 3	1 6 6	
Girth at 3 fc.	1851	ft, in.		5 10	3 7	4 11	7 8		61 &		
Year	Planted.	1786 ,, 1825	1858	1786	1825 1860 ",	1786	1786	1825 1856 1858 1856 1860	1786	1825	1856
No.		-01004	- c1	7078	63 69	7	-	-01004r0	~ ci co	-	1
Name,		Lime ⁵	Norway Maple	Sycamore ⁶	Horse Chestnut ⁷	Gean (Wild Cherry) ⁸	Ash 0	English Elm	Scotch or Wych Elm ¹⁰	Birch	Turkey Oak

- ¹ The average growth of these 4 trees is taken from the date of first measurement.
- ² These 11 are all park trees and more or less exposed, except 6, which is in a wood and has a fine straight, clean bole. Taking the average from the date of first measurement, the 9 oldest trees show an increase of nearly .9 in., and in the last 40 years only a little over .8 in. The 2 young trees average 1.23 in. since planting, just over 1 in. in the last 40 years (1.025 in.) and a little more in the last 35 years (1.05 in.).
 - ³ This tree is failing.
- ⁴ Up to 75 years the average increase was .93 in. In the last 45 years it has only been .32 in. Though past maturity and making little wood, these trees are quite healthy. They are all solitary trees, except 4, which get a certain amount of shelter from old beeches.
- ⁵ Nisbet says the lime lives to a great age, and often continues sound for upwards of 200 years. These appear quite healthy.
- ⁶ Nos. 1 and 2 have suffered a good deal from wind, but No. 3, which is more sheltered, is flourishing.
 - ⁷ The average increase of No. 3 is nearly 1.6 in.
- ⁸ This is a very fine tree of its kind and still healthy. Nisbet gives 80 years as normal age limit.
- ⁹ This tree appears to be quite healthy and still growing, though Nisbet gives 50 to 60 as age of full maturity. No. 1 was badly smashed by wind about six years ago. Nos. 3, 4, and 5 are on a sandy bank, and are not doing well.
- Nisbet says the Wych Elm is of quicker growth than the English Elm, but these measurements do not bear out this view.

Year		Height		Trainba		_	1871.				1906.			Average
planted Tree.		when planted		Height 1866.		Height.		Girth at 3 ft.		H'g't	Girth breast high.		Age.	increase in girth per ann'm
1856	A. Menziesii 11	ft. 3	in. 0 0	21 19	in. 0 0	ft.	in.	ft. 3 2 2	3 10	ft.	5 6	in. 1 7	50 50	inches.
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,,	,,										8	0	50	
,,	,,										6	4	50	1.64
1853	A. Douglasii	1	6	21	6			2	7	ļ	7	4	53	
1856	,,	5 3	10	$\frac{30}{25}$	4			4	$\frac{3}{10}$	i	11	$\frac{2}{1}$	53	(2.54)
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"	,,	•		21	3		ļ	3	7		7	9	50	
,,	,,	3	8	24	3		- 1	2	11		4	1	50	
,,	,,	4	4	20	0		ł	2	5		5	4	50	
,,	,,			20	6		1	3	11	- { [5 7 5	6 3 2	50	
1861	**	0	6	6	2					58	5	2	45	1.62
1856	Cedrus atlantica			17	1		l	1	8		3	9	50	
1863	,, ,,	4	1	6	1	12	6				5	$1\frac{1}{2}$	43	j
,,	,, ,,	4	0		10	11	6		Į	- {		0	43	1
1862	" "	4 2	2 9	7 5	10	12	6		ı		4	5 4	43	1.2
1002	,, ,,	~	9	υ	4					İ	4	4	44	172
1862	A. Albertiana	1	3	6	0	12	6		- [2	$6\frac{1}{2}$	44	
,,	,,	1	6 3	5 6	$\begin{bmatrix} 0 \\ 10 \end{bmatrix}$	11 13	0			45	$\frac{2}{2}$ 1	10	44	
"	21	i	3		10	16	8		i i	40	5	4 3	44	1

11 These trees were purchased in 1853, and planted out in the autumn of 1855. The two largest are near each other on the bank of the lake. The rest are in similar situations or on an island on the lake. Note by W. F. C.:—"It appears to thrive best in moist and rich peat soil. The rate of growth seems much the same as common spruce. Though ornamental when young the trees appear to get very bare of leaves as they get larger, and unless the timber is superior to common spruce the advantage of planting it is doubtful. It is said to grow well on peat moss, but so does common spruce for 20 years. In its native country it is found in deep alluvial soil, and the expectation that in Scotland

it is to produce timber on poor soil or peat moss unless containing a mixture of alluvial soil is not likely to be realised."

No. 1 planted without a pit in light sandy loam. Injured by rabbits, but recovered, and in 1861 was 15 feet high. It was then well sheltered by common spruce, which were removed in 1862, and the tree left standing alone. This gave it a considerable check, but though much exposed to the S.W. wind it has not shaken at the root. No. 2 stands in centre of island, forced soil (a mixture of alluvial and sand), about 5 feet above water level. Purchased in 1853 when 1 foot 6 inches high, and planted in autumn 1855. In 1860 it was 16 ft. high, and that summer lost its leading shoot; the following year it produced a great number of cones and made hardly anything either of these years. In 1862 contending leads were removed, and though it again produced a number of cones it made a leading shoot about a yard long. In 1863 it produced no cones, and made a good leading shoot. It is now (1906) a very fine tree. "From the rate at which D grows as compared with common spruce it would appear that the former will produce in the same number of years one-third more timber than the latter and of equal, if not superior, quality. The great bulk of timber which it will produce points it out as a desirable forest tree. Probably any soil which can produce spruce of first-rate quality is equally suitable for Douglas. Unfortunately, it has a fault which may prevent it from ever becoming a forest tree in this country, viz., its producing cones at an early age. Nine-tenths of the plants exposed for sale are probably raised from home-grown seed taken from young trees, and will never attain timber size. In consequence of this a really valuable forest tree is likely to be condemned and the cultivation of it given up."

Cedras Atlantica.—No. 1 stands on island and has been drawn up by other trees (others park trees).

A. Albertiana.—No. 3 is protected from prevailing winds by 1 and 2. No. 4 is on an island, and protected by adjacent covert. It is probably about 60 feet high, and a handsome tree.

21st December, 1906.

Chairman-Dr J. W. MARTIN.

IN AND AROUND BESANCON. By Mr William M'Cutcheon, B.Sc.

The Jura Mountains form the natural boundary between France and the north-west of Switzerland, stretching in a northeasterly direction for some two hundred miles and having an extreme width of fifty miles. In the summer of '92 I cycled down the western limit of these mountains from Dijon, the town of "Glory Roses" and champagne, to Lyons, the River Saone forming the boundary. Standing on the Tour Metallique in Lyons one has a splendid view of the deep valley through which the Rhone comes from the Lake of Geneva, and which separates the Juras from the Alps of the Dauphiny, with Mont Blanc in the background. From the Swiss side a forenoon's cycle run from Berne brings one to the eastern limit of these mountains not far from Lake Neuchatel, which nestles at their foot. In the summer of '94 I crossed their extreme spur by means of a pass that leads from Olten towards Bâle; but during last summer (1906) it was my fortune, however, to spend a month of my holidays in Besancon, and I was able to glean a few facts concerning this interesting district.

The Juras rise rather abruptly from the lowlands of Switzerland, but towards the great central plain of France they descend as by a gigantic staircase, for there are no fewer than seven parallel ranges of diminishing altitude. My personal experiences were gathered from the two lowest chains, as I had not time to visit the actual culminating pine-clad points which overlook Lake Geneva. To the geologist the word Jura recalls the Jurassic system of rock-formation, and here the limestones are to be seen cropping out in every valley. The hill on which the citadel of Besancon stands is a huge mass of limestones, and the bending of the strata is distinctly visible a long way off, for the two sides of the hills are perpendicular and devoid of the least trace of herbage. The limestone lends itself to the formation of underground passages for water, and more than one stream disappears during its course, to reappear further down the valley. Some

two miles distant from Besancon are the Grottes Saint-Léonard, the main portion of which consists of a long narrow tunnel which enters the mountain side with the same dip as that of the strata, which at this point have a considerable inclination. Not having provided myself with candles, I was unable to penetrate very far. This fissure has to be approached from above by means of a rough footpath and a guiding chain, as the rocks rise with almost perpendicular steepness from the valley. A fine view is to be had of the Doubs Valley, and the forts encircling the town; one of these, a small one, a mile or so distant, was blown into the air two months later by the explosion of eighty tons of melinite. One could almost throw a stone into the river, yet on the steep slope were cut no fewer than three roads and a railway.

A much more interesting cave exists in the neighbourhood of Arbois, the district far-famed for its wine, which is produced on the slopes of the lowest range of the mountains, and where the memory of the great Pasteur is held in reverence. The Lycée, or High School, has been named after him and his statue adorns the square, for it was here that he taught, as a young man, before he began those studies which were to so benefit the human race and render his name a household word throughout the civilised world. We visitors were invited by the members of the Natural History Society to accompany them on an all-day's outing, one Sunday, to visit these caves. From the railway station a four miles' walk through the well-tended valley of the Cuisance brings you to a spot hemmed in by a semicircular rampart of limestone rocks rising some hundreds of feet from the valley, and after a short climb among the underwood you arrive at the mouth of the cave and are glad to take shelter from the broiling mid-day sun, when, even in the shade, the thermometer stands at 100 deg. Candles being lit, you descend the easy slope of this wide cavern, which is bedded with a coarse sand. At one point you have to climb by means of a rope to a higher level, and, if so inclined, to a still higher gallery. The lower gallery contains a large pond and is rather damp, while the upper one is comparatively dry, though every now and then you flounder about in a layer of thick black Here and there the roof descends so low that you have to lie flat in order to squeeze through, other times there is a clear height of forty feet. There were no stalactites or stalagmites worth noting. We went in about two hundred yards, but were told there were numerous ramifications which had never been thoroughly explored. The young folks of the neighbourhood seem to hold high revel in this cavern, and the place fairly rang with their shouts and laughter, as some of them got left in the dark. The majority of us had varied marks of our close contact with the floor and walls when we emerged once more into the sunlight. Time does not permit of expatiating on the good qualities of the cuisine or the local wine served in the open air in the garden of the country inn.

Another day we visited a cavern of more varied interest on one of the plateaux some miles from Besancon and near to the village of Hopital-du-Grosbois. After a long climb in the train we had to walk two miles to our destination. On the way we noted the fact that the vine-growing region had been left behind, and that cereals occupied the greater part of the cultivated ground. Hay was being taken in and various townsmen were out assisting their country cousins on their only off-day. Every here and there were depressions on the surface due to subsidences, the rock having been dissolved from underneath. The entrance to the grotto takes the form of a rent in the centre of a field, and we had to descend about seventy feet by means of a ladder. After that, a shelving tunnel leads down into the grotto proper. When some magnesium ribbon had been lit we could see at a glance that we were in an immense dome-shaped cavity of about fifty yards diameter and fifty yards in height. Here again was a little lake where one could gather peculiarly rough little bits of calcareous matter, not unlike bits of fish roe. Just beyond this sheet of water was a sinister-looking cavity with precipitous sides where the water found an outlet; it was supposed to reach a stream in the valley some miles off. On the plateau above there is no trace of a stream, the water being drained off into those The beauty of a grotto, however, consists in its stalactites and stalagmites, the latter being scattered every here and there over the floor of the place. Some of them were ten feet high and six feet through, and their formation points to a time when the dripping water must have been much greater in volume than at the present time. Then veil-like draperies and buttresses surround the stalagmites on all sides. magnesium light they showed up with marble whiteness, but when

the candles were placed behind them they gave the impression of fantastically carved ivory work. The tops are usually flat with a faint depression towards the centre, into which the drop charged with the lime falls. These three grottos, which I have made mention of, are by no means famous but happen to be easily accessible from Besancon.

Botanically speaking, the Juras are divided into three zones according to their altitude. All below 1200 feet form what may be called the plain; here cereals are grown, but by far the greater part of the sloping hill sides is taken up with the cultivation of the vine. The best of champagne may be had for halfa-crown the bottle, the wine for every-day use being sold at anvthing up to threepence the bottle. Every here and there you could see the vine-stumps covering fairly large portions of the ground where they had been burned down after having been attacked by the phylloxera or vine disease insect; this treatment is meted out to the infested areas to keep the pest from spreading. Fruit trees, such as the apricot, plum, quince, are to be seen at their best, as are also the walnut, peach, and cherry. Very few farms are to be seen, the people living in villages, and going out to the fields in the vicinity. In the next zone, extending from 1200 feet to 2500 feet, and which may be called the "Hilly Region," the apricot disappears, and the vine, if found at all, produces but a poor variety of wine. More space is therefore given to the cereals such as rye, barley, maize, and corn, though these naturally don't grow so well as lower down. In the "Mountain Region," extending from 2500 feet to 5000 feet, the fruit trees entirely disappear, and barley and corn are cultivated. Here are the best grazing patches for the cattle, and the forests are then composed of conifers. At lower altitudes the cattle are never to be seen grazing; any hay that is grown is cut and stored indoors for feeding. It is one of the striking facts of the lowland landscape of France, Germany, and Switzerland, the entire absence of cattle and hedges. In the "Plain" there are numerous fairly extensive forests, the principal trees being beech, oak, plane, alder, and aspen. Only a small fraction of these forests are in the hands of the Government.

Among wild flowers the leguminous plants are very common by the wayside, and other plants which catch one's eye are the Traveller's Joy (Clematis vitalba) and Marjoram (Origanum

vulgare); these are to be found chiefly on calcareous soil, and here they were in special abundance. In the neighbourhood of Arbois, which I have mentioned before, the rare plants are Saxifraga sphonhemica, Telephium Imperati, Geranium palustre and pratense; for, although these are to be found in various parts of the Juras, it is but seldom that they descend so low in this latitude. For information concerning the rarer plants I am indebted to Dr Magnin, one of the professors at the University. You find that some of our commonest plants when found in the district are accounted interesting from the fact that they are, comparatively speaking, rare; one has to take into account the fact of ten degrees difference of latitude. Such plants are Cardamine impatiens, Geranium silvaticum and lucidum, Anthriscus vulgaris, Adoxa moschatelina, Epilobium angustifolium, Hypericum pulchrum and humifusum, Geum rivale, Pedicularis palustris and silvatica, Lotus major, Parnassia palustris.

The town of Besancon, birth-place of Victor Hugo, and capital of the ancient province of Franche-Comté, or the Free County, deserves more than passing attention, both from an archæological and historical point of view, and as I spent most of my time within its walls, for it is fortified, I was able to become better acquainted with it than with the country at large. At the present time the town is about the size of Carlisle, and, being in the border country, its fortunes have been as varied. Doubs surrounds the town on three sides with a horse-shoe shaped loop, the remaining side, barely two hundred yards wide, being guarded by the citadel, perched high on a huge mass of limestone which descends sheer into the river on both sides. Julius Cæsar, in his Gallic war, describes the situation of the town at that time, 58 B.C., called Vesontio, and the chief stronghold of the Sequani, a Celtic tribe. The name of the river is Celtic, being the same as our own Gaelic word meaning "black." The town was a favourite place of residence of the Emperor Marcus Aurelius, and a fine triumphal arch, the Porte Noire (Black Gate), 190 feet high, dating from 167 A.D., was erected in honour of his victories over the German tribes. Near this are the remains of the Roman theatre, showing the sub-basement in the form of a semi-circle, as also a row of Corinthian columns, which have been recently taken from the debris and set in position. The bridge, which carries by far the greater part of the traffic, is

substantially Roman; the arches are still visible, though additions have been put to both sides of them. The town still draws its water supply from the springs five miles distant, from which the Romans brought theirs. The Porte Taillée, or "Cut Gate," still shows the spot where they had to cut through the spur of the citadel hill in order to open up a way for their aqueduct. The fine park of Chamars still points to the Roman Campus Martius or parade ground. Towards the downfall of the Roman Empire, the district was overrun by the Burgundians, whose name still lingers in the adjacent province of Burgundy. Then its sovereignty was disputed for centuries; sometimes it belonged to the rising kingdom of France, more often, however, it was attached to the Emperor, and, being so far from Austria, it got a considerable share of self-government, which is still preserved in the name Franche-Comté. Then, through marriage, it passed to Charles V. of Spain; the Spanish occupation is still attested by the Moorish designs to be seen on some of the buildings of the sixteenth century. Neither Charles nor his son Philip II. has left such an impress on the town as did their servants of the house of Granvelle. Nicolas, keeper of the seals to Charles V., built the fine edifice, called to this day the Palace Granvelle. Nicolas is not so well known as his son, the cardinal minister of Philip II., and the great opponent of William the Silent of Orange. The palace is now used as a meeting place for the learned societies of the town. Granvelle's fine library now belongs to the town, and is housed in the municipal library, which contains 90,000 books, 2000 manuscripts, and 1000 books dating from the start of printing, some having been printed by Guttenberg. These together with 10,000 coins form a fair collection for a town of 60,000 inhabitants.

The town was taken and then given up by Henry IV. of France, and then taken twice by Louis XIV., being finally ceded to France in 1679.

In one of the squares stands a statue of Jouffroy, who was the first in France to apply steam to the propulsion of boats, as he had a model plying on the River Doubs as early as 1776; he invented a ship with paddles in 1783, but, not having floated it, the honour was carried off by Fulton, who put one on the Seine at Paris in 1803.

Behind the Porte Noire, and occupying the site of a Roman

temple, stands the Cathedral, which is so hemmed in with nunneries that it has little architectural effect. It contains, however, some fine mural paintings; but much more interesting is the fine astronomical clock built in imitation of the one in Strassburg Cathedral. It has about forty dials, showing the time at different parts of the earth, together with the rise and fall of the tide, and the phases of the moon. At the stroke of twelve six of the apostles circle round the figure of Christ. Mention of this clock recalls the fact that the chief industry of the town is watchmaking, and I had the privilege of seeing the different processes gone through in this most interesting manufacture. I think the most marvellous piece of machinery was the one which cuts out the teeth in the wheels. The factories of this town alone turn out annually no less than 100,000 gold and a quarter of a million silver watches.

Besancon, or its immediate vicinity, has been the birthplace of men of world-wide fame. Mention has been made of Pasteur and Victor Hugo, whose statue in marble adorns the Promenade Granvelle, a recreation ground in the centre of the town, embowered in planes and chestnut trees. Here, too, was born Mairet, who helped to forge the chains which were to bind the French dramatic writers for two centuries in the classical tradition until set free by his townsman Victor Hugo. Vernier, the inventor of the instrument which bears his name; Cuvier, the naturalist; Luc Breton, the sculptor; Fourier, the communist, who gave rise to the "phalanstérienne school;" Proudhon, the publicist, who wished to do away with rent and interest; Nodier, the poet, were born here.

Besancon is one of the most strongly fortified towns on the borders of France. The walls and the river are of little importance now in those days of big guns; but sixteen of the neighbouring hills are fortified. These forts are often surrounded by trees, and are only visible when one stands on a higher hill. It is also a garrison town, having seven distinct barracks. You rub shoulders with soldiers at every turn. I was in the town during the Fête Nationale, and the march past of the soldiers in broad columns took two hours. One finds in the school books all over France strong admonitions to the children to remember the fate of their cousins of Alsace-Lorraine.

The neighbouring hills give rise to saline springs, the waters

of which have been led into the town, which now has a sumptuous baths' establishment. In connection with this is the inevitable Casino, where you may study the feverish effect of the gaming table on the human mind.

I left Besancon about four one morning, and never shall I forget that railway journey of fifty miles to Belfort. The line lies all the way along the banks of the Doubs, which is every here and there hemmed in by precipitous masses of the everpresent limestone. In and out of the tunnels we threaded our way, past villages and towns bathed in the early morning mist. Every now and then one would catch a glimpse of the angler up betimes, for in that part of the world everybody fishes; but the picture ever present to my mind's eye is that of wood-capped cliffs just emerging above the sea of mist. And so on to Belfort with its rock-cut "Lion" of Bartholdi which keeps watch over the town with its teeming garrison.

Dumfriesshire and Galloway Ministers in Cumberland.
By Mr Henry Penfold, Brampton.

After drawing attention to the ecclesiastical history of Scotland in the seventeenth century and referring to the upheavals which occurred in England during the same period, Mr Penfold proceeded:—

It is interesting to note that with the dethronement of Episcopacy some of the "rabbled or outed" curates who held benefices in Dumfriesshire found a comfortable home in Cumberland, some as parish priests and others as parish schoolmasters. At Sebergham, Kinneir, he said, the ejected rector of Annan, found a home as curate from 1699-1735. Bishop Nicholson refers to him in his "Miscellany Accounts":-- "The present curate, Mr Kanyer, an honest and modest Scotchman." At Cumrew also a Mr Allen was curate. The writer has reason to suspect that he also hailed from Dumfriesshire. Bishop Nicholson's reference to him is interesting:-"The Register Book is only of paper and begins at 1639. It appears in it that a great many children of foreigners were baptised here in the time of the late civil wars by one Mr Alexander Allen, who, they say, was a Scot, and reckoned a more knowing and pretious man (in his way) than most of his brethren."

Another Mr Allen ministered in spiritual things to the people of Bewcastle, the reference to whom by the good Bishop is exceedingly quaint:—"The man's a poor ejected Episcopalian of the Scottish nation. The men of Bewcastle would be well content with him if they had him wholly to themselves as in justice they ought." Allen, at Bewcastle, appears to have been something of a pluralist, endeavouring to minister to both the people of Bewcastle and Stapleton at the same time.

Ejected Scotch Episcopalian parsons found also congenial employment as schoolmasters, no less than three in succession becoming masters of Sebergham Grammar School. Their names were Blain, Halifax, and Jackson, and all three were classical scholars of high attainment, and all three were personal friends of the ejected rector of Annan, through whose influence they probably found their way to Sebergham. Chancellor Ferguson, speaking of them, says ("Hist. Diocese of Carlisle," p. 184):—
"The first kept school at Sebergham in a mud hut, and was afterwards master of Wigton Grammar School, and domestic and examining chaplain to Bishop Law. The second succeeded Blain at Sebergham, and also at Wigton Grammar School, and became incumbent of Westward; the third, mathematician as well as classic, became vicar of Morland and was the intimate friend of Archdeacon Paley (author of the 'Evidences of Christianity')."

Bishop Nicholson, to whom reference has been made, was a "Miscellany Accounts," from keen observer, and his which we have quoted, contain graphic descriptive notices of all the churches in his Diocese of Carlisle. Visiting Kirkbride Church, he found the parson from home "and the key of the church would not be found. However, I easily put back the lock of the great door with my finger, and quickly discovered why I was in a manner denved entrance. I never vet saw a church and chancel out of Scotland in so scandalous and nasty a condition. . . . The whole place look'd more like a pigsty than the House of God." So far as the writer has been able to ascertain, the Bishop's travels in Scotland had been no further than Ruthwell to view the cross, so that the members of this society can imagine better than the writer can describe the condition of the Dumfriesshire churches two and a-half centuries ago.

One of the principal roads between Scotland and England

ran substantially over the same ground as the present road from Dumfries through Annan, Longtown, and so to Brampton, where it joined the ancient "Stanegate," the well-known ancient highway between Newcastle and Carlisle, which, passing through or near to Brampton, was the principal means of communication between east and west. It is, perhaps, to this fact that we owe the presence of so many Lowland Scotch at different periods as residents in Brampton and its vicinity. The Brampton Presbyterian Congregation, for a long time definitely connected with the Kirk of Scotland, had its origin in the Act of Uniformity, which culminated in the ejection of over two thousand parish ministers in England, who, rather than bind themselves to a cast-iron uniformity, resigned their benefices, and became the first of the English Nonconformists. The parish minister of Brampton at this time was Nathaniel Burnand, who had been presented to the living by the first Earl of Carlisle, the Cromwellian Charles Howard. We are not now concerned with Burnand or his immediate successors, interesting and important as their story may be, but we pass on to notice those ministers who are immediately connected with the ground which this society's operations cover. The first of such ministers was an exceedingly interesting character, John Kincaid, variants of the spelling of his name being Kingcaid, Kinkaid, Kincade, Kingcade, and Kinkead. Our first introduction to him is his settlement as Episcopalian parson over the parish of Terregles in 1688. When revolutionary times came he was deprived by the Act of the Scottish Parliament of 1690, which restored the Presbyterian ministry and ejected the Episcopalians. It is probable that Kincaid had been a Presbyterian minister before the establishment of Episcopacy and conformed when Episcopacy became the fashion, for his degree of M.A. was obtained at Glasgow in 1659, so that when he came to Terregles he was no longer a young man. The disturbances known to students of Scottish history as "outings," or "rabblings," took place at and immediately after Christmas, 1688, and in 1690 we find him inducted at Brampton. No congregational records of this date are extant at Brampton, so that any connected or detailed account of his ministry here is out of the question. We can, however, by judiciously gathering and piecing together small, and in themselves insignificant facts, tell something of

the story of his changeful career. By the 108th Canon of the Church of England the parish clergy were directed annually to "exhibit to their several ordinaries the presentments of such enormities as have happened in their parishes since the last presentments." Originally the chief enormity had been Popery. After the passing of the Act of Uniformity it was Nonconformity, and so by searching the Bishop's Registry of Presentments at Carlisle, under date 1690, we find the following presentments by the Brampton Church wardens:-"Wee present Leonard Deane for keeping a meeting house unlysensed. Wee present Mr John Kincade for preaching there unlysensed." Leonard Deane was a man of very considerable importance locally. He it was who provided the congregation harassed by the Test and Conventicle Acts with an upper room in the yard of the Scotch Arms Hotel, which was built by Deane in or about 1674. This upper room was the "unlysensed" meeting house, and here John Kincaid, the "unlysensed" minister, officiated. The hotel, with its ancient hooded doorway, still exists, and it is probable that some preference for Scotland and Scotchman led Deane to call it the Scotch Arms. In this connection it is interesting to remark that the Brampton Presbyterian Church is still locally known as the Scotch Chapel. But to return to Kincaid. Clearly he was a person of considerable local importance, else the church wardens would not have prefixed to his name the title of Mr, which, in those days, as we find from the parish register, was only accorded to important persons. The same inference as to John Kincaid's local importance is suggested by the presentments of the Castle Canock Church Wardens, who, in that same year 1690, say:-"We present Mr John Kingcade for baptizing children in our parish without ve consent of our minister."

The last entry in Brampton Parish Register regarding Kincaid is:- "John Kincaid buryed October the 25th, 1707."

Kincaid seems to have been possessed with an exceedingly obliging attitude of mind, for we have seen him as an Episcopalian in Presbyterian Scotland, and as a Presbyterian in Episcopalian England. Catholic and broad-minded to a degree, he was not above taking help from the Congregational Fund Board, London, for from 1696 to 1704 he appears as a recipient of an annual grant from a fund expressly established to assist ministers of the Independent persuasion—an undenominationalist indeed in whom there was no guile.

Leaving Kincaid, we pass to another minister, the Rev. Robert Wight, M.A., whose name must be familiar to the congregation of St Michael's. From Scott's "Fasti Ecclesiæ Scoticana" we extract the following data:--"Robert Wight, son of William Wight, tenant in Glengelt, was laureated at the University of Edinburgh, 12 May, 1703. Licensed by the Presbytery of Earlston 12 March, 1709. Ordained as minister over the Presbyterian congregation at Brampton, 20 Augt., 1712. Presented by Charles Duke of Queensberry and Dover to Torthorwald, 22 Oct., 1724. Recalled to Brampton, 30th May, 1725. Called to St. Michael's, 23 July, 1732, and admitted assistant and successor, 30 Nov., 1732. Rebuilt St. Michael's, 1747. Died, 4th Decr. 1762, in his 80th year, and 53rd of his ministry. married 3rd Novr., 1724, Jean, daughter of Alexander Robesone, minister of Tinwald, and had two sons and six daughters." No more methodical minister was ever placed in a pastoral charge than Robert Wight. Fourteen days of his Brampton incumbency had not passed over until he called a meeting of his session together, at which it was agreed "that there be two paper books, one of them to be a register of collections, baptisms, etc., in the Dissenting Congregation of Protestants att Brampton, the other to be a register for recording what briefs are received." One of the first things he did after getting his "two paper books" was to insert in one of them a memorandum of the names of this congregation admitted to partake of the Sacrament of the Lord's Supper. Then follow the names of four elders and fifty-seven members, the whole concluding with a note saving:—"All these were members before Mr Wight's ordination, being admitted to partake of the Sacrament of the Lord's Supper in the time of his predecessors.—Robert Wight, Minister."

Mr Wight, it thus seems, came to a not insignificant congregation, which, as we shall see, almost trebled itself in his incumbency. These registers are still in existence, and are so beautifully written and kept as to rejoice the heart of any who may be acquainted with contemporary parish registers. Thenceforward minutes of the session's proceedings, records of baptism, discipline, and finance are kept with a scrupulous accuracy and care which evinced the careful and methodical character of the man.

The term "briefs" may require to a Scottish audience some explanation. They were collections made under the authority of an Act of Parliament "for collecting charitie money upon briefs by letters patent so far as it relates to ministers, church wardens. chapel wardens, teachers, and preachers in separate congregations, and to every person qt hath taught in Quakers meetings."

One entry from the baptismal register is all that we need extract:- "Nov. 27, 1730. Then baptized William, son of Mr Robert Wight, Min. to the Dissenting Congregation, by himself before the congregation." This son was subsequently well known in Scotland. He became a distinguished Professor of Glasgow, occupying at different times the Chairs of Ecclesiastical . History and Divinity. He died July 29th, 1782.

The following extract from the Evans MSS. in the Williams Library, London, is of interest:-- "1718. Brampton market town. £8 or £6 allowed from Presbyterian Fund. Minister, Robert Wight, 180 hearers, 1 county voter, 6 gentlemen, mostly poor tenants of the Earl of Carlisle." Another extract from Evans' list, under the heading of Brampton, is interesting:-"Wardrew in the water drinking time. £5 allowed from the Presbyterian Fund."

After twelve years of strenuous labour at Brampton, Wight received a presentation from the Duke of Queensberry to Torthorwald. He only staved at Torthorwald some nine months, however, returning to Brampton in May, 1725, continuing at Brampton until 1732, when he was called as assistant and successor to the Parish Church of St. Michael's, Dumfries. The story of his occupancy of this important charge will be better known to many here than to the writer, who would be glad to receive any information regarding him, and would also like to know if a portrait of him exists. When Wight left Brampton he left a flourishing congregation of 101 Presbyterian families, say between three and four hundred members. There is still remaining in old lead work in one of the windows of the old church the initials of "R. W." Following Wight as minister came Mr John Herries, preacher of the Gospel at Dumfries. Ordained by the old Cumberland Classis or Presbytery at Brampton on April 10th, 1734, his ministry terminated about the end of 1736. What became of him there is nothing to show.

That Brampton congregation had friends at Dumfries at this

time is evident from the purchase of a field called "Half Acres" as an endowment. Among the subscribers are "Friends at Dumfries," £10. Isaac Watts, the hymn writer, also subscribed one guinea. This purchase was made in 1745, the same year as Mr John Allan, from Dumfries, was ordained as minister. Mr Allan was at Brampton during the period of the rebellion of 1745, and, whether on account of his youth—he was only 21 when placed in charge of the Brampton congregation-or on account of his peaceable disposition, he held no services, for during the period of rebellion it is recorded:—" Nov. 10 and 17, 1745. No sermon. The min. being out of town because ye Rebels were in." Discretion seems to have been his "role" rather than valour. Mr Allan received from the Crown a presentation to the Parish Church of Dunscore, at which place he died in 1753, in the 29th year of his age, and 8th of his ministry.

Following Allan came the Rev. John Johnston, who was ordained at Brampton, April 11, 1753. There is nothing out of the ordinary about Mr Johnston's ministry. From whence he came the writer cannot tell, but it is known that in 1758 he left Brampton and became parish minister of Durisdeer, continuing there as minister until his death in 1770.

18th January, 1907.

Chairman -- Mr James Barbour, V.P.

It was agreed to record in the minutes an expression of regret at the deaths of Miss M'Kie, Moat House, Dumfries, and-Mr E. B. Rae, Town Clerk, Lochmaben.

THE WEATHER OF 1906. By the Rev. W. Andson.

Barometer.—I begin with the barometrical observations, which, as a general rule, indicate the weather conditions with considerable certainty—that is to say, a rising and high barometer is as a rule a sign of good weather, while a falling and low one is a sign of unfavourable conditions, probably of wind and rain. The highest reading of the year was registered on 8th and 9th of April, when it rose to 30.743 inches; and the lowest on

the 10th of February, when it fell to 28.417 in.; showing an annual range of no less than 2.326 in. The mean barometrical pressure for the year (reduced to 32 degrees and sea level) was 29.816 in. This is rather less than the average of the last twenty years, which is 29.913 in. The only months which had a mean in excess of 30 inches were April, June, and September, the values of these being 30.060 in. for April, 30.139 in. for June, and 30.197 in. for September. The lowest monthly mean was in February, with 29.672 in., and the next lowest was in October with 29.722 in. In the second week of January the barometer fell below 29 inches, and the weather was stormy and wet, with a westerly and south-westerly wind. Again in February, also the second week, when the lowest reading of the year was reached, the weather was exceedingly rough and squally, with strong winds between north-west and south-west. And once more on the 11th and 12th of March, when the barometer went down to 28.690 in., there was a repetition of the storm, mostly from the north-west. Stormy weather also marked the close both of November and December, and the latter was distinguished both by the severest snowstorm and the lowest temperature of the year, when roads and railways were blocked over the whole country, and many sad fatalities occurred.

Temperature.—Passing from the barometric variations, we now come to the temperature, which is perhaps the most important element of weather. Here we have on the whole a very favourable account to give. Premising that the observations are of temperature in the shade, four feet above the grass, I have to report that the absolute maximum, that is, the highest single day temperature of the whole year, was not only the highest for last year but the highest for many years, I think for the whole period of 20 years to which my observations extend, and it occurred also at an unusual period, not in June, July, or August, but in September. In the end of August and beginning of September there was an extraordinary heat wave which passed over the country, occasioning such remarkable temperature as 82 deg. on the 31st of August, 88 deg. on the 1st of September, and 89 deg. on the 2d September. From 89 deg., the highest of the year in September, to 17 deg. on the 26th December, the lowest, we have the extraordinary range of 72 deg. The warmest months were August, with a mean of 60.5 deg.; June, with a

mean of 58.8 deg.; and July, with a mean of 58.4 deg. June and August were both above average, and July only very slightly below. June was remarkable for warm, sunny days, with maximum temperatures ranging from 70 deg. to 82 deg., and no rain from the 2d to the 16th, and only 10 days in which any rain fell. The coldest months were February and December, February with a mean of 37 deg., 1 deg. below the mean, and December with 36.1 deg., 2½ deg. below average. Taking all the months, there were six, viz., January, June, August, September, October, and November, which had excesses above the mean amounting altogether to 12.2 deg.; and five which had deficiencies below the mean, viz., February, April, May, July, and December, to the amount of 7.1 deg.; while March was exactly average. Hence we can readily understand that the temperature of the year as a whole must be somewhat in excess of the average, although not to any great extent. The mean of the last 20 years is 47.5 degs.; but 1906 comes out at 48.3 degs.

Rainfall.—We now pass on to the rainfall, not the least important element of the weather. The number of days in which precipitation took place either in the form of rain or of snow or hail was 211 (rain 199, snow or hail 12). The heaviest rainfall in 24 hours occurred on the 2d of August in connection with a severe thunderstorm, and amounted to 1.70 in., and again on the 13th of the same month there was a fall of 1 in. Only on one other day, in May, the 19th of that month, was there a fall exceeding an inch, the amount then recorded having been 1.38 The total amount for the year was 36.29 in. This is slightly under the average, the mean of 20 years being 37.11 in. The wettest months of the year were May and August. For May the record was 5.44 in., rather more than double the average for that month. In August the amount was 6.73 in., about 2½ in. above the mean. It may be mentioned that during these months the river was almost constantly flooded, and in the beginning of August particularly the depth at the bridge was nearly 11 feet and the Sands completely covered. But while these two months contributed so heavily to the rainfall of the year, all the other months, with the exception of October, were under the average in amount, the driest having been September, with a record of only 0.72 in., with only eight days on which it fell; April with 0.92 in., with ten days; and June with about half its usual

Report of Meteorological Observations taken at Dumfries during the year 1906,

varcal at Daminics and the year 1300, ve sea level, 60 feet; Distance from the sea, 9 miles. 5 inches; Height of Rim above Ground, 10 inches.	Relative Humidity.			98	85	78	7.5	62	78	49	83	80	86	85	2.2	79								
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	HYGRO- METER, n Shade.	Mean Wet Bulb.	Deg.	39.3	34.6	38.4	41.1	46.5	54.5	55*	56.3	2.19	47.5	43.1	37.1	45.4								
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Dumines uning 50 feet; Distance from sight of Rim above Gr	RA	Heaviest in Month,	II.	0.64	0.35	0.25	0.56	1.38	0.36	0.26	1.20	0.53	82.0	0.47	19.0	1.70								
60 fee eight	ER. grass.	Mean temper.	Deg.	:15	37	41.1	12.5	49.7	58.8	58.4	9.09	56.3	50.3	44.8	36.1	48.3								
level,	ETER ve gr	Mean Minimini	Deg.	2.98	30.8	34.8	35.5	43.	48.8	48.3	52.3	45.2	43 3	40.9	32.1	40.9								
Elevation above sea level, f Rain Guage, 5 inches; H	SR. THERMUMETER. In Shade, 4 feet above gra	Mean Maximum.	Deg.	45.2	43.3	47.4	56.2	9.99	8.89	68.5	8.89	9.49	5.2.9	9.84	40.1	55 6								
		Monthly Range.	Deg.	25.5	.25	38.	42.2	43.2	42.5	38 5	38.	56.3	34.3	.97	34.	72.								
ation in Gu		Lowest in Month.	Deg.	27.	22.	18.	28.	30.3	.0#	39 5	44.	32.7	2.63	30.	17.	17.								
Elev of Ka		Highest in Month.	Deg.	52.5	49.	.99	2.02	73.	82.5	78.	82.	-68	64.	.99	51.	.68								
3° 36' W.; Elevation abo		Mean for Month as 32° and Sea Level.	In.	29-773	29.672	29 970	30.000	29.801	30.139	29.862	29.892	30.197	29.723	59.800	29.898	29.816								
.: Long., 3 70 feet; D	IETER.	IETER.	IETER.	IETER.	BAROMETER.	IETER.	IETER.	IETER.	IETER.	Мопсыу Вапке.	In	1.421	1.880	1.751	1.639	0.833	1.023	0.623	0.610	1.204	1.132	1.204	1.681	2.356
Lat., 55° 4′ N. : Long., Rain Guage, 70 feet; 1	BARON	Lowest in Month.	In.	28.902	28.417	28.690	29.114	29-311	29.400	29.677	20.207	29.417	29.241	28-993	29.039	28.417								
Lat., 51 Rain G		Highest in Month,	In.	30.285	30-297	30.441	30.743	30.133	30.423	30.300	30.417	30.621	30-373	30.200	30.720	30-743								
	1906.	Months.		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year								
•				XX7	TN	D.																		

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				WIN	D							
N.	N.E.	Ε.	S.E.	S.	S.V	v. 1	w.	N.	w.		Var	
181	341	26	401	$16\frac{1}{8}$	78	3 (33	7	77		15	,

amount, and also ten days. From the 30th of March to the 18th of April there was a very dry period, with anti-cyclonic conditions, when not more than one-hundredth of an inch fell, a circumstance which proved exceedingly favourable for the seed time. And we must all remember the splendid weather in September which followed the rains of August, and by its dryness and comparative warmth proved equally favourable to harvest operations, in this district at least, although in the northern parts of Scotland, where the crops were later in ripening, the same advantage was not enjoyed. In connection with this part of the subject, some notice should be taken of the snowstorm which marked the closing weeks of the year, which was undoubtedly the severest snowstorm experienced in this country for many years past. It was accompanied by strong winds, mostly from a north-westerly direction, which caused much drifting and blocking of railways and roads, and by a very low temperature, the lowest indeed of the year, which greatly aggravated the inconveniences and dangers which it involved. And one of its most lamentable results was the railway accident near Arbroath, in which 22 persons lost their lives, and many more were more or less injured.

Hygrometer.—The readings of the dry and wet bulb thermometers for the year, by which the relative humidity of the atmosphere is ascertained, were mean dry bulb, 48.5 deg., almost exactly the same as the mean temperature of the year, which was 48.3 deg., and mean wet 45.4 deg., from which it follows that the mean temperature of the dew point comes out at 41.4 deg., and the relative humidity at 79—saturation being equal to 100.

Thunderstorms were comparatively rare during the year. But I noted at the time that there was one on the 11th May, which lasted about half-an-hour, with the accompaniment of a shower of hail, and another on the 29th of the same month from 1 to 2 p.m., which was repeated after 5 p.m., with heavy rain. But by far the severest thunderstorm of the year was from 6 to 8 p.m. on the 2d of August, which was accompanied by the heaviest rainfall of the year, the amount which fell on that day having been 1.70 in., which is equivalent to 170 tons of water per acre. There was thunder and lightning in some parts of the country in connection with the storm of the last week of Decem-

ber, but I cannot say that I observed any occurrence of the kind in this district.

With regard to the wind observations, the table shows that on the greatest number of days it blew from the south-west, which is the rule, but during the past year there were nearly as many days in which it blew from the north-west. Adding together the south-east, south, south-west, and west, we have 198 days, and adding north, north-east, east, and north-west, we have 150, while fifteen were calm or variable.

I have been favoured with reports of the rainfall for the past year in several places in this district where regular observations are taken, which I now beg to submit to the society.

	Amo	ount for year	ear. N	o. of day which it i	rs fell.	Observer.
Jardington		37.85		243		Mr Rutherford.
Arbigland		37.31				Mr Houliston.
Cargen		42.41	•••	163	•••	Mr Peacock.
Lochmaben		41.21	•••	228		Provost Halliday.
Drumlanrig		47.04		220		Mr Inglis.
Dumfries		36.29	•••	211	•••	Rev. W. Andson.

I see from an article in the "Meteorological Magazine," by Dr H. R. Mill, that over the country generally the rainfall for the year is very nearly average—in some places a little more, in others a little less.

Some Natural History Observations at Jardington, near Dumfries, in 1906. By Mr J. Rutherford, Jardington.

January.—Barometrical pressure varied between 29.15 and 30.65 inches. Rainfall, 4.25 inches; fell on 26 days. There was very little frost; and fine, mild weather prevailed during the month. I heard the Song Thrush on the 27th for the first time, and on the last day of the month the song and chatter of birds was heard everywhere.

February.—Barometrical pressure varied between 28.6 and 30.4 inches. Rainfall, 2.5 inches; fell on 14 days. The weather during this month was also fine and mild; no continued frost, although there were a few frosty nights. In the beginning of the month the fields were covered with beautiful green grass.

March.—Barometer varied between 29.1 and 30.4 inches.

Rainfall, 3.32 inches; fell on 19 days. Typical March weather prevailed, but not at all severe. On the 12th, 13th, 14th, and 15th there was very hard frost, 7, 18, 22, and 7 degs. respectively, being registered during the night on those dates, with a north and north-west wind, and barometer at 30. March flowers were 10 days later in coming into bloom than in the previous year, 1905. Colt's Foot flowered on the 24th and the Anemone on the 31st.

April.—Barometer varied between 29.2 and 30.8 inches. Rainfall, 0.81 inches; fell on 11 days. There was no rain till the 17th. There was a little frost during several nights, but no day frost. The Small White Butterfly was first seen on the 10th, and the first Swallow seen on the 16th. The Sand Martins were first seen on the 27th. The Cuckoo heard on the 21st. The Sloe came into bloom on the 13th, and Pear (Jargonelle) on the 9th

May.—Barometer between 29.7 and 30.2 inches. Rainfall, 5.4 inches; fell on every day during the month, with the exception of the 13th. This was nearly double the average rainfall for this month for the last 13 years, the mean for that time being 2.48 inches. The wet weather during the month hindered turnip putting in to some extent, but it thoroughly watered the land, and, being followed by a warm, dry June, there was an abundance of grass during the summer; also good crops of hay and oats followed. There was a little frost on the nights of the 1st and 2nd. Flowers came into bloom about seven days later than 1905. Birds and insects also appeared about seven days later. The Chestnut blossomed on the 29th. The first Wasp was seen on the 7th. The Spotted Flycatcher came on the 17th.

June.—Barometrical pressure varied between 29.5 and 30.4 inches. Rainfall, 1.6 inches; fell on 13 days. Fine, warm, genial, typical June weather prevailed during the month. Hawthorn came into bloom on the 1st, which was a fortnight later than 1905, the Wild Rose on the 7th, Ox Eye Daisy on the 8th, Bluebell on the 30th.

July.—Barometer between 29.75 and 30.4 inches. Rainfall, 2.42 inches; fell on 20 days. The weather during the month was very favourable for haymaking. Ryegrass and early meadow hay were well got. Knapweed came into bloom on the 20th. Meadow Brown Butterfly seen on the 4th.

August.—Barometrical pressure varied between 29.55 and 30.35 inches. Rainfall, 6.45 inches; fell on 26 days. This was an exceptionally heavy rainfall for August, the mean for the last 13 years being 3.98 inches. Meadow haymaking on higher lands was hindered very much by the wet weather, a good deal being almost wasted. Oats that began to shoot at Jardington on the 1st of July were cut on the 26th of August. I have observed that, with average seasonable weather, oats are ready for cutting in about 57 days after beginning to shoot.

September.—Barometer between 29.55 and 30.7 inches. Rainfall, 8 inches; fell on 9 days. The weather was very warm in the beginning of this month. On the 1st, at noon, in the shade, 82 degs. was registered; at 4 p.m., in the sun, the thermometer stood at 97 degs. From beginning to end this was an ideal month for harvest work, and crops were secured in capital condition. Strawberries were in bloom on the 30th.

October.—Barometrical pressure between 29.4 to 30.5 inches. Rainfall, 4.8 inches; fell on 26 days. There was a heavy flood on the Cluden on the 27th and 28th. The last Swallow was seen on the 5th.

November.—Barometer varied between 29.1 and 30.55 inches. Rainfall, 2.7 inches; fell on 25 days. The weather during the month was very mild and fine; in the last week the fields were quite fresh and green.

December.—Barometer between 29.2 and 30.65 inches. Rainfall, 3.0 inches; fell on 24 days. There was a severe storm of drifting snow on the 26th, 27th, and 28th, with a cold north by west wind, which blocked up a number of the roads in this locality, also many of the roads and railways in the north of Scotland; but, with this exception and a few nights on which there was a good deal of frost, the weather during the month was very mild. I think I may add that throughout the whole year the weather was exceptionally fine and mild; yet it is a year which will be noted for its disastrous earthquakes.

BIRD MIGRATION AT SOUTHERNESS. By Mr R. SERVICE.

Mr Service gave an interesting address embodying some of his observations of the autumn migration of birds at Southerness during the week from 13th to 19th September last, when he had kept watch. During that time, sixty-seven species of birds came under observation—a rather large proportion, because, as a rule, they could not reckon on finding any more than from forty to forty-five in any given district in that period of time. His first observation was that of a party of no fewer than fifteen gray wagtails. That was a comparatively rare sight, the largest numbers he had previously seen together being just two or three. They flew about a few minutes and then headed right into the clouds, thence aiming almost due south, or on a course that would take them past Anglesea. The next specimen he saw was the blue-headed wagtail. He had not seen this bird in life before, it being one of the rarest species in the district. On the Sunday he witnessed an extraordinary assemblage of titlarks, numbering many thousands. Where they came from he could not tell. He watched all day to see from what point of the compass they had arrived, but he failed to get a clue. When disturbed, these titlarks did not fly up in the air as is their usual; they rather simulated the movements of mice, running about among the herbage and around rocks and stones. They remained all Sunday at the point; and next morning, when he looked around, not a dozen was to be seen of all the thousands. They had gone off during the night. About half-past twelve that same day, when he was looking across the sea, he saw five rooks coming along and going south; then some forty came along, half-an-hour later twenty more, and towards six o'clock nearly sixty. He had not before seen rooks coming across from the English side; but considering the time of day they arrived and that they came in separate bodies, he had every reason to believe that these rooks were on migration and had probably started their journey from some of the Danish or German forests. was not an unreasonable view, because along the east coast of England and Scotland rooks had been seen coming in from the ocean in swarms. Suddenly, on the Monday morning, a large number of swallows, probably eight hundred or a thousand, made their appearance, none having been visible before that. The great bulk were the ordinary swallow, a number were house martins. For an hour and a-half they circled about, when suddenly the house martins changed to the majority. Where the swallows went to he could not make out, but probably they went off singly or in a stream. The martins now in large numbers flew about for a while; then they took a diagonal flight about a quarter of a mile up towards the clouds; and went off in the same direction that all birds follow at the autumn migration from Southerness, nearly due south. Immediately afterwards there was quite a "rush" of wings, and a flock of about seven hundred starlings made their appearance. Mr Service's other observations had reference to, among other birds, razor-bills, guillemots, gulls, and the raven, the latter a common bird in former times, but now rare because of the strictness with which it is kept down by game preservers and shepherds.

THE LAYING OF PHEASANTS.

A note on this subject was contributed by Mr Hugh S. Gladstone, Capenoch. This showed that early in the spring of 1906 two hen pheasants were penned with a blackcock in the hope of obtaining a hybrid. None of the eggs, however, were fertile. The first egg was found in the pen on April 11th, and the last egg on October 1st, when the hen birds were liberated. During this period no less than 154 eggs were laid by these two hen pheasants.

CIST AND URN FOUND AT CREETOWN.

A communication on the cist and urn recently found near Creetown, with a drawing of the urn, was submitted from Mr C. S. Robertson, Creetown. It contained the following particulars:-- "While Mr Joseph Gordon and his son were clearing away an embankment in the vicinity of a new house recently erected at Barholm Dairy, on 8th December, 1906, they found a small cist neatly built with stones about 3 feet in length, 21 inches broad, and 1 foot deep, and covered with a flat slab which was about 3 feet by 21 inches. The cist was composed of the ordinary whinstone of the district. On the finders removing some of the side stones, which they thought were simply rough cobbles embedded in the soil, the top slab fell in, and on this being lifted it was seen that there was something underneath. On the rubbish being cleared away, a small urn was discovered, which had unfortunately been broken by the top stone falling in. The urn is beautifully moulded, and appears to be made of burnt

clay, is five inches in diameter at the top, six inches in depth, and about half-an-inch thick. It is composed of three layers, the outer and inner being brown and the centre quite black. The urn contained small bones and dust, which appeared to have been put in after cremation, and one little bit of skull was quite easily detected."

1st February, 1907.

Chairman-Mr R. SERVICE, V.P.

Reptilia and Amphibians of the Cairn District. By Dr $J.\ W.\ Martin.$

I now conclude the third and last group of the Fauna of Glencairn, which deals with the reptiles and amphibians. This is not an extensive or numerous group, as the divisions will show, probably owing to the extensive cultivation of the land during last century, and the drainage of the soil, thus driving out the inhabitants of the marshes and more secluded parts of the district. The members as represented are for the most part small, and seemingly unimportant, but, no doubt, they fulfil a useful purpose in the general economy of Nature, and on that account commend themselves to our closest study and attention. We have no fossil remains such as exist in other parts of Scotland, though traces are to be found in the eastern parts of Dumfriesshire of saurians or amphibians, as recorded by Sir William Jardine, a past president of this society. Might I recommend to those who have the time and opportunity to spend part of the summer in the examination and dredging of inland ponds and marshes, and the search of secluded areas such as abound in woods and hill districts, for what may be found of the obscure animals we are dealing with to-night? I have to apologise for the absence of specimens at present.

1. Lizard (Lacerta vivipara), called newts, asks, and mankeepers in the country.—I have often seen specimens of this harmless little animal, especially during the month of August, when out on the hills. It is very quick in its movements, and, like other members of its family, readily parts with its tail,

should you lay hold of that part of its body in trying to catch it. The tail quickly grows again, and in some cases comes double. It is of a light brown colour, and easily escapes the eye of the casual observer, although lying sunning itself on some bank or stone. It feeds principally, if not entirely, on insects. It is strange the inborn fear of boys and girls possessed by this little animal.

- 2. Slow-worm (Anguis fragilis).—The slow-worm is very common in most parts of this parish, and may be seen almost any sunny day in summer in the woods or hillsides. It is commonly taken for a snake, and dealt with accordingly; but in reality is as harmless as a lizard, to which, indeed, it is closely allied; and may be handled with perfect freedom, its beautiful markings being well worthy of a close inspection. It feeds on insects, and hibernates. I have secured several specimens 12 inches long, but some are got 15 inches in length. It casts its slough. It is ovo-viviparus, i.e., its young are brought forth alive, from seven to ten at a birth. The tail breaks off easily.
- 3. Common Newt (Triton punctatus or vulgaris).—This member of the amphibia may be mistaken for a lizard by the casual observer on account of its somewhat smooth skin and habit of living so much on land. It is fairly common in most parts of the parish, and may be found during the early summer months in quiet pools frequented by tadpoles, on which it feeds, and among which its young may be seen swimming about. It also feeds on aquatic insects and worms. In September they commence to hibernate, emerging in early spring. It casts its skin like one taking off his clothes. Its length is $3\frac{1}{2}$ -4 inches. Newts have a very slow motion on land. It is the most common species of newt in the British Isles.
- 4. Great Water Newt (Triton Cristatus).—Though not so common as the last mentioned, may occasionally be met with. It is somewhat larger, about six inches long, and is of a more loathsome appearance, with its warty skin and dark brown colour. I remember seeing a fine specimen when one of the wells at Dardarroch was being cleaned, the yellow ventral markings being very brilliant. It also feeds on tadpoles a good deal, and may be met with in pools where they are abundant. A crest develops about the breeding season, but drops off again. If this newt drops into a well from which it is not able to get

out, it may remain there when it appears as though it had been living in that situation.

- 5. Palmated Newt (Triton palmipes).—Said to occur in the higher reaches of the parish, as on the hills and moors. It is characterised by: 1st, the tail is suddenly truncate before the apex, and terminating in a slender filament three lines in length; 2nd, hind feet perfectly palmate, all the toes united by a membrane; 3rd, the dorsal crest, small and simple; 4th, size much smaller than the smooth newt.
- 6. Adder (Pelias berus), Scot.—" Nether," Anglo-Saxon—" Neddre."—The adder, or common viper, is the only poisonous snake to be found in Britain. It is fairly common in this parish, but is gradually getting scarcer. My friends have often killed them when grouse shooting in August, and last summer they found one on the road between Dunscore and Moniaive, and therefore far from its habitat. Its bite is dangerous to small children, sheep, and sometimes dogs, but I have rarely heard of any loss among larger stock from that cause in this district. It feeds a good deal on mice, and is therefore of some use to the farmer, but its loathsome appearance and poisonous bite make most of us dread rather than cultivate its acquaintance. (There was a fatal case of a bite in a child reported in the *Medical Journal* two months back.)
- 7. Snake (Tropidonetus natrix).—This is the common grass snake of England found about gardens and manure heaps, but I have never heard of this snake being found in this district or neighbourhood. The smooth snake (Coronella loevis) was said to have been found near Dumfries on one occasion.
- 8. Common Toad (Bufo vulgaris).—This somewhat sluggish and repulsive-looking creature is very common, and may be met with in any garden or by the roadside almost any summer evening after rain. It is considered useful for keeping down slugs in the garden, and therefore rather encouraged and protected by some gardeners; but I doubt if it prefers such to a good earthworm or some of the insect tribe. In any case it is quite harmless. It frequents sluggish ponds during the breeding season, when it deposits its eggs in long stringy lines of a yard or more, the young after passing through the various tadpole stages forsaking the water in autumn. In winter it hibernates

in some suitable hole in a tree root or crack in a wall. In appearance it is brown and warty looking, and when alarmed has the power of causing an acrid secretion to exude from the pores of its skin, which is supposed to cause a slight irritation to the animal molesting it.

9. Frog (Rana temporaria), the paddock or puddock.—The common frog is very widely distributed throughout the parish, and may be seen in great numbers during the breeding season in any suitable pond. There is a pond of this kind on Dardarroch, called Waterloo, where I have counted many hundreds at that season, and listened to their monotonous croaking, the pond being kept constantly astir with heads bobbing up and down. Later in the season one finds them, especially during wet weather, scattered over hill and dale, when their brilliant coat is sure to attract the eye. Their food consists principally of slugs, snails, and insects, which are captured by the frog suddenly throwing forward the tip of the tongue, which is covered with a viscid secretion. Its curious mode of breathing led us as boys to imagine it was about to spit upon us, but it is merely its natural method.

The Edible Frog (Rana esculenta), so far as I know, is not found in Scotland, though it is in England, especially in Cambridgeshire and Norfolk, where it was introduced about 1837 to 1842.

Natural History Notes from Annandale. By Mr J. W. Payne.

Since coming to live at Annan, rather more than eighteen months ago, I have taken considerable interest in observing the wild life of Lower Annandale, chiefly in the bird life of the locality, and have noticed one or two differences in the avifauna as compared with the coast line of, say, the neighbouring Stewartry of Kirkcudbright, with which I am more familiar. I do not take the birds in any particular order.

Here I may be allowed to repeat the notes I made upon the ideal situation of the Solway as a vantage point for the study of bird migration.

The Solway area is considered by many experts on the subject to be one of the best in the British Isles for carrying on

natural history observations. This is so especially in reference to bird migration. The study of bird migrations in the Solway area is pursued almost alone by Mr Robert Service. But why should he be alone, when the study of Nature is a pastime for all?

In spring one is naturally interested in the coming of our summer migrants. In this connection my notes on April 6th and 20th may be worth recording.

The beginning of April brings quite a number of our spring birds to the south of England; and they are usually with us about a fortnight later. First and chief of these to visit the woods along the Annan is the willow warbler. On the average it reaches the Solway area about the middle of April. My own earliest recorded date occurred in 1893 (8th April). The summer that followed was a specially fine one. Last year I first heard this bird on the 12th, an early date also. The summer of 1905 was one of the finest of recent years. In some cold seasons I have listened in vain for the song until the 19th or 20th. The pleasing succession of liquid, falling notes, once heard, is always remembered. Two other interesting species of this order come to the woods on the Annan in some numbers—the wood warbler and the garden warbler. I found two nests of the latter last summer, but somewhat late in the season. I think the blackcap, a sweet songster second only to the nightingale, comes to the woods opposite Mount Annan.

As our summer migrants come, so our winter migrants move northward. Among these is the pretty little siskin. It is known as a winter migrant in Dumfriesshire, but its home in summer is among the pine-woods of the north of Scotland, in similar localities to those affected by the crossbill. I am indebted for this information to a friend who was a close Nature student. The young of the crossbill are hatched very early in the season, generally in January, sometimes even in December I was told. Nature's reason for this is that at that period the pine cones yield more readily to the bills of the birds, and so food is provided.

We in Annandale are still looking for the first swallow! I was told by a friend that the swallow was seen on the 4th near Lockerbie; and I have seen similar notes in the newspapers. These probably all refer, however, to the sand martin, which is

the first of the hirundines to reach our shores. When in the company of two naturalist friends, I saw a pair of this species on the afternoon of Saturday, the 7th. This date is the earliest at which I have seen the sand martin, and I think the occurrence may be taken as a presage of an early summer. The martins observed on 7th April were catering for flies above the river opposite Milnbie Quarry, where they, of course, nest. Since then the numbers have considerably increased.

While the fine weather brings our summer migrants earlier it is not all in their favour. In some years after such a fine period there is apt to be a recurrence of wintry conditions late in the spring, when the birds are less able to bear it. Many die in consequence. This was very marked by the case in 1886, when many swallows died after their arrival at their nesting haunts for the summer. It already seems as if we were to have a similar cold spell in the present year. The earliest summer visitor noted by me last year was the wheatear. I saw several of these birds on April 7th, 1905, when the ground was under snow. As their constitution differs greatly from that of members of the swallow family the cold did not affect them in any appreciable degree.

An interesting case of the nesting of the woodcock was reported to me from Hoddom. I in turn reported the circumstance to Mr Murdoch, editor of the "Natural History" page of the Yorkshire Weekly Post, who replied in his column:-"It is interesting to know that woodcocks are breeding in your neighbourhood. These birds breed in Yorkshire, also quite regularly in certain wooded parts of Westmorland. I am inclined to think that they breed in various parts of the North of England to a far greater extent than is generally supposed. In the nesting season they are very wary, and few birds, in the place chosen for their nest and in its construction, also having regard to their own plumage, display the protective imitation faculty so beautifully as woodcocks. They probably breed oftener in Dumfriesshire than is generally known. If you looked into the pages of that delightful book, 'My Strange Pets,' by Richard Bell of Castle O'er, in your own county (Edinburgh: Blackwood & Sons. 1905, p. 238), you will find an interesting passage on the subject."

In May, along with a few friends, I paid a visit to the large gullery on Bowness Moss, in Cumberland, where, I dare say, most, if not all of the supply of black-headed gulls of Lower Annandale are bred. I give my notes upon the visit:

"The day was showery, but never unpleasantly so, and the rain in no sense cooled the enthusiasm for what is, perhaps, one of the most interesting sights the field of nature affords. Save for the gulls themselves, the moor seemed wanting in bird life. An occasional blackcock rose from the marsh; the call of the curlew could be heard; and occasionally the carol of the skylark. Sometimes one or two of the gulls might be seen flying from the ploughed fields. The first nesting-place we came to was a little tarn or sheet of water, thickly covered with wet weeds. There were one or two nests at the margin; but the larger number, between thirty and forty in all, were practically affoat on the water. At a little distance we found the main colony of gulls, which again was divided into two large camps. Here the birds were in the air in thousands, screaming loudly as they dashed hither and thither above us, evidently distressed at our intrusion upon their homes. The nests were on the bare ground, all carelessly made of course stalks and lighter herbage from the moss. The nests were placed so closely together that we had to exercise some care not to tread upon the eggs. We found nests with one, some with two, others with three eggs, the last being the highest number in a clutch. Among the eggs themselves, there is great variety of colour and marking. Some have a very pretty greenish ground colour, marked with large blotches of brown, while others have a drab ground, with pencillings of dark brown. The sight of the black-headed gulls in nesting time is one not soon forgotten.

"We saw two pairs of lesser black-backed gulls frequenting the moss. I understand they breed at a little distance from their more numerous congeners. In appearance they are much more sedate. The lesser black-backed gull usually nest on the shore. Their breeding upon Bowness Moss is, therefore, exceptional. Nesting with them, however, will not take place until later in the month of May. One is here reminded of the exception with regard to breeding haunts in the case of the oyster-catcher. It almost always builds on the seashore, that is beside salt water. Yet an exception to that rule is furnished by its nesting on the shores of the large fresh water lochs in Perthshire, Loch Katrine, Loch Vennacher, etc."

During the summer of 1906 I examined one nest of the grey wagtail on the Annan. I mention this not because the bird is quite rare, for it cannot be said to be so, but because it is rather local in its distribution, and the Annan seems to be one of its favourite haunts.

It is rather curious to note that while numbers of the garden warbler came to the woods on the river-side in the vicinity of the town of Annan in 1905, and two nests of the species came under my own notice in that season, this migrant did not put in an appearance at all in 1906. Whether this is to be accounted for by the nature of the season or not, I am unable to say. In 1905 we had a very fine summer, while the summer of 1906, especially the earlier part of it, when the birds were on migration, was decidedly under the average in warmth.

15th February, 1907.

Chairman—Mr James Barbour, V.P.

Among the Yorkshire Abbeys. By Ex-Provost David Halliday, Lockerbie.

At the outset the lecturer spoke of the numerous ruins and charms of Yorkshire, and commenced his description of several of the Yorkshire Abbeys with Fountains Abbey. To him, he said, there was always something very fascinating in ruins of any kind, particularly in those of an Abbey, and he felt inclined to quote the words of Byron:—

"The lore
Of mighty minds doth hallow in the core
Of human hearts, the ruin of a wall
Where dwelt the wise and wondrous."

Fountains Abbey is situated within the beautiful grounds of Studley Royal, the property of the Marquis of Ripon, not far from the cathedral town of Ripon. Like most of the Abbeys of Yorkshire, Fountains dates from the first half of the twelfth century, when some monks, who were disgusted at the irregularities and the laxity of discipline of St. Mary's, at York, under the weak rule of Geoffrey, the third Abbot, headed by the Prior

and Sub-sacrist, invoked the aid of Thurstan, the celebrated Archbishop of York, to remedy the state of matters. Owing to the power of the Abbot, the appeal to the Archbishop proved ineffective, and the discontented brethren decided to leave the Abbey altogether. The Archbishop, willing to aid these zealous Monks, gave them a site in the Vale of Fountains, on the banks of the little river Skell, a spot which, for its beauty of situation, was such an one as the Monks would themselves have selected for their pious meditations. At that period, however, the district was still suffering from the effects of William the Conqueror's policy of defence against the Northmen. About Christmas time the Monks took possession of their new property, and, as building operations were impossible at such a season, the pious men, refusing the offer of a temporary home made to them by the Archbishop, camped under the trees, and there they experienced the hardships of a very severe winter. A number of large yew trees are still shown as being the identical trees under which they camped, and under the largest of which they erected a hut to serve as an oratory. Filled with a worthy ambition to build a church, they set to work. Their first Abbot was the Prior of St. Mary's, and they adopted the Cistercian rule because of its greater austerity than the Benedictine. Having asked St. Bernard, at Clairvaux, for advice, he sent them one of his own Monks, named Geoffrey, to instruct them in the subtleties of chanting and in the arrangements for their church. In due time this church was completed, and the brethren having attained a great reputation soon began to receive accessions to their numbers and gifts of land from the nobles. The wall of the close encircled twelve acres of ground and more than two acres were covered by the various buildings, while the church was found to measure nearly four hundred feet. The buildings, however, that one now sees and admires must not be imagined are those actually erected by the first Monks, because each succeeding Abbot tore down and rebuilt as necessity required or as his fancy suggested, till it finally became the gorgeous pile which excited the greed of Henry VIII, and his courtiers. Between the years 1203-7 the Monks became so numerous that there was not room in the chancel for them, the altars being too few to allow them all to celebrate at the same time. This caused a considerable extension to the eastward, a transept being added at the east end

-a most unusual thing-to make room for an additional number of altars. This particular part of the ruins is called "the nine altars," and is not the least interesting part of the buildings. The architecture of the choir is Early English, and is much to be admired for the lightness and elegance of its columns and arches. Wheel windows were at first used for lighting, but were afterwards removed, and the present seven-light windows substituted. The eastern window is fifty-two feet in height, and its tracery is exceedingly beautiful. The lady chapel is also an exquisite structure. The pavement of the nave has all disappeared, and instead we have a fine green sward fringed with massive columns twenty-three feet high. Probably the most striking feature of the ruined Abbev is the perpendicular tower, which rises 168% feet high, and is of noble proportions. Next to the tower, or some people might think even more wonderful, are the cloisters, which, as usual, are situated at the south of the church, in the angle formed by the nave and the transepts. They are of singular construction and remarkable beauty, and are even to-day completely perfect. The chapter house opens by six arches upon the east walk, and to its south is the remains of a narrow groined chamber, which formed the Abbot's entrance into the monastery. The long, low vaulted building which forms the south side of the cloisters is really very wonderful. The northern half is said to be of Transition Norman era, the date of the commencement of the monastery, and was stated to have been extended southward in the thirteenth century. Much speculation has arisen among experts as to its exact use, but it seems to be generally accepted that it was the day-room of the lay brothers. magnificent hall, a chapel, and other rooms, supposed to have been the Abbot's house, were to the east of the cloisters.

Leaving Fountains, the lecturer proceeded to give a description of Bolton Abbey, situated within a short distance of Skipton and Ilkley, regarding the foundation of which there is an interesting legend. In the year 1120 William de Merchines and Cicely, his wife, founded at Embsay a priory of Augustinian Canons to the honour of the Virgin Mary and St. Cuthbert. It continued at Embsay thirty-three years, being then translated by a daughter of the founders to Bolton, to the vicinity of the chasm on the Wharfe where her son, "the boy of Egremond," had met an untimely death. While by no means so grand or so extensive as

that of Fountains, the Abbey is well worthy of a visit. The remains of the choir are probably interesting. In its interior are nine niches of each side, which were the stalls of the canons, and above them is a series of arches with a profusion of varied capitals. Beyond there is a tier of lower stalls for the conversi, who were lay brethren of a college of canons. On the south side are four sedilia, with carved bosses, where the officiating priests rested at intervals during the service. The nave of the church is still complete, and is used regularly every Sunday for divine service. In fact it is reported to have been in continuous use from 1150 to the present day. The tower, which, unfortunately, was never completed, is a massive and imposing structure, was begun in 1520. The arms of the Cliffords and of the Priory are introduced into the spandrils of the doorway, and on the first stage of the south-west buttress stands the figure of a pilgrim in a cap and gown, holding a short staff in his right hand and a shield under his arm, while at his feet is an old sun-dial. The greatest attraction, however, of the nave is the door, at once massive and elegant, but rather hidden by the gateway of the tower. There are no fewer than fifteen mouldings on the doorway, and they are almost perfect.

The next building to be described was Kirkstall Abbey, in Leeds, which was built between 1147 and 1153 by Henry de Lacie, Baron of Pontefract, for Monks of the Cistercian order. To-day it is a picturesque and beautiful ruin extending over an area of 340 feet by 440 feet. The principal portion seems to have belonged to the church, a cruciform building, of Transition work, and, like nearly all the abbeys visited, its tower was the leading feature, being lofty and square, and said to have been built in the reign of Henry VIII.

In a corner of the gardens of the Yorkshire Philosophical Society at York are situated the remains of St. Mary's Abbey, at one time a Benedictine Monastery, in point of wealth and influence the most important in the north of England. The foundation-stone was laid by William the Second, who also gave it a number of grants and privileges, by which it quickly rose to an important position. At the Reformation it shared the fate of other religious houses, and was surrendered to the crown. From 1540 onwards the buildings were used as quarries for material for other buildings, but in 1872 the society to whom the ruins now

belong obtained possession of the ruins and land. By their excavations a good idea of the original structure can be had. The principal remains consist of the north wall of the nave of the church, with its eight windows, and panelled archade with pointed arches. The whole length of the church was 371 feet and the breadth 60 feet, and it was a beautiful specimen of early decorated work.

Proceeding to describe Whitby Abbey, the lecturer told the story of its foundation by Oswry, King of Northumbria, whose daughter Hilda became its first Abbess. After varying fortunes the abbey began to flourish under the Romans. In its original shape the abbey was cruciform, consisting of a nave, with two aisles, a transept (with aisles on the east side only), a square lantern tower, and a choir, with aisles. It extended about 300 feet from east to west, and the transept about 150 feet from north to south. It is of Gothic architecture, but has undergone many alterations and repairs, with the unfortunate result that we have a conglomerate mass of styles far from satisfactory to even the most amateur of students. Amongst these styles were mentioned the "early pointed" (chiefly shown in the long, narrow, lanceheaded windows, without mullions), the "decorated" (distinguished from the preceding by a considerable increase and variety of ornament), and, lastly, the "perpendicular" (distinguished by large windows divided by perpendicular mullions and horizontal transoms, and by a great display of ornamentation and elaboration). The tower of the abbey, which rose to the height of 104 feet, is reported to have fallen in 1833.

The last Abbey dealt with was that of Jorvale or Jerveaulx, an interesting ruin near Middleham. Belonging to the Cistercian order, it was founded in 1156, and dedicated to St. Mary. Cruciform in design, its extreme length was 270 feet, and the ruins were thoroughly cleared in 1807 by the Earl of Aylesbury. The outstanding feature of the ruins are the refectory and domestic buildings, which are very extensive.

1st March, 1907.

Chairman-Dr W. Semple.

A minute of regret at the death of Mr Robert Murray, Honorary Vice-President of the Society, and for many years a member of the Council and a Vice-President, was unanimously adopted.

THE CASTELLATED REMAINS OF DUMFRIESSHIRE. By Mr JAMES LENNOX, F.S.A.Scot.

In submitting this paper I give it more as an index or preface to so great a subject, and I promise it will not be the last of this subject that will be brought under your notice. In producing so imperfect a paper the only excuse I have to offer is that I do so to try and focus the photographic efforts of our camera section on one of the important antiquarian subjects in the county of Dumfries. I select this branch of our work for two reasons. In the first place it is perhaps the widest, and in the second place many of these towers have disappeared from natural decay and from the ruthless hand of man within very recent years, and we wish a permanent record of what remains to-day, both by photograph and also by measurement. Messrs M'Gibbon and Ross in their "Castellated and Domestic Architecture of Scotland "have done a colossal work in this direction. but from want of local knowledge it was impossible for them to produce a complete work for the whole of Scotland, and it remains for local societies like ours to compile this in papers of a tabulated form for ready reference at any future time. In the two other counties of Kirkcudbright and Wigtown we have also many towers, but we have also ecclesiastical remains of a very fine order, whereas in Dumfriesshire we are devoid of ancient church architecture, although we at one time had Holywood Abbey, Dumfries Monastery, and Canonbie Priory, besides less important buildings. In the troublous times of Border war the Border Tower sprang up as an absolute necessity for self preservation as well as for the protection of one's goods, unless the owner removed into a walled burgh, and thus got protection. The church itself could not claim immunity from these Border thieves, as these men respected no property if they thought they could plunder it. The church of Annan had a fortified tower as part of its structure, and to defy the English Borderers. In this county we have castles proper, such as Caerlaverock, Lechmaben, etc., but by far the greater number of our castellated remains are Border towers or peels constructed in different ways, for the most part simple keeps with a great number of distinctive peculiarities, and it is these we wish to have properly recorded. For convenience, I divide the list into three sections, as follow:—

ESKDALE, LIDDESDALE, AND THE DEBATABLE LAND.

Glendinning—in Westerkirk. Westerhall—in Westerkirk. Brantalloch Castle-near Staplegorton Churchvard, fragment of wall only. Wauchope Castle-earth works and grass-grown walls near Langholm. Langholm Tower-vestiges, north of Langholm. Broomholm—site of. Harelaw-at Penton Linn (Liddle). Munbyhirst. Auchenrivock. Hallgreen. Woodhouselees--sites for the most part of these towers are the only remains. Hollows or Gilnockie Tower on the Esk.-This tower belonged to Johnnie Armstrong (the most famous man in Border song); he was executed by James V. for his many dashing raids into England; he, however, was a sort of Border Robin Hood; he protected the poor, and never stole from the Scotch. known as the Prince of Plunderers. The English warden of the west marches wanted to burn his tower, and Armstrong hearing of it, and knowing the greatness of his opposing force, swept round them, and the same night burned Netherby Hall. This is a typical Border tower of the simple keep design, and I will give a rather detailed description of it so as to serve for others that follow, pointing out some of their peculiarities as I come to them. It measures 331 feet by 251 feet, and about 40 feet high to the parapet. There is, as is common in such buildings, a vaulted ground floor lighted by slot holes. There were three other storeys and a cape house or warden's house in the attic. There was but one room in each flat. At the corners there were turrets and a parapet walk round connecting them. These were supported on projecting corbels. Above this come the sloping gables, one forming a chimney head, the other a beacon lantern. This stone lantern is not common, and photographers should observe and note it when met with. At the back of the tower there may have been a court yard, such as was common for the protection of cattle, etc. This tower formed one of a great group of Armstrong towers, Mangerton, over into Roxburghshire being the chief one. Sark Tower—site of, near the farmhouse of Tower of Sark.

Annandale.

Millingshaw-Fragment only on Evan Water. Middlegill-Fragment only. Auchencass Castle—At the junction of Garple and Evan. This was a first period castle of earthwork and curtain walls, the immediate successor of the earthwork and palisade. French Land-A tower on L plan, a little to the east of Moffat, requires to be carefully photographed. Lochhouse-A regular Border 16th century keep having one peculiarity; the 3rd storey walls are thinned externally, and give the appearance of an additional storey having been added; this will require to be observed by photographers. Lochwood Tower— The home of the Johnstones of Annandale. It is in a very ruinous state, and much hidden by the fine trees. Spedlings Tower—A second period keep, converted by repairs and extensions to a fourth period keep, and is a fine specimen, requiring care in bringing out the details. Elshieshields Tower—A fourth period tower on the L plan; these towers on the L plan are for the most part simple keeps with a wing at one angle, and contains the stair. This has angle turrets at three of the angles; the fourth is taken up with a cape house. Lockerbie Tower—This is surrounded by houses, and thus slightly hidden. It was used as police cells until recently. Lochmaben Castle—Situated on a promontory in the Castle Loch; was defended by great earthworks from the shore side. The building at first consists of curtain walls like all first period castles. The ashlar stones have been stolen for all sorts of local purposes, so little remains for definite photographs. The huge blocks of rubble bound together by shell mortar testify to the great strength. Hoddom Castle-A tower on the L plan adapted to modern requirements. Repentance Tower-A small watch or signal tower. Blacket Tower -On the L plan; this is not mentioned by M'Gibbon and Ross. It belonged to the Irvings. It measures 30 ft. by 24 ft.; this addition formed for the stair, and is surmounted by stepped gable roof. The main tower is very ruinous, and the exact plan is now difficult to make out. Above the door is the date 1663, and on a marriage stone is I.B. II. Bonshaw Tower—A typical Border simple keep, 34 ft. by 25 ft., having a corbelling carrying a parapet but no angle turrets. This is the tower of the head of the Irvings. The tower is in perfect condition, except a slated roof in place of one of stone flags. Wardhouse-Only one-half of this tower remains, looking like a section to shew the inside of such towers. Was also an Irving tower. Robgill Tower-Is said to have been like Bonshaw, but the proprietor took down the walls to the level of the hall floor to build his dining-room over it. Redhall Castle-The home of the bold Flemings; site of only. Old Gretnay-Site of only; in this parish there were eight towers, all now extinct, showing the necessity of complete records being taken of what still remains. Stapleton Tower-This is the finest Border peel I have seen, not recorded by M'Gibbon and Ross. It is in perfect preservation, measures 37 ft. by 31, and is about 50 ft. high. The doorway is decorated by the holly leaf, the crest of the Irvings. The windows and patron saint niche over the doorway are decorated by fine dog-toothing; the parapet is supported on corbels; the angle turrets are also supported on corbellings. The wooden door was supported by an iron vett; the ground floor is arched. Brydekirk-A fragment only, built into farm steading. Cockpool—Site of only (the home of the Murrays). Comlongon Castle—A splendid building, with many interesting peculiarities, and would require many photographs in detail. Holmains-Fragments only. Raffles-Site of.

NITHSDALE.

Clenrae Castle—Up Croiach Water (mounds at site). Castle-hill—In Carco (site of). Kemps Castle—At junction of Barr and Euchan burns (fragmentary). Goosehill Castle—On Goosehill Farm. Castle Robert—Site of. Castle Gilmour—In Menoch Pass. Carshogal Castle (site of). Sanquhar Castle—Stands to the south of the town, on the bank of the Nith. The castle covers a large space, and photographers will require a good many plates to do justice to the details of the building, or group of buildings. Enoch Castle—Near Carronbridge Station (fragmentary only). Castlehill—In Durisdeer (site only). Morton Castle—The second only in interest in Nithsdale; was originally a first period castle of curtain walls, and was converted into a third period castle, guarded on three sides by the lake, and on

the south side by the two towers at either extremity. It is of immense size; the front wall measures 90 feet long. It is well described by M'Gibbon and Ross, and the present remains show a transition from the courtvard to the keep castle. Drumlanrig Tower—The remains of this tower were swallowed up by the castle of that name. The walls form part of the chapel within the castle. Tibbers Castle—Is very ancient; the walls have been cleared of debris. Auchengassel—In the upper part of Penpont parish. Closeburn Castle—A fine and strong specimen of second period castle, 45 feet by 34 feet, the walls being 10 feet thick; this will require to be photographed on all sides. It is occupied by Mr Brown, the Closeburn factor. Barjarg Tower-A tower in the L plan, with angle turrets, and added to and adapted to more modern requirements in the 17th century. This is not given by M'Gibbon and Ross. Jarbruck Castle (site only). Peelton—Close to Crawfordton (site only). Old Crawfordton— On the west side of Cairn (lower storey standing); was a simple keep. Maxwelton House—The north end of this is the remains of an ancient castle. Breconside Tower-On the L plan, measures 27 feet by 21 feet with 5 feet walls, and the abutment of 17 feet by 17 feet, forming the L. It was in occupation in the nineteenth century, but only the foundation now remains. It is situated near the old Drove Road from Lanark, passing Tynron and on to Dunscore. Snade Castle (site of only). Sundaywell Tower-Measuring 27 feet by 21 feet, with walls 4 feet 6 inches thick; has been converted into a dwelling-house; modern windows broken into the walls, and surmounted by ordinary chimneys. A porch has been built to the doorway, and on the end of this the marriage stone, which used to be above the door, is now inserted. It consists of a square stone, in the centre a shield, the lower half of which is a St. Andrew's Cross surmounted by three diamonds, above which are the letters I K—I W, and under it the date 1611. Bogrie Tower—Site of only, and a marriage stone. None of these Glencairn towers are given by M'Gibbon and Ross. Lag Tower-A simple keep of 15th century. In this there was no vaulted ground storey; it is chiefly remembered by being occupied by the Laird of Lag, Sir Robert Grierson, the Bloody Lag of the Covenanters. Fourmerkland Tower-In Holywood parish. A keep in good preservation, with a detailed description in M'Gibbon and Ross.

Two angle turrets and no battlements, date 1590. Isle Tower-A simple keep, with two angle turrets and no battlements; in perfect preservation, with iron yett and wooden door. The property of the Fergusons, it was built in 1587. Dalswinton (site only). Cowhill Tower-Fragments only; on a hill in front of modern house. It was built by a Maxwell in 1579, and mostly taken down in 1789. It consisted of a stair turret, and to the one side a fortified house, and is described by Grose. Amisfield Tower—A typical peel of large size; in good preservation; with three circular turrets at angles, and a signal turret at the front corner. These turrets at angles are all corbelled out from walls. The windows are all decorated with dog-toothing. Above all is a square cape house. A dormer window directly over door has beautiful decorations. Above the doorway are two marriage stones. Torthorwald Castle—Is of unusual construction, and has been constructed to prevent being destroyed by fire; both the storevs were arched. It has been added to, as is seen by distinct join on the building. It belonged to the Carlyles. Dumfries Castle and the Maxwell Tower in Dumfries have both disappeared. Caerlaverock Castle—The finest in the county, and would require a paper devoted to itself; originally a first period castle of curtain walls; it has been adapted in different ages to the ideas of the periods. The north walls show two dates, as the top part is newer than its base. The internal structure has different dates in its construction. On the right of the gateway the buildings are older than they are on the left. Those on the left belong to the decorative period in castellated architecture. Bankend or Isle Tower-A keep on the L plan, in very ruinous state, which should be at once photographed, as the walls are so rent that the whole structure may fall any day if something is not done to preserve it.

EDWARD I. AT SWEETHEART ABBEY. By E. J. CHINNOCK, LL.D.

Some time ago I sent the Society an excerpt from the letter sent from Otford by Robert of Winchelsea, Archbishop of Canterbury, to Pope Boniface VIII., describing how he and Lombardi, the other Papal Legate, had met King Edward I. at Sweetheart Abbey, on the 27th of August, 1300, and delivered



HILLS TOWER, KIRKCUDBRIGHTSHIRE.



TORTHORWALD CASTLE, NEAR DUMFRIES, see pages 96 and 182



the Pope's mandate that the King should abandon his claims on Scotland. I now send translations of two extracts from the "Daily Book of the Wardrobe of Edward I." for that year, establishing the fact that Edward was at Newabbey, and not at Caerlaverock, at the time when the Papal Legates had their interview with him.

From page 69—"Paid to Sir John of Langford, sent from Gerton upon Fleet in Galloway to Carlisle, for the fifteen days between 10th of August and the 24th day of the same month, going to Carlisle, staying at the Port of Skynburness, waiting for a favourable wind and returning to the Court at Douzqueer (Sweetheart), £2 6s $0\frac{1}{2}$ d."

From page 202—"Paid to Sir John Le Strange, Banneret, for his wages and those of two knights and seven esquires from the 6th day of July, on which his horses were valued in the aforesaid war, until the 23rd day of August, on which he retired from the King's army at Douceur (Sweetheart), the first day being reckoned and not the last, for 48 days, by agreement made with him at Westminster, in the month of November in the 30th year, £36."

15th March, 1907.

Chairman—The PRESIDENT.

The Union of 1707 in Dumfriesshire. By Mr James W. Whitelaw.

The Treaty of Union between Scotland and England was adjusted in the first instance by commissioners who were appointed to represent the two Kingdoms respectively, and among the Scots representatives we find the Duke of Queensberry and Daniel Stewart, brother of the Laird of Castlemilk. The commissioners met for the first time on 16th April, and finished their labours on 23rd July, 1706. The Treaty consisted of 25 articles, and at this stage only four copies of it were made, one for the Queen, one for the English House of Lords, one for the English House of Commons, and the fourth for the Scots Parliament, who met in Edinburgh on 3rd October, 1706, to consider

the Treaty, with the Duke of Queensberry occupying the throne as Lord High Commissioner for Oueen Anne, and the Earl of Seafield as Lord Chancellor, or Premier as we now should call him. The Scots Parliament sat as one House, and consisted of the greater barons or nobility, the Commissioners for the Shires. who were elected by the smaller barons and freeholders, and the Commissioners for the Burghs. Dumfriesshire returned four members-Sir John Johnstone of Westerhall; William Douglas of Dornock; John Sharp of Hoddom; and Alexander Fergusson of Isle. The royal burghs of Dumfries, Annan, Lochmaben, and Sanguhar each returned one member, who were Provost Robert Johnstone for Dumfries: William Johnstone for Annan: John Carruthers for Lochmaben; and William Alves for Sanguhar. It is well to explain here that the title "Provost," as applied to Robert Johnstone, is a little misleading; he had occupied the civic chair, and in courtesy was still accorded the title on the principle of "Ance a Provost av my 'Lord,' " and so Provost Johnstone we will continue to call him. On the opening day a letter was read from the Queen, dealing mainly with the Union, and speeches by the Queen's Commission and the Lord Chancellor followed thereon. Her Majesty's letter and these speeches were ordered to be printed. The Articles of Union were also "ordered to be printed, and copies to be delivered to Members of Parliament "

FEELING IN DUMFRIESSHIRE AT THE TIME.

A few days later Provost Johnstone writes to the then Provost of Dumfries, William Copland of Colliston, enclosing a copy of each of these prints, and requests the views of the Town Council thereon. These were passed round the members for perusal, and were considered at a meeting of Council held on 14th October, when the following resolution was arrived at:—
"The Magistrates and Council of this burgh did unanimously consider that the said Articles are not fully and clearly understood by them, and therefore that they cannot give their said representative any positive instructions thereanent. In regard they have not seen the minutes of the said Commissioners of the Union nor the debates, reasonings, and motives that induced the said Commissioners to agree unto the said Articles. But withall the Council recommends to their said representative to be well

advised in what he votes and that he shall have all due regard to the security of the Protestant religion as now established by law, and to the honour, safety, and interest of the kingdom, and to the rights, privileges, and municipal laws thereof. And the Council recommends to the Provost to send an Extract hereof to him." Probably the members of the other burghs took a similar course, but there is no record of this. The minutes of the Town Council of Annan are rather meagre, and do not contain any reference to the Union, while the minutes of the Town Councils of Lochmaben and of Sanguhar have not been preserved so far back. The county minutes are also awanting, and we are therefore unable to ascertain whether the county members applied to their constituents for their views upon the Union. However, certain of their constituents did issue "instructions" to them, and, luckily, a copy thereof has been preserved in Dumfries Observatory (Appendix I.). In this document is pointed out "That if you give our votes for ratifying and confirming the said Articles, we must resign and lose our Crown, Sovereignty, Independence, and our Parliament; and by unavoidable consequence, these three great and valuable interests, to wit, our Church Government by law established, our liberty, and our trade;" the argument as to the advantage of community of trade with England is controverted on the ground that this is "most uncertain and of a long view;" and, after a strong statement that the power to represent the County in Parliament did not authorise them to conclude a union with England without a special mandate, the document concludes as follows:—" Upon the consideration whereof, we, by these our instructions, specially require you, our commissioners and delegates, that when any of the said Articles of Union, which we have declared prejudicial to our interests, are proposed, motioned, or overtured by any member, or members of Parliament, to be ratified and past into a law, that you expressly give your vote against the same; and that you neither treat, vote, nor determine in any matter which may relate to the surrendering and resigning of any of our foresaid privileges, dignities, rights, and interests, without advising and consulting your constituents, and procuring from them their special warrant for that effect. And these, our sentiments and resolutions about the matters above specified, are signed and signified by us, the barons, freeholders, heritors, and others, within the Sheriffdom of Dumfries, at Dumfries the twenty-ninth day of October, one thousand seven hundred and six years."

ATTITUDE OF THE CHURCH OF SCOTLAND.

The printing of the treaty made the terms of it public property for the first time, and a storm of opposition to it arose throughout the country. The Church of Scotland was first in the field; an address by the Commission of the General Assembly "for establishing and confirming the true Protestant religion and government of the Church as by law established "was presented to Parliament, and read on 17th October, "And thereupon the Parliament declared that before concluding the union they would take the said address to their consideration, and would do everything necessary for securing the true Protestant religion and Church government presently established by law in this kingdom;" but the Church in general does not seem to have been altogether satisfied with this promise. The Synod of Dumfries was then divided into four Presbyteries, viz.:-Dumfries, Penpont, Lochmaben, and Middlebie. The Presbytery of Middlebie has since been split up into the Presbytery of Langholm and the Presbytery of Annan. The Synod at that time held regular halfyearly meetings, which extended over several days in May and October, and at the meeting on 10th October, 1706, they passed an Act respecting the Treaty of Union, which they considered might concern the liberties and future happiness both of the Church and nation (Appendix II.). In this Act the Synod record their thankfulness "for the restoring of the rights and privileges of this National Church by the late happy Revolution," but express the fear "That impenitency in sin and slackness of reformation may provoke the Lord to remove the blessings we enjoy," a fear which seems to them to be rather confirmed by the fact of "the present threatening season, whereby the fruits of the ground have been and are in a great measure endangered, together with many other calamities and distresses, as tokens of the Lord's holy displeasure, which both Church and nation groans under;" they therefore judged "it incumbent upon them to excite themselves and one another, and the people under their inspection and charge to the great and necessary duties of unfeigned repentance, of active and zealous reformation and returning to the Lord, and of pouring out our most serious and fervent

supplications before the Throne of Grace," and they appointed "the several Presbyteries of this Synod to meet upon Wednesday next in order to the foresaid ends, and to spend the day together in the above exprest dutys, and each minister apart with his Session and such other serious Christians within his paroch, as he and they think fit, to keep another day for the foresaid ends with their first conveniency; and that they stir up the Godly within their bounds to a just concern in their prayers to God for the interest of the Church and nation in this present juncture." The Presbytery of Dumfries had this Act under their consideration at their meeting on the same day (10th October), and on 16th October it is minuted that they carried out the instructions therein contained. On 22nd October the Commission of the General Assembly passed an Act in somewhat similar terms, in which they recommended to all Presbyteries to set apart "a day for solemn public prayer, fasting, and humiliation." This was done by the Dumfries Presbytery on 29th October, when they appointed the following Tuesday as a solemn Fast in all the parishes within their bounds; and they also, in obedience to a further letter received at the same time from the Commission, engaged "in prayer among themselves for the Lord's directing of the Parliament at this time." When there was much business the Presbytery adjourned for an interval in the middle of the day, and on their resuming business on that afternoon the minute opens with the quaint phrase, "The brethren who had not prayed in the forenoon went about it now." William Vetch, minister of Dumfries; Alexander Robison, minister of Tinwald; and Andrew Reid, minister of Kirkbean and clerk of the Presbytery, had been chosen to attend the Commission in succession, and before the mid-day adjournal on 29th October certain brethren were appointed to draw up instructions to these representatives. In the afternoon, these instructions being produced and read, were approven and appointed to be insert in the Presbytery book; the tenor whereof follows:-" The Presbytery of Dumfries having seen by the Articles of Union that the Scots Parliament is for ever to be dissolved, whereby the whole covenanted work of Reformation as well as all our privileges, will be in imminent danger; therefore we thought it our duty to give the following instructions to you who represent this Presbytery in the Commission of the Kirk. 1º. That in a calm and regular way ve move

that the Commission use what methods they think fit for them in the capacity of a Church-judicatory for preventing the passing of that article of the giving up of our Parliament. 2º. That ye do nothing in the Commission which may be reasonably accounted a compliance with the passing such an Article. 3º. If any such thing be likely to be concluded by the Commission that may be accounted such a compliance, or any other way endanger the present Church-establishment according to the claim of right and all Acts of Parliament made thereanent, ye shall in our name protest against it." The letter to be sent to them with the above instructions was also read and approven, and Mr Vetch appointed to sign both in the Presbytery's name, and to transmit the same with all dispatch. A fortnight later Mr Vetch and Mr Robison reported that they had attended "the Commission, and, having made report of their diligence, they were approven." The minutes of the Presbytery of Penpont and of the Presbytery of Lochmaben are awanting for this period, while in the minutes of the Presbytery of Middlebie there is no reference to the Union except that the Act of the Commission above alluded to was not dealt with till the 13th November, when the 21st of that month was appointed as a Fast day. There is no time to follow the matter through the deliberations of the Commission; suffice it to say that by the influence of William Carstares, minister of Greyfriars, Edinburgh, the Church was kept out of the thorny path of politics, and her attention mainly directed to passing the Act of Security. This Act was read a first time on 6th November, and after a further representation and petition from the Commission of Assembly, and a strongly-worded protest from Lord Belhaven to the effect that it afforded "no valid security to the Church of Scotland" (which protest was concurred in by the Marquis of Annandale, John Carruthers of Lochmaben, and several others), the Act was passed by a large majority on 12th November, the very day on which Mr Vetch and Mr Robison reported to the Presbytery.

THE BURNING OF THE ARTICLES OF UNION AT DUMFRIES.

The Cameronians in the West and South-West of Scotland, with Covenanting times still green in their memory, not unnaturally saw danger to the Protestant religion from the Union, and the Act of Security did not allay their fears, or, indeed, the

fears of the more extreme Churchmen. So strong was their opposition that they seemed prepared to join with the Jacobites in the north, and march in armed force on Edinburgh. Had they done so, the face of history might have been changed, for the Government had only a small number of somewhat disaffected troops at their disposal. But the Cameronians and Jacobites had nothing in common except their opposition to the Union, which, in each case, was based on widely divergent grounds; there were traitors among their numbers who kept the Government advised of what was going on; and all that happened was some rioting in Edinburgh, Glasgow, and Lanark, and a fairly peaceful, but apparently well-organised, demonstration in Dumfries, with which alone I deal in detail. On 20th November a body of horsemen came in from the country, and were joined by some of the town rabble; they proceeded to the market cross, and a fire was lit; a print of the Treaty of Union was produced, and solemnly burnt; then a paper containing the names of the Commissioners who signed the Treaty was committed to the flames with the remark, "and thus may all traitors perish;" the minutes of these Commissioners (evidently printed in book form) were also burnt; and finally, there was affixed to the cross a protest entitled "An Account of the Burning of the Articles of the Union at Dumfries," which, being in the form of a printed document, shows distinct premeditation (Appendix III.). This document notifies to all concerned the reasons and designs which actuated the participators in the demonstration; they state that they have "no design against Her Majesty, nor against England nor any Englishman;" they testify their dissent from, discontent with, and protestation against the twenty-five Articles of the Treaty of -Union; they express very freely their views regarding the Scotch Commissioners who adjusted that Treaty to the effect that they must "have been either simple, ignorant, or treacherous, if not all three; when the minuts of the Treaty betwixt the Commissioners of both Kingdoms are duely considered; and when we compare their dastardly yieldings unto the demands and proposals of the English Commissioners, who, on the contrar, have valiantly acquit themselves for the interest and safety of their nation;" and after indicating that they considered that the Union was being attempted to be carried against the consent of the generality of the nation, they protested that "whatever ratification

of the foresaid Union may pass in Parliament contrar to our fundamental laws, liberties, and privileges, concerning Church and State, may not be binding upon the nation, now or at any time to come; and particularly we protest against the approbation of the first Article of the said Union, before the privileges of this nation, contain'd in the other Articles had been adjusted and secured; and so we earnestly require that the representatives in Parliament, who are for our nation's privileges, would give timeous warning to all the corners of the Kingdom; that we and our posterity become not tributary and bond slaves to our neighbours without acquiting our selves as becomes men and Christians; and we are confident that the soldiers now in martial power have so much of the spirits of Scots-men; that they are not ambitious to be disposed of at the pleasure of another nation; and we hereby declare that we have no design against them in this matter." There is an endorsation at the foot of the document that it was "publickly read from the Mercat Cross of Dumfries about one of the clock in the afternoon, the 20th day of November, 1706, with great solemnity, in the audience of many thousands; the fire being surrounded with double squadrons of Foot and Horse in Martial order: And after the Burning of the said Books (which were holden up Burning on the point of a Pike, to the view of all the People, giving their consent by Huzza's and Chearful acclamations). A Coppy hereof has left affixed on the Cross, as a Testimony of the South part of this Nation against the Proposed Union, as Moulded in the Printed Articles thereof. This we desire to be printed and kept in Record ad futuram rei memoriam." The endorsement is quite illegible in the print of the "Account" preserved in Dumfries Observatory, which is much torn at the foot, but there is a complete copy in the Advocates' Library, from which I have ascertained its terms. The intention seems to have been to impress Parliament with the importance of the disturbance in question, even at the expense of strict accuracy of detail, because in De Foe's History of the Union, published in 1709, the author (who, writing so soon after the event, must have been able to obtain fairly exact information) states that the numbers actually present were about 200, and he adds "that there was any such thing as squadrons or companies, either of horse or foot, or any martial order, such as officers or commanders, or any-

thing like troops, was a manifest forgery." On 29th November the Lord Chancellor reported these disturbances to Parliament, and presented a letter from the Magistrates of Dumfries to Her Majesty's Advocate, bearing an account of the abuses and tumultuary meeting in that place with a declaration emitted by those who met, which was affixed to the "Mercat Cross of Dumfries;" and after some discussion a proclamation against all tumultuary and irregular meetings and convocation of the lieges was passed; it proceeds in name of the Queen, and is addressed to "Our Lyon-King at Arms and his brethren, heraulds, pursevants, massers, and messengers at arms, our Sheriffs in that part conjunctly and severally," and it concludes as follows:- "Our will is herefore, and we charge you that ye pass to the Mercat Cross of Edinburgh, and Mercat Crosses of Dumfreis, Lanerk, and Glasgow, and other places needful, and there make publication hereof by open proclamation of the premises that none may pretend ignorance, and ordain these presents to be printed, and our solicitors to send copies hereof to the magistrats of the respective burghs above-mentioned for that effect." Parliament returned next day to the consideration of the declaration affixed to the Market Cross of Dumfries, and remitted to a committee to take trial and make enquiry anent the printer of the paper, who, luckily for him, was never discovered; further, not to be outdone in dramatic effect by their opponents, they ordered "that the said scurrilous print be burn'd by the hand of the Common Hangman at the Mercat Cross of Edinburgh upon Monday next, between eleven and twelve of the clock, and the magistrats of Edinburgh appointed to see the orders punctually executed."

A CLERICAL PROTEST.

Before leaving this part of my subject, I must refer to a petition against the Union, which is minuted as an "Address of a body of people in the South and Western Shires, subscribed by Mr John Hepburn and other seven persons," received in Parliament on 12th November (Appendix IV.). Mr Hepburn was "Minister of the Gospel at Orr, in Galloway," but had been deposed by the General Assembly from that charge, in which, however, he was reinstated. He was a very staunch Presbyterian, and the address in question, which is strongly imbued with his own personality, is a characteristic piece of ecclesiastical

invective. Its terms are preserved in a book, entitled "Humble Pleadings for the Good Old Way," published by Mr Hepburn in 1713, and there is also a copy in the Advocates' Library. It states nine grounds for the protest against the Union therein contained, of which I shall quote two as an example of its language: -"1mo. We incorporat with a nation deeply guilty of many national abominations, who have openly broke and burnt their covenant with God and league with us, entered into in the year 1643. Are sworn to the maintainance of abjured Prelacy; have their publick and established worship horridly corrupted with superstition and idolatry, and their doctrine dreadfully leavened with Socinianism and Arminianism; besides the most gross and deeply lamentable profaneness that abounds amongst them. . . . 5to. When we think how the great God, Who fixes the bounds of people's habitations, has granted to us this land; and by a very peculiar Providence has preserved us as a free nation these 2000 years, when many other nations, greater and mightier than we have been dispersed, and their memory extinct; how unaccountable does it appear to us, that we should destroy our selves and make a voluntar surrender of our liberties, sovereignity and independency; and that when our God has so often interposed by a marvellous Providence for our deliverance and defence, from the encroachments and invasions of forreigners and injurious neighbours! We should now distrust our Protector, and chuse England for the ground of our confidence, our shield and stay: which as we look upon as contrary to God's Word. So likewise to our sacred covenants, whereby, according thereto, we are bound to maintain the privileges of our Parliaments, and liberties of the subjects." But Mr Hepburn could use softer tones when occasion required, and his book ends with these words:—" Curteous reader, be pleased to pardon escapes of the Press in pointing and spelling." Evidently the "Printer's Devil' was beyond even ecclesiastical control in these days when Church discipline was a stern reality.

Local Representatives at the Convention of Royal Burghs.

We must now hark back in point of date, and ascertain the position taken up by the Convention of Royal Burghs. At a meeting of the Convention on 8th July, 1706, the Lord Provost

of Edinburgh was requested to call the Convention together "in case the great concern of ane Union with England comes to be laid before, and considered by Parliament." On 15th October, Sir Samuel M'Lellan, the then Lord Provost, accordingly did convene such a meeting, and his missive was considered by the Town Council of Dumfries on 21st October, and the meeting elected William Copland of Colliston, the then Provost, as their commissioner to the Convention, with Alexander Barclay, one of the Bailies, as his assessor. The missive was further considered on 25th October, in view of the request therein that special instructions should be given to the commissioner, and the meeting appointed "Bailies Corbet and Ewart, Provost Rome, the Dean, Baillie Kennan, Treasurer Gilchrist, the Convener and any two Deacons he pleased to bring with him, as a committee or major part of them, to meet with the said commissioner and assessor, and consider the Articles of Union agreed by the Commissioners of Scotland and England, and to draw up instructions to the said commissioner and assessor." The Council minutes do not show what these instructions were, but on 19th November the Provost reported that he and his assessor "had attended and waited on the said Convention during the sitting thereof, and had walked according to the town's instructions to them." Lochmaben was also represented at this Convention, but there was no representation from either of the burghs of Sanguhar or Annan. The Convention met on 29th October, and again on 4th and 5th November, on which last mentioned date they unanimously resolved to present an address to Parliament, the terms of which had been adjusted after debate. This address is directed "To His Grace Her Majesties High Commissioner, and the Right Honourable the Estates of Parliament," and after stating the Convention's objection to an incorporating union and the fear of increased taxation and of Scots interests suffering in a British Parliament wherein Scotland was only allowed a "mean representatione," the address concludes as follows:-- "We therefor humbly supplicat your grace and the honourable estates of Parliament, and do assuredly expect that yow will not conclude such ane incorporating union as is contained in the articles proposed, but that yow will support and maintain the true reformed protestant religione and church government as by law established, the sovereignty and independency of this crown and kingdome, and

the rights and privileges of Parliament, which have been generously asserted by you in the (present) sessione of this present parliament, and do further pray that effectual means may be used for defeating the designs and attempts of all popish pretenders whatsomever to the successione of this croun and kingdome, and for securing this natione against all the attempts and encroachments that may be made by any persons whatsomever upon the sovereignity, religion, lawes, liberties, trade, and quiet of the same; and we promise to mentain, with our lives and fortunes, all those valuable things, in opposition to all popish and other enemies whatsomever, according to our lawes and claim of right.' The address was presented to Parliament on 6th November, and is referred to in the minutes of Parliament of that date as "given in and read."

LOCAL PETITIONS AGAINST UNION.

Both prior and subsequent thereto there were petitions against the Union presented to Parliament from various counties and burghs; among those were the following of local interest, which were received on the dates now mentioned:—

Novr. 12—The Burgh of Kirkcudbright, and a body of people in the South and Western Shires.

,, 18—The Stewartry of Kirkcudbright.

,, 23—The Stewartry of Annandale.

,, 26—The Burgh of Annan, and the Burgh of Lochmaben.

Decr. 3—The Burgh of New-Galloway, and the four parochines of Glenkenns in the "Shire of Galloway."

The terms of only four of these addresses are, so far as I am aware, now ascertainable; those of the Stewartry of Kirkcudbright and of the Burgh of New-Galloway are contained in the appendix to De Foe's History; copies thereof, and also of the address of the four parochines of Glenkenns, are preserved in the Advocates' Library; and the fourth is the address of the body of people in the South and Western Shires to which I have already alluded. These addresses, and others of a similar nature from different parts of the country were treated with scant courtesy by Parliament, and the Duke of Argyll described them as only fit to make kites with. The opponents of the Union then endeavoured to get the subscribers

to these addresses to assemble in Edinburgh for the purpose of "waiting the effect of said addresses, and of knowing what return the Parliament would make." Parliament replied on 27th December with a Proclamation "against all such meetings and gatherings of the subjects as are unwarrantable and contrair to law," and the proposed assemblage was thereby prevented. Thus in one way or another outside opposition was met and checkmated.

Votes of Local Members of Parliament.

There was, however, a strong minority in Parliament itself against the Union, and when Parliament met on 3rd October the Ministry could not count on a majority of more than twelve. It was to the statesmanship of the Duke of Queensberry and the Earl of Seafield, assisted by those princes of debate, the Earl of Stair, the Earl of Roxburgh, and the Duke of Argvll, that the accomplishment of the Union was largely due. The general debate upon the Treaty occupied the whole of October, and the national Whig party, or "Squadrone" as they were called, ultimately declared in its favour, which practically placed the matter beyond doubt. On 2nd November the 1st Article was again read, and two days later it was approved by a majority of 116 to 83, and the subsequent divisions on the other Articles show that these numbers represented practically the full strength of both parties. What of the votes of our local members? Of the county members, Sir John Johnstone and William Douglas were the most regular attenders, and they voted persistently in favour of the Articles of the Treaty of Union. John Sharp and Alexander Fergusson were not so regular in attendance, but when present they voted against the Treaty. It will therefore be seen that Sir John Johnstone and William Douglas disregarded the instructions of their constituents, while John Sharp and Alexander Fergusson acted in accordance therewith; and I am led to understand that at a meeting held afterwards in Dumfries Mr Fergusson was publicly thanked for his opposition to the Union, in which vote of thanks Mr Sharp would also be included in all likelihood. In regard to the burgh members, Provost Johnstone, the member for Dumfries, has been represented as a fierce antagonist to the Union; there was, after the manner of the times of paying fulsome compliments to the deceased, inscribed upon

his tomb the words, "Unioni fortiter opposuit," and it is probably from this that the idea arose; but the Parliamentary division lists do not bear out the assumption. He voted against Article 1, which provided for an incorporating Union of England and Scotland into one Kingdom by the name of Great Britain; he was absent from the division upon Article 2, which secured the succession to the monarchy of the United Kingdom to Queen Anne and her issue, and in default of issue to Princess Sophia, Electoress and Duchess of Hanover and the heirs of her body, being Protestants; he voted against Article 3, which established one British Parliament; upon the Articles dealing with the community of trade, equality of taxation, etc., he voted sometimes with the majority and sometimes with the minority; and he was not present at any division after that upon Article 15. In view of the instructions given to him by the Town Council, already alluded to, it is curious that he was absent from the division upon Article 21 conserving the rights and privileges of Royal Burghs, and from the division upon the Act of Security in favour of the Church. The votes and attendances of William Johnstone, member for Annan, are very similar to those of Provost Johnstone; the most regular attenders were John Carruthers, member for Lochmaben; and William Alves, member for Sanguhar, the former of whom voted persistently against the Union, whilst the latter, with equal persistence, voted in favour of it. The Duke of Queensberry, as Lord High Commissioner, did not have a vote, and, indeed, looking to his high official position, his connection with the Union is of national rather than of local interest. There was, however, another local magnate among the nobility who attended the last Scots Parliament—the Marquis of Annandale—and his votes were generally cast against the Union, although he voted with the majority on one or two occasions. Before the final vote upon Article First was taken on 4th November, he offered a "Resolve" against an incorporating Union (Appendix V.); he voted with the majority in favour of Article Second settling the succession to the Throne; but before the final vote on Article Third he gave in a protest "upon the foot of his former resolve presented to this house" (Appendix VI.), to which protest there was a strong adherence, among whom we find Alexander Fergusson of Isle, and John Carruthers, the member for Lochmaben. The Marquis of Annandale was

Provost of the Burgh of Annan in 1706, and I think he held the same position in Lochmaben, and his influence had no doubt considerable effect upon the votes of the members for these two burghs. On the other hand, the Queensberry influence at Sanquhar may account for the member of that burgh voting in favour of the Union, which has occasioned some surprise, seeing that that district was a stronghold of the Cameronians, who were so much against it.

THE END OF "ANE AULD SANG."

The Act of Ratification was read a first time on 15th January; it was again read on the following day, and "Then the Act for Security of the Protestant Religion and Presbyterian Church Government, which is insert in and ratified by the above Act, was touched by the Royal Scepter by Her Majesties High Commissioner in the usuall manner," and after some further procedure, including a third representation and petition from the Commission of the Kirk, "The vote was put approve the Act, ratifieing and approving the Union of the two Kingdoms of Scotland and England Yea or not, And it carried approve." The majority was 110 to 69, and in this division there voted with the majority Sir John Johnstone, William Douglas, and William Alves, and with the minority the Marquis of Annandale, Alexander Fergusson, and John Carruthers; the other local members were absent. The scene now changes to England. The English Parliament commenced its deliberations upon the Treaty and the Scots Act of Ratification early in February, and the English Act of Ratification received Royal assent on 6th March, 1707. On 19th March the Exemplification of the English Act of Ratification was laid before the Scots Parliament, and ordered "to be inserted in the Books of Parliament and to remain with the Records of this Kingdom," and after authenticating it for this purpose by his signature, the Earl of Seafield used the memorable words, "Now, there's ane end of ane auld sang." By the Treaty the number of members to be returned by Scotland to the British House of Commons was fixed at 45, and of these the Scots Parliament appropriated 30 to the shires and 15 to the burghs. Under this distribution, Dumfriesshire returned one member, and the burghs of Dumfries, Annan, Lochmaben, Sanguhar, and Kirkcudbright one member. It was

further arranged that the first members should be elected by the Scots Parliament from amongst its own numbers, and Sir John Johnstone of Westerhall was chosen for the county, and Sir Andrew Home (the member for the burgh of Kirkcudbright) was chosen for the district of burghs. On 28th April the Scots Parliament was finally dissolved, and three days later, on 1st May, the Union came into full effect, and was inaugurated by a religious service in St. Paul's Cathedral, which was attended by the Queen, the State officials, and the Members of both Houses of Parliament

And so there was an end to "Ane auld sang," for a while at least, because in the years that followed the Union the fears of its opponents were to some extent realised. Matters were not helped by the feeling which arose that some of the support of the Union was obtained by English gold; historians are not agreed on the subject, and in any case the charge of bribery rests on very slender and partisan grounds, but the idea long remained fixed in the minds of ordinary folks, and is alluded to by Burns in his poem—

Such a Parcel of Rogues in a Nation.

Τ.

Fareweel to a' our Scottish fame,
Fareweel our ancient glory;
Fareweel even to the Scottish name,
Sae fam'd in martial story!
Now Sark rins o'er the Solway sands,
And Tweed rins to the ocean,
To mark where England's province stands—
Such a parcel of rogues in a nation.

II.

What force or guile could not subdue,
Through many warlike ages,
Is wrought now by a coward few,
For hireling traitors' wages.
The English steel we could disdain,
Secure in valour's station,
But English gold has been our bane,
Such a parcel of rogues in a nation!

III.

O would, or I had seen the day, That treason thus could sell us, My auld grey head had lain in clay,
Wi' Bruce and loyal Wallace!
But pith and power, till my last hour,
I'll mak' this declaration,
We're bought and sold for English gold,
Such a parcel of rogues in a nation!

I have not been able to fix the exact date of this poem, but the local allusions to the "Sark" and "Solway Sands" seem to indicate that it was written after Burns came to Dumfriesshire, and this view is rather confirmed by a letter written by Burns to Mrs Dunlop from Ellisland on 10th April, 1790, in which he remarks:-" Alas! have I often said to myself, what are all the boasted advantages which my country reaps from the Union that can counterbalance the annihilation of her independence, and even her very name," and the letter closes with the statement that he had "been manufacturing some verses lately," among which may very well have been the poem just quoted. It was three years later that Burns, on a Galloway moor, amid the warring of the elements, composed "Scots Wha Hae;" which sings in grander tones of that beginning-or, perhaps, I should rather say that revival of Scottish Independence with which the names of Wallace and Bruce are so closely connected. Was the fact of this Birthday Ode being written after the Requiem, to which I have just alluded, prophetic of Scottish independence surviving the eclipse which it was thought to have suffered from the Union? We may almost say that it was so, because in course of time the doubts and fears of the opponents of the Union have come to be groundless, and in the end we must admit that the final result has been for the good of both nations.

SCOTLAND AND SCOTSMEN TO-DAY.

The Scottish name and Scottish fame and ancient martial glory are as undimmed as they were two hundred years ago, while the opening of trade with the English colonies, from which Scotland had previously been debarred, has been the foundation of her commercial prosperity. It seems to me, therefore, that the "Auld Sang" has arisen from its ashes in a revised version set to modern time and still goes ringing down the ages. Scotland has no longer a Parliament sitting in Edinburgh, but go to Westminster and you will find Scotsmen in the forefront

on both sides of the House; you will find them occupying important positions in the professions, in finance, and in commerce throughout the whole United Kingdom; and in that Greater Britain beyond the seas they are amongst the most loyal and successful citizens. But though loyal citizens of this great Empire of which we are all so proud, they never forget the ancient Northern Kingdom to which they owe their origin, but ever, be it in times of trial or in times of mirth, draw closer to one another just for the sake of those days of "Auld Lang Syne."

APPENDIX I.

Instructions for the Commissioners of the Sheriffdom of Dumfreis.

GENTLEMEN,-

Having seen and considered the articles of Union agreed upon by the Commissioners for the Kingdoms of *Scotland* and *England*; we judged it proper, to impart to you our Resolutions thereanent.

We find, That if you give our Votes for Ratifying and Confirming the said Articles, we must Resign, and Lose our *Crown*, *Sovereignty*, *Independency*, and our *Parliament*; and by unavoidable Consequence, these Three great and valuable Interests, to wit, Our *Church Government* by Law established, our *Liberty*, and Our *Trade*. We find our Taxes and impositions certain, and subject to a greater Power to make them effectual: Our Advantage, from a communication of trade with the Kingdom of *England*, most uncertain, and of a long View.

OUR reserved Rights and Interests, are capable of no security, seeing the plurality of Voices in the Parliament of *Great-Britain*, must Determine whatsoever is brought before them.

We doubt not of your being most sensible of these important Losses; And as we have given you full Power to Represent us in Parliament, in every Thing which may redound to our Advantage, and is contained within the Bounds of your Commissions; so we doubt not of your integrity and Resolution, to give the immediate Sentiments of those you Represent by acting for their good and Interest.

At your Election, you were impowered to represent us in the Parliament of *Scotland*, to do everything that was not Extraordinary; and that it is presumed, your Constituents would have

given a special Mandate for: But a matter of so high and great importance, as an Union in the terms it is now agreed upon, by the Commissioners for the respective Kingdoms, not being then in View; We judge, That nothing can be done by our Representatives in that Matter, conform to their Commissions, unless they have a special Authority for that Purpose. And we have not, by vertue of your said Commissions, delegated any Power to you our Trustees, to evert, alter, or innovate our Fundamental Laws, our Ancient Constitution, and Privileges of Parliament, the Offices, Rights, Liberties, and Dignities of this Kingdom, either belonging to Church or State. For all which, a special Mandate was requisite and necessary.

Upon the consideration whereof, we, by these our instructions, specially require you our Commissioners and Delegates, That when any of the said Articles of Union, which we have declared prejudicial to our interests, are Proposed, Motioned, or Overtured, by any Member, or Members of Parliament, to be Ratified and past into a Law, that you expressly give your Vote against the same; and that you neither Treat, Vote, nor Determine in any Matter, which may relate to the Surrendring and Resigning of any of our foresaid Privileges, Dignities, Rights, and Interests, without advising and Consulting your Constituents, and procuring from them their special Warrant for that Effect. And these our Sentiments and Resolutions about the Matters above specified, are signed and Signified by us the Barons, Freeholders, Heritors, and others, within the Sheriffdom of Dumfreis; at Dumfreis, the twenty-ninth day of October, One thousand seven hundred and six years. Sic Subscribitur,

William Fergusson of Kaitloch
Robert Murray of Dumcreif
John Creichton of Craufurstoun
Alexander Migahen of Dalwhat
James Kirk of Bogrie
John Maxwell of Steilstoun
William Johnston of Grantoun
Mr John Cunningham of Birkshaw

John Corsan of Merkleknox James Carlile of Breakwhat Sir Thomas Kilpatrick of Clossburn

Six John Jardin of Applegirth
Six Walter Laury of Maxweltoun
Robert Johnston of Wamphray
George Maxwel of Dalswinton
Walter Riddel of Glenriddel
Alexander Ferguson of Craigdarroch

Robert Brown of Inglestoun Charles Maxwell of Couhill

James Rorison of Caldside
James Douglas of Dornock,
younger
Francis Maxwell of Tinwal
Andrew Johnstoun of Newton
David French of Frenchland
Mr John Henderson of Broadholm

William Hairstain of Craigs
John Bell of Croudounknow
James Ferguson of Fourmerkland
William Grier, younger of Lag
George Johnston of Girthherd
Mr Archibald Johnston, Portioner
of Moffat

APPENDIX II.

ACT BY THE SYNOD OF DUMFRIES RESPECTING THE UNION WITH ENGLAND EXCERPTED FROM THEIR MINUTE OF MEETING, DATED 10TH OCTOBER, 1706.

The Synod considering, That the result of a Treaty of Union with England, which may concern the Liberties and future Happiness both of this Church and Nation, is to be laid before the Parliament; and that, as they ow the most humble and thankfull Acknowledgments to the Infinite Mercy of God for the Restoring of the Rights and privileges of this National Church, by the late happy Revolution, and to his free and undeserved Grace, for continuing and preserving the same until now, so they have Ground to fear, That Impenitency in Sin, and slackness of Reformation may provoke the Lord to remove the Blessings we enjoy; Considering likewise the present threatening Season whereby the Fruits of the Ground have been and are in a great measure endangered, together with many other Calamities and Distresses, as Tokens of the Lord's holy Displeasure, which both Church and Nation groans under; They do, therefore, judge it incumbent upon them to excite themselves and one another and the people under their inspection and charge to the great and necessary Duties of unfeigned Repentance, of active and zealous Reformation, and Returning to the Lord, and of pouring out our most serious and fervent Supplications before the Throne of Grace, through the intercession of our glorious, exalted and compassionate Redeemer, for the Spirit of Grace and Humiliation, of Repentance and amendment, of Zeal, Faithfulness, and Wisdom, unto our Selves and all Ranks within the Land, That it may please our Merciful God to pardon our Sins, to heal our Breaches, to remove all the Tokens of his wrath, and to cause his Face shine upon his Sanctuary, That our gracious Queen may be

preserved and blessed in her person, Counsells, Forces, and Government, That the Parliament may be under the influence and Direction of Divine Wisdom and Conduct in all their Determinations, to the Glory of God, the Welfare, Comfort, and Satisfaction of his people, That the Rights and Libertys of this National Church, now happily established by Law, may be confirmed and secured from Danger, That Truth, Rightousness, and peace may be perpetuated and a good Understanding and Agreement continued and increased between the two Nations, with respect to a happy Union, That God may direct and guide the Commission of this National Church in doing what is incumbent upon them, with Faithfulness, zeal, and prudence, And the Synod doth hereby appoint the several Presbyteries of this Synod to meet upon Wednesday next, in order to the foresaid Ends, and to spend the Day together in the above exprest Dutys; and each Minister apart with his Session and such other serious Christians, within his Paroch as he and they think fit, to keep another day for the foresaid Ends with their first conveniency; And that they stir up the Godly within their Bounds to a just concern in their prayers to God, for the Interest of the Church and Nation in this present Juncture.

APPENDIX III.

An Account of the Burning of the Articles of the Union at Dumfries.

These are 10 Notific to All Concerned, what are Our Reasons for, and Designs in the Burning of the Printed Articles of the Proposed Union with England, with the names of the Scots Commissioners, Subscribers thereof: together with the Minuts of the whole Treaty, betwixt them and the English Commissioners thereanent.

We have herein no Design against Her Majesty, nor against Eugland or any Englishman; neither against our present Parliament, in their Acts or Actings, for the Interest, Safety, and Sovereignty of this OUR NATIVE and ANCIENT NATION: But to Testifie our Dissent from, Discontent with, and Protestation against the Twenty five Articles of the said Union, subscribed by the foresaid Commissioners; as being Inconsistent with, and altogether prejudicial to, and utterly destructive of this NATION'S Independency, Crown-Rights, and Our Constitute

Laws, both sacred and civil. We shall not here condescend upon the particular Prejudices, that do, and will Redound to this Nation, if the said Union should be carried on, according to the Printed Articles; But refers the Reader to the Variety of Addresses, given in to the present Parliament, by all Ranks from almost all corners of this Nation, against the said Union: Only we must say and Protest that the Commissioners for this Nation have been either Simple, Ignorant, or Treacherous, if not all three, when the Minuts of the Treaty betwixt the Commissioners of both Kingdoms are duely considered; and when we compare their Dastardly Yieldings unto the Demands and Proposals of the English Commissioners; who, on the contrar, have Valiantly acquit themselves for the Interest and Safety of their Nation.

We acknowledge it is in the Power of the present Parliament to give Remissions to the Subscribers of the foresaid Articles and We heartily wish for a good Agreement amongst all the Members of the Parliament that it may tend to the Safety and Preservation of both CHURCH and STATE, with all the Privileges belonging thereto, within the Kingdom of SCOTLAND.

But if the Subscribers of the foresaid Treaty and Union, with their Associats in Parliament, shall presume to carry on the said Union, by a Supream Power, over the Belly of the Generality of this Nation: Then and in that case, as we Judge, that the Consent of the Generality of the same can only Divest them of their Sacred and Civil Libertys, Purchased and maintained by Our ANCESTORS with their Blood; So we Protest, whatever Ratification of the foresaid Union may pass in Parliament, contrar to Our Fundamental Laws, Liberties, & Privileges, concerning Church and State, may not be binding upon the Nation, now nor at any time to come: And particularly we Protest against the Approbation of the first Article of the said Union, before the Privileges of this Nation, contain'd in the other Articles had been adjusted and Secured: And so we earnestly Require that the Representatives in Parliament, who are for Our Nation's Privileges, would give timeous warning to all the corners of the Kingdom; That we and our Posterity become not Tributary and Bond slaves to our Neighbours, without acquiting our Selves, as becomes Men and Christians, And we are Confident that the Soldiers now in Martial Power have so much of the Spirit of SCOTS-MEN; that they are not Ambitious to be Disposed of, at

the pleasure of another Nation: And we hereby Declare that we have no Design against them in this matter.

This was publickly read from the Mercat Cross of Dumfries about one of the clock in the afternoon, the 20th day of November, 1706, with great solemnity, in the audience of many thousands; the fire being surrounded with double squadrons of Foot and Horse in martial order: And after the Burning of the said Books (which were holden up Burning on the point of a Pike, to the view of all the People, giving their consent by Huzza's and Chearful acclamations). A Coppy hereof was left affixed on the Cross, as a Testimony of the South part of this Nation against the Proposed Union, as Moulded in the Printed Articles thereof.

This we desire to be printed and kept in Record ad futuram rei memoriam.

APPENDIX IV.

To His Grace, Her Majestie's High Commissioner, and Honourable Estates of Parliament, The Humble Address of a Considerable Body of People in the South and Western Shires.

Sheweth

We Undersubscribers being Commissionate and Appointed by many Christian Societies in the South and Western Shires of this Kingdom for the Effect following, considering how much the Union treated of at present, may be of dangerous consequence to the Civil and Sacred Liberties and Concerns of this Nation; and how it is like, if carryed on, to involve the Nation in much Guilt. While,

1 mo. We Incorporat with a Nation deeply Guilty of many National Abominations, who have openly Broke and Burnt their Covenant with GOD, and League with US, entered into in the year 1643. Are Sworn to the maintainance of Abjured Prelacy, have their Publick and Established Worship horridly corrupted with Superstition and Idolatry; And their Doctrine dreadfully leavened with Socinianism and Arminianism, Besides the most Gross and Deeply Lamentable Profaneness that abounds amongst them.

2 do. We would thereby bind up our Hands from Prosecuting the Ends of our League and Covenant, while Incorporating

with them upon terms quite Prejudicial thereunto, And such as whereby we could not but dishonour our GOD, and bring His Wrath upon us, on this Account; And hence for our parts, the Fear of GOD makes us abhore any thoughts of thus Imbodying with them, or of any Union whatsoever of that sort, without making this our joint Covenant the Primary and Fundamental Article thereof.

3 io. We can never for our parts Own or connive at the Civil-Places of Church-Men, and that Bishops should have a Legislative Power and Authority over us: Yea, We reckon the Title of Spiritual Lords, given to them as Blasphemous, The Lord Christ being the one only Lord in His Own House. 4 to. It is an Extream Grievance to us, to think, That not only the interest of the Church of England should be secured by an Oath of Abjuration, while that of ours is left to the Will and Discretion of the English in a British Parliament, But withal, for any thing we see or hear of as yet; Many in this Nation will be obliged to take the said Oath: Which considering the 2d Act of Parliament, To which it refers, cannot be done, without both Inferring, Guilt on our Part, Endangering our Church and inevitably causing many jealousies, Heart-burnings, and most grievous Ruptures amongst us.

5 to. When we think how the Great GOD, who fixes the Bounds of Peoples Habitations, has granted to us this land; And by a very peculiar Providence has Preserved us as a free Nation, these 2000 Years, when many other Nations, Greater and Mightier then we have been Dispersed, and their Memory extinct; How unaccountable does it appear to us that we should Destroy our Selves, and make a voluntar surrender of our Liberties, Sovereignity and Independency; And that when our GOD has so often interposed by a Marvellous Providence for our Deliverance and Defence, from the Encroachments and Invasions of Forreigners and Injurious Neighbours! We should now distrust our PROTECTOR and chuse England for the ground of our Confidence, our Shield and stay; Which as we look upon as contrary to GOD's Word. So lewise to our SACRED COVE-NANTS, Whereby, according thereto, we are bound to maintain the Privileges of our Parliaments, and Liberties of the Subjects.

6 to. We cannot see what Security we can have for what ever is dear to us, that we need to have secured in case of an

Incorporating Union with England, save only their bare Promise, who have broken the most solemn Tyes of Sacred Engagements, and all Bonds of Friendship, Confederacy, and Neighbourhood, these hundred years bygone, to the extream hurt, & hazard both of our Church and State, and have even still, since ever we came under one Head with them, been in appearance seeking our Ruine.

7 mo. For any thing we can see, if this Union should go on, either we behoved to Ruine our Selves by submitting to a Toleration, destructive to our own Government and Discipline; or else to put our Honest Neighbours (some of the Dissenters) in England, in hazard of losing theirs, since it will no doubt be pleaded, that the Dissenters in both parts of the Nation should be equally dealt with; And yet for us we cannot without Horror think of the Sin, and sinful Consequences of a Toleration here.

8 vo. Our Hearts do Tremble to think what bitter Fruits of Faction, Parties, and incurable Breaches the going into this Union may produce, and how easie an Access thro' this and the great Ferment of the Nation it may make for the pretended King James the Eight to come to the Throne, At least we cannot understand how this Union can put a Bar thereupon, but rather have strong and not groundless Fears of its tending to the contrary. And as to the matter of Rents and Irritation among these in our Bounds, We are very sure that they who have hitherto complained of the continuance, by Act of Parliament, of so many Prelatists in Churches, of the Connivance at others in Meetinghouses, of Incroachments made on Assemblies in their Adjournments and Dissolution; and otherwise also in the matters of Fasts and Oaths; And of the not duly Executing of good Laws against Papists, Quakers, and other Heretical and Profanely Scandalous Persons, will then have their Grievances greatly encreased, and who knows what may be the issue thereof.

9 no. We cannot see how it can consist with this Union to endeavour to bring to condign Punishment Malignants, or Enemies to Reformation, which is plain Duty in itself, and to which we stand solemnly engaged by our Covenants; Yea, such being readiest to take the Sacramental Test of England, are nearest to advancement, and no Scotsman can be advanced in England without it, whereas any Englishman may be in place of Truth in Scotland how opposit soever to our Government.

Upon all which and many moe such Weighty reasons we could offer, and are offered by others, who seek the welfare of the Church and Kingdom, Tho we solemnly Protest and Profess that we are not against an Union in the LORD with England, And such as may be consistent with the Liberty of our Nation, and with our sacred Covenants, and security of our Church; Yet we cannot but also Protest, Likeas hereby we do Protest, against this Union as moulded in the Printed Articles; Neither do we judge our selves bound thereby, tho' a prevailing Party in Parliament should conclude the same; but will stand by such Noble patriots, with Life and Fortune, as are for the Maintainance and Defence of the Nations Independency and Freedom and this Churches just Power, and proper Privilege, conform to our attained Reformation from 1638 to 1649.

This in name of many Christian Societies united into a considerable Body of People, in the South and Western Shires of this Kingdom, is subscribed this 12th day of November 1706.

$_{ m BY}$	
W. Woodburn,	J. Hepburn
J. Thomson,	G. Mitchel,
W. Lorimer,	W. Harris,
J. Mulican,	J. Millar.

APPENDIX V.

Resolve by the Marquis of Annandale, Excerpted from Minutes of Parliament, under date 4th November, 1706

- "Whereas it evidently appears since the printing, publishing, and considering of the Articles of treaty now before this house this
- "Nation seems generally averse to this incorporating Union in the
- "terms now before Us as subversive of the Sovereignty funda-
- "mental Constitution and Claim of Right of this Kingdom and as

"threatening ruin to this church as by law established.

"AND since it is plain That if an Union were agreed to in "these terms by this Parliament and accepted of by the Parliament of England, it would in no sort answer the peaceable and "friendly ends proposed by an Union but would on the contrare "creat such dismall distractions and animosities amongst our-"selves and such jealousies and mistakes betwixt us and our

"Neighbours as would involve these Nations into fatal breaches and confusion.

"THEREFORE Resolved That We are willing to enter into such an Union with our Neighbours of England as shall unite us entirely and after the most strict manner in all their and our interests of Succession, Warrs, Alliances, and Trade, Reserving to us the sovereignty and independency of our Crown and Monarchie, and immunities of the kingdom and the constitution and frame of the Government both of Church and State as they stand now established by our fundamental Constitution by our Claim of Right and by our laws following thereupon. Or

"RESOLVED That We will proceed to settle the same succession with England upon such conditions and regulations of
government within ourselves as shall effectually secure the
Sovereignty and Independency of this Crown and Kingdom and
the indissolvable society of the same with the fundamental
rights and constitution of the government both of Church and
State as the same stands established by the Claim of Right and
other Laws and Statutes of this Kingdom."

APPENDIX VI.

PROTEST BY THE MARQUIS OF ANNANDALE, EXCERPTED FROM MINUTES OF PARLIAMENT, UNDER DATE 18TH NOVEMBER, 1706.

"WHEREAS it evidently appears since the printing, publishing, "and considering of the Articles of treaty now before this house "this Nation seems generally averse to this Incorporating Union in the terms now before us as subversive of the Sovereignty, fundamental constitution, and Claim of Right of this Kingdom, and as threatening ruin to this Church as by Law established And since it is plain That if an Union were agreed to in these "terms by this Parliament and accepted of by the Parliament of England it would in no sort answer the peaceable and friendly ends proposed by an Union but would on the contrary creat such dismall distractions and animosities amongst our selves and such jealousies and mistakes betwixt Us and our Neighbours as would involve these Nations into fatal breaches and confusions Therefore I do Protest for my self and in name of "all these who shall adhere to this my protestation That an In-

"corporating Union of the Crown and Kingdom of Scotland "with the Crown and Kingdom of England and that both Nations "shall be represented by one and the same Parliament as con-"tained in the articles of the treaty of Union is contrare to the "honour, interest, fundamental Laws, and constitution of this "Kingdom, is a giving up the Sovereignty, the Birthright of the "Peers the rights and privileges of the Barons and Burrows, and "is contrare to the Claim of Right, property, and liberty of the "subjects and third Act of her Majesties Parliament Im vijc and "three by which it is declared high treason in any of the Subjects " of this Kingdom to quarrell or endeavour by writing malicious "and advised speaking or other open act or deed to alter or "innovat the Claim of Right or any article thereof As also that "the Subjects of this Kingdom by surrendering their Parliaments "and Sovereignty are deprived of all security both with respect to "such rights as are by the intended treaty stipulated and agreed "and with respect to such other rights both Ecclesiastick and "Civil as are by the same treaty pretended to be reserved to "them, And therefore I do Protest that this shall not prejudge "the being of future Scots Parliaments and Conventions within "the Kingdom of Scotland at no time coming."

23rd March, 1907.

SPECIAL DISTRICT MEETING.

TOWN HALL, KIRKCUDBRIGHT.

Chairman-Mr Thomas Fraser.

KOCKBREX FORT.

Mr James Barbour, F.S.A.Scot., gave an account of the Fort at Knockbrex, his paper on which, read at a meeting of the Society of Antiquaries of Scotland, is sent to the members of this Society for the session who apply for it to the Treasurer.

An Incident in the History of Kirkcudbright. By Mr Joseph Robison.

One of the most picturesque among the many incidents in the history of Kirkcudbright is that of the attempted storm of the

town by Sir Thomas Carleton in that dreadful period of Border warfare after the disastrous battle of Solway Moss. It occurred in February, 1547, a year in which Dumfriesshire suffered severely. Sir Thomas, who had come by way of Teviotdale and Canonbie, seized Dumfries, and issued a proclamation in the name of King Henry, calling upon all men to come and make oath to King's majesty. The great majority of the natural leaders of the people appear to have submitted; and it is to the honour of Kirkcudbright, at a time when the whole of Dumfriesshire lay under the English yoke, that the town refused to acknowledge English supremacy. As was to be expected, Carleton, with a strong force of cavalry, left Dumfries to burn down the town as an example.

Kirkcudbright at that period, more than four and a-half centuries ago, consisted of the High Street only, with, perhaps, a few straggling houses in what is now known as the Millburn. Where St. Mary Street, St. Cuthbert Street, and the streets in that vicinity now stand, would then, in all probability, be a swampy meadow, flooded at every high tide. It was not till fully three centuries had elapsed that the embankment was formed. From the present harbour a great creek ran through what are now known as the Church Grounds, and at high water this would form a formidable defence to the little burgh. When this creek was filled up I have been unable to definitely ascertain; but the venerable Provost M'Ewen remembers his father stating that at low water people passed across on stepping stones on their way to the church on the Moat Brae. The creek terminated at or near the house now occupied by Sheriff Napier, where stood the Meikle Yett, the principal—indeed, it might be said the only—port. On the other side of the street the "Yett" abutted on the fosse and wall, which then proceeded towards the west, enclosing what are now known as the town's gardens. Much of this portion (says M'Kenzie, in his "History of Galloway,") is still open; but unfortunately that is not the case now. At the field near the Academy the ditch and wall proceeded along the west side of the town, at the foot of the gardens behind the High Street, to the river, and in many places its course can still be distinctly traced. The wall continued along the edge of the river, another gate being at the harbour, thus completing the defences. The space included was almost square, each side being about three hundred yards long.

Where Union Street, Castle Street, Castle Gardens, part of St. Cuthbert Street, and the present Castle stand was then a meadow; on the south and west the ground will be little changed. On the Moat Brae rose in stately magnificence the fabric of Greyfriars, not yet for a few years longer to fall a prey to the despoiler. On the south, where the County Buildings stand, rose the Church of St. Andrew, destined to an ignoble use by the builder of Kirkcudbright Castle. The old Tolbooth was erected about the middle of the sixteenth century, and if built at the time of the raid would be entirely new. In the open at Castledykes, the ancient Castle of Kirkcudbright, one of the royal fortresses, upreared its hoary front. Here came the hero Wallace to embark on his expedition to France in search of aid for his sorely distracted country. Here also came the "Hammer of the Scots," and are there not the memories of Robert Bruce, the warrior-king; Edward Bruce, his rash but heroic brother; the Jameses; Henry VI. of England and his indomitable Queen Margaret of Anjou? Away to the south was the Priory of St. Mary's Isle, then an island in reality at some stages of the tide. On the hill, towards the east, was the even then ancient churchyard, with its little church, the site of which is now marked by yew trees. Hither then, on that far-away February evening, appeared the strong detachment of English horse under Sir Thomas Carleton. The inhabitants had received timeous notice of the raid, and stood on their defence. We may imagine, however, with what feelings the approach of the enemy was viewed. The town had already been summoned to surrender, and, to their honour be it said, had refused to do so. Some, no doubt, would be for surrender; but some strong man, like Provost Towers of Edinburgh, after Flodden, would elect to fight to the bitter end. There would be memories, too, of Brankston's fatal ridge, with the recent actions at Annan and Dumfries. The attack upon the town reads like a page from Froissart. The townspeople, according to Carleton's despatch, barred their gates and kept their dykes. Advancing on foot, the Englishmen made a vigorous assault, but were driven back. One man within the walls was killed by an arrow, and this, according to the quaint chronicle, alarmed some of the women for the safety of their husbands. "One wife," says Sir Thomas, "came to the ditch and called for one that would take her husband and save his life." Like many

another English commander, Carleton had Borderers under his command, and one, Anthon Armstrong, with a keen eye, no doubt, to the ransom, rather than from any feeling of pity, called out to the poor woman, "Fetch him to me, and I'll warrant his life." The woman brought her husband (who was, perhaps, nothing loth) through the dyke, and delivered him over to Armstrong, who took him to England, and received a ransom for him.

Just at this point the Laird of Bombie made his appearance with a party of his friends and vassals, and attacked the besiegers. The result of a sharp encounter, however, was that several of M'Lellan's men were killed, and others taken prisoners, and the party compelled to retreat. It is said that only one Englishman fell, but commanders in all ages have minimised their losses. Be that as it may, the determined attitude of the defenders and the help they were likely to receive, decided the English commander on a retreat to Dumfries. He, however, denuded the district of stock, carrying with him, according to his despatch, no fewer than 2000 sheep, 200 cows and oxen, with 40 or 50 horses, mares, and colts. The people rose behind them on the west side of the Dee, and proceeded towards a place, then called "Forehead Ford," which, I think, may be identified with the present farm of Ford, near Bridge of Dee. The Galloway men must have been in considerable strength, as the Englishmen were alarmed to such an extent that they abandoned their sheep, and gave the charge of their "nowte and naggs" to the men who rode the worst horses. Sir Thomas was a cool and wary soldier, and sent thirty of his best men to meet the Galloway men, should they attempt to cross the river. He himself, with a strong party, remained to guard the standard, keeping themselves in readiness, if need be, to succour their companions. The Galloway men, however, did not venture to cross the river. Galloway, at this period, according to Buchanan, was struck with such terror that its chiefs, partly afraid of being deserted by the other landholders, vied with each other who should be the first to adhere to the English Government. As Sir Herbert Maxwell, in his "Dumfries and Galloway," says, Kirkcudbright, deserted on every hand, was compelled to come into the King's Grace, along with, among others, the Laird and Tutor of Bombie. The number of men accredited to Kirkcudbright was 36, and to the Tutor of Bombie 151. The

pledge for Kirkcudbright, described as a "pretty haven," was "Barnaby Douglas's son," described as worth nothing.

More than forty years later a new Meikle Yett appears to have been considered necessary. According to a minute of Council of 19th April, 1590, the building of the Meikle Yett was let to Herbert Gladstanes. The details are all carefully specified, and the height was to be such that "himself and his grey horse riding may not reik the hand to the pien stane thereof." The next we hear of the Meikle Yett is about a century and a-half later. In the Council minutes of 3rd September, 1739, we have a further reference to it. John Kerr, mason in Kirkcudbright, petitions the "Right Honourable the Magistrates and Town Council of Kirkcudbright for the sum of £6 11s 11d, the balance of an account for £12 7s 3d for having two years previously built and finished the port of the burgh on the same place where the old port called the Meikle Yett stood." The Council ordered the petitioner to produce his contract and acts of Council to which he ought to refer. Kerr expressed his surprise that he was ordered to do this. He was unable to do so. However, the past Bailies and great part of the past Council knew very well he was employed; "yea, they desired me to do the work, and engaged to pay me or see me paid." Kerr proceeds that the work testified for itself, and the account given in by him in his former petition "this day will stand tryall before any Corporation or quorum of crafts, and sure I ought (to receive) payment, as it could not be alleged I owe the town any sum, nor promised, nor was it in my power to do it gratis. Please, therefore," proceeds the earnest "cry and prayer," "to order me payment of the said balance, to prevent putting your past members, who engaged to see me paid, to further trouble. Your gracious answer is still humbly expected."

The Council's answer was the laconic one—" Adheres to the Inter Loquitor in the petitioner's petition this day." In 1771 the community petitioned to have it removed, and the Magistrates, "being of opinion that it was no longer required for defence, and that its removal would not only be an improvement to the street, but encourage building eastwards, granted the request." In consideration of the sum of ten guineas, and his engaging to erect a new house immediately to the north of where the gate stood, it was sold to Mr Freeland, a merchant, and, if I mistake not, also a magistrate, of the town. In fulfilment of the agreement, the house now occupied by Sheriff Napier was erected by Mr Freeland. It was used for many years as a branch of the Bank of Scotland, hence the name of Old Bank House. Mackenzie, in his "History of Galloway," says that two perforated stones in the pavement "are still visible, in which the pivots of the gate turn." These are still to be seen-one in front of Sheriff Napier's house, and the other in front of Mr Peter Comline's. One of the stones is a whinstone, and the other a Netherlaw sandstone. The yett, with its pillars and two globular ornamental stones, were removed about 1780, the arch stones being built over the burn at the east side of the churchvard. To judge from this arch, the yett would be about six feet wide. The pillars and stones were erected at the present entrance to the churchyard, to guard, after all the years of storm and strife, the peaceful "God's acre" on the hill.

Kirkcudbright in the Sixteenth Century. By Mr W. Dickie.

THE COMMON LANDS—ALIENATION OF BURGH PROPERTY— EXTENT OF THE TOWN.

In perusing the Town Council records of Kirkcudbright many cases come under our notice during the latter half of the sixteenth century in which portions of common lands lying within and around the town were parted with for annual considerations more or less onerous. Thomas Anderson, the Town Clerk, figures in a number of these transactions; one of the deeds conveying to him "all and haill thair common landis by and within the said burgh, betwix the Hie Street qlk passis fra the Marcat Croce of the samen to the port callit the Mekill Yet, upon the south pairt," excepting those portions which have already been conveyed to James Lidderdale of St. Mary's Isle and others. For this he is only to pay annually sixpence of "usual money." Andro Pauling, burgess, gets a conveyance of a "croft and pec. of land" in the south end of the burgh, and lying east of "the common streit qlk, passes fre the said burgh to Sanct Marie Isle," for five merks and an annual feu duty of twelve pennies. In 1581 the Council disponed to "thair nychtbour, Johnne Hendirsoun," a waste piece of ground betwixt the "Mlynburnes," on the east side of the common street, for 2s of ground annual, for the erection of a house; and he is taken bound to build in line with the mill wall. In February, 1584, a number of plots lying north and west of the "Moit," or Moat, are let in fen at 3s 4d each. In one case the length is specified at sixty feet. The Moat Well is also mentioned in the description of boundaries. On 11th February, 1579, a sale is made to Robert Hall, burgess, of certain "common land beneth the toun and at the buttis," as it shall be "proppit and markit" by certain persons appointed and sworn for the purpose. The price is to be forty merks. Of that sum, the Council assigns £20 to John Foster, a former Treasurer, in payment of a debt due to him; and ten merks to James Cant, "wardane" (who was also the Kirkmaster), in settlement of his claim, probably for arrear of salary. These payments absorb the whole sum. It would seem, therefore, that it was the pinch of necessity which compelled the community to part with so many slices of their birth right. An incidental reference in a court case to a private person, Hercules Hal, uplifting 30s yearly "maills of the Castledykes '' (16th Dec., 1579), shews that before the year 1572 the burgh had parted with this portion of their patrimony, of which they received a royal gift in 1509.

The Boreland farms were then, as now, one of the most important possessions of the town. They, as well as common lands lying around the burgh, were divided into "skairs," or plots of equal size, regarding which the original rule would seem to have been that they should be let annually to the burgesses; but with that persistent tendency to expansion that seems inherent in "the rights of property" those who were at first annual tenants subsequently secured long leases, and with the lapse of time acquired a prescriptive interest in their holding that put them almost on the footing of proprietors. Of the inconvenience arising from this state of matters, and the way in which it operated to the prejudice of other burgesses, we have evidence in the following elaborate minute of date May, 1580:—

"The qlk day the Provost, Bailzeis, Counsall, and communitie of the said burgh, being conveint in the tolbuith of the same, in ane assensit court, understanding that the common landis beneth the said burgh wir gevin be thame in feu to the

burgesses of the said burgh quha wir rentallaris of the same befoir, and als thair landis callit the Borelands wir set in lang takis to the said personis, albeit divers and sundrie of thame to quhome the samen wes gevin were depaupirit [became paupers] and becum unworthie to keip skat and stent [to bear the public burdens, and enjoy the privileges of burgess-ship] with the remanent nvtbouris of the said burgh, and that divers young men and others burgesses of the said burgh, quha were abill to sustene the chairges of the toun, wir be dispositioun of the saidis landis in manner foirsaid debaureit perpetuallie fra the saidis landis, and culd ressave na commodtie thairof, quhairthrow thay wir [compelled?] pairtlie to leif the said toun, to the greit discommiditie thairof, in suffering sik men as were nocht abill to underly and fulfill the charges to bruik the proffeit of the common landis, and sik men as wir abill thairfoir to want the said proffeit, and thairby to depart the said burgh, qlk feuing of the saidis landis thay culd not retreit nor annul, sa that samekill [so much] thairof as wes gevin to thame that wir nocht worthie thairof mycht be of new disponit to thame that wes abill and meit thairfoir; bot behovit to mak sum uthir remeid thairanent, and sa willing to recompens thame quha wantit with sum uthir landis nocht feuit nor set in lang takis, and knawing that na landis perteining the said burgh wir instantilie sa meit to be disponit to thame as the common landis of the said burgh callit the Mylnflat, qlk first behovit to be declarit common, and in the tounis hands, and that because it wes afoir set in tak to sum burgesses of the said burgh for certane yeiris, qlk will be sone expyrit, and cannot but [without] thair consentis be declarit common nor gevin in feu to na uthirs during the tak thairof: Thairfoir, for eschewing of the inconvenientis foirsaidis, thay altogidder in ane voce, without ony discrepance, hes declarit, and be this present act instantlie declaris that the saidis landis of MyInflat and the pertinentis as presentlie, notwithstanding the saidis takis thairof, commoun and in the tounis handis, and lesum to the toun to dispone the samen to quhatsumevir burgess within the said burgh thay pleis, but ony observatioun of the takis thairof set to ony of thame of befoir."

The following account of the riding of the marches, of date 4th May, 1597, gives a more detailed account of the burgh's landed possessions, viz.:—"The qlk day Williame Fullartoun,

ane of the bailyeis of the said burgh, accompaneit with ane guid pairt of the Counsall and communitie of the said burgh, past and perambulat the landis within thair teritoreis: And first to thair landis lyane benethe the said burgh, on the southe and west sydis thairof, merchand to the land of Sanct Marie Ile on the southe, the landis of Meikill Kirkland on the eist, and the sey on the west partis, qlk is devydit in fyftie skairis and set in few ferme to the burgesses of the said burgh for payment veirlie of ijs [2s] money for ilk skair: Secundlie, to thair landis callit the Mylnflat, lyand at the north pairt of the said burgh, merchand with the landis of Lochfergus on the northe and eist partis, and the sey on the west partis, qlkis lands [extend to] xxv skairs, and ar set in few ferme to the inhabitantis of the said burgh for the yeirlie peyment of ijs. of few maill for ilk skair thairof: And thirdlie, to thair landis of Boirlandis, merchand with the landis of Lochfergus, Lytill Stokartoun, and Culdoche, on the southe, eist, west, and northe partis, qlk also are devydit in fyftie skairis amangis the inhabitantis of the said burgh, and were set in takis to thame for the space of xix yeiris, quairof thair is bot ane yeir or thairby to rynn, for the veirlie peyment of xijs money of maill for ilk skair of the same: And fand that nathind was alterit or removit of the boundis and merchis of the saidis landis, boundit of auld tharto, but remaint still, as of befoir, sufficientlie merchit and proppit."

The manner in which the common good of the burgh was intromitted with aroused the suspicions of the Convention of Royal Burghs that it was not being "set to the best avail," as the expression then was; and they called for a strict accounting from the Kirkcudbright commissioner. Accordingly a statement of the burgh's sources of revenue, together with the manner in which these were set, was submitted to the Convention of 1612. So far as regards lands the list is not a correct one, or the process of alienation had gone on rapidly, for it is stated that there are no common lands pertaining to the burgh except the Borelands. These, it is further stated, are divided into a hundred skairs, and let at twelve shillings per skair; and it is explained that one half is under crop and the other half in pasture, "ay four yeirs about."

The Council in those days sometimes adopted rough and ready methods to obtain the money necessary for public

purposes. We have an example of this in connection with the plague or pest, which visited the town in 1585. On the 9th of March of that year (1586 according to our present reckoning) it was ordered for "paying of the clengeris thair feis awand thame be the toun'"—" clengeris' being "persons employed to use means for the recovery of those afflicted with the plague''—every burgess, tacksman, and possessor of the skairs of land of the Borelands, Milnflat, and "land beneth the toun'' were to pay two years' "maill," or rent of the said lands in advance. Little time was allowed them to make arrangements to meet this call, for the money was to be paid over to the collector "betwix and the morne at evin." In cases where payment is not made, the skairs are to be declared "vacand and in the tounis hands."

The descriptions of boundaries in the case of property transactions are interesting as helping us to a notion of the extent and form of the town at that period. "Common gaits," "common streits," or "hie streits" as they were synonymously called, ran from the Market Cross to the Moat, near the harbour; from the Cross to the Meikle Yett, or gate of the town, east of the Selkirk Arms Hotel; from the town to St Mary's Isle, by way of the Meikle Yett; another from the Cross to the Isle, and a "common vennel" branching off in the direction of the Isle, some way east of the Market Cross. The name of the Moat still survives, although its use is not apparent. It is probable that it had served a defensive purpose in connection with the harbour. This view is strengthened by the circumstance that the Convention of Burghs made a grant to the town in aid of the repair of the Moat and Haven.

THIRLED TO THE LAIRD'S MILL: MONOPOLIES.

On 15th November, 1580, we find this entry: "The Bailzies, Counsall, and communitie of the said burgh, at desyre of the Rycht Honbil. Thomas M'Clellane of Bombie [who was Provost in 1576; builder of the castle, father of the first Lord Kirkcudbright], oblisses thame to bring thair cornis, malt, and uthir stuffe to the myln callit the New Myln, and pay their multuris usit and wont, sa that the said myln be sufficient in wattir, warkmen, and all uthir necessaris, and [accessable?] to all the town requyring thame." And if the mill shall be found to answer these conditions—the matter being tried by "half ane disone of

the honest men of the said burgh "—they ordain that all malt and other stuff passing from the town to other mills "be eschaittit [i.e., forfeited], and lesum [i.e., lawful] to ony haiffand interest and apprehendane the same, to tak it; in doing of the qlk they sall incur na skaith."

This appears to be an instance of the Council using its monopoly-creating power to the personal advantage of one of its most influential members. We are less surprised to find a prohibition against competing with the ferryboat, for that belonged to the Council, and was a part of its revenues which was annually let. This is the Act of Council on that subject, dated 1st Dec., 1591: "It is ordaint that na boit be permitit to cary men or horse over the water bot the ferry boit allanerlie [i.e., only]."

Here is another prohibitive enactment, of date 12th January, 1587-8: "The Bailleis and Counsall hes statute and ordaint that nane on landwart, in ony tyme cuming, brew ony, except frie stallangeris, under the pane of v. lib. ilk falt." The "free stallangers" were persons other than freemen of the burgh, who were allowed for a small annual consideration to open stalls or booths for the sale of merchandise on market days.

THE CUSTOMS OF MINNIGAFF.

At Michaelmas, 1576, the whole small customs of the burgh "by [i.e., except] Monygeif," were let for a year to Robert M'Culloch, at a rent of twenty merks; and about the same time, it appears, Thomas Hall was "customar of Monygeif," holding the customs on lease at the yearly rent of "fyve punds usuall money." In 1579 the customs of Minnigaff were set to Johnne Foster for seven merks; and we find annual entries of their let, at varying sums. Minnigaff was at that time a place of more relative importance than it is now; and it was one of two burghs of barony which were in a manner feudatory to the royal burgh of Kirkcudbright; the other being Preston, now also decayed to the shadow of its former self. Minnigaff was a thorn in the flesh to the neighbouring town of Wigtown, which not only felt its dignity as a royal burgh hurt by the weekly market and annual fair which had been set up and prospered in this up-start village, but which found its customs revenue impaired from the same cause. What was the

nature of the customs levied by the superior burgh does not appear; but they could hardly have been of the nature of market dues, for Kirkcudbright joined with Wigtown in at least one of the complaints to the Convention of Burghs, which were of almost annual occurrence, against the infringement of the charter rights of royal burghs occasioned by the markets held at Minnigaff.

THE TOWN CHURCHES AND THE TOLBOOTH.

There were at this time two ecclesiastical buildings in the town itself-the church of the Greyfriars, attached to which had also been a convent, where the female school now stands; and St Andrew's Church, or the New Kirk, where the little Roman Catholic chapel and school now stand, behind the Court-house; and the church of St Cuthbert would be standing beside the burial ground still in use, the "Hie Kirkyaird," as it was then called. The churches have a curious and somewhat perplexing history in the years immediately following the Reformation. The magistrates had received from Queen Mary, in 1564, a grant of the Friars' Kirk, to be used as the parish church, and it continued to be so used until the present parish church was built; but in the year 1596 Thomas M'Clellan, of Bombie, the Provost, had received from King James a personal gift of the church and monastery, and proceeded to build the present Castle on a portion of the ground. He was also patron of the church of St Andrew's, and seems to have exercised a proprietary right in the building. In March, 1570, he disposed of both churches to the town, the price being two hundred merks and a hundred bolls of lime (the latter, it is understood, to assist in building the castle). Greyfriars' continued, as before, to be used as the parish church; but St Andrew's was turned to a baser purpose, being made to do duty in place of the recently demolished Ten years later we come upon an entry in the Council books which puts a different complexion on the transaction. It bears that Provost M'Clellan (who is here termed "the Richt Honn^{ll}.") had excambed the two churches with the town for a tenement called the Pesthous; but the transaction had never been completed by recording and the giving of seasin. To remedy this the town, of new, dispones the said tenement to the Provost, subject to an annual burden of £12, the property "to be halden of their sovrane lord in free burgage;" and he, on the other part, ratifies the conveyance to the town of the two churches, which are to be held of him in blanche, "for payment of ane rois [rose] at midsummer, gif it beis requirit." The former bargain may have fallen through from failure to implement its terms; or this second conveyance may be merely a colourable method of completing the title.

The neighbourhood of the tolbooth and quondam church had been in a very insanitary condition. The burgesses, we learn from a minute of February, 1579, were hardly able to get to it dry-shod, because of the mire and dubs; and Thomas Anderson, the Town Clerk, had undertaken to open up "the auld conduttis [passages or conduits] of the Watergait," and to mend "the passage and way to the said tolbuith;" in recompense for which services he received a conveyance of a rood of the "waist landis callit Poldryte and new kirkyaird," north of "the Hie Passage [street] qlk passis fra the Mercat Croce to the port callit the Mekill Yet," subject to an annual rent of £12. A proper tolbooth was erected soon afterwards, beside the market cross, and it is still standing. The Convention of Burghs, in 1591, voted a sum of £20 to aid in its erection, and exempted the burgh from sending representatives to its sittings for the space of three years, the outlay thus saved being, presumably, applied to the same purpose.

BURIALS IN CHURCH.

Burial within the walls of the church had up till Reformation times been a common practice, and it was one that was clung to with something like superstitious tenacity. Here is a minute, of date 16th May, 1580, forbidding its longer continuance:

"The qlk day the Provost, Bailzeis, Counsall, and communitie of the said burgh, understanding perfytelie that the auld kirkyaird appointit be thame for buriall of the personis deceissand within the said toun and parochin is sufficientlie biggit and dykit, and sa ordainit yeirlie to be uphauldin for the same effect: Quhairthrow bestiall is debarrit fra passing thairin, and sa is decent and honest for the said buriall, and that be the lawes and actis of the realme the kirk aucht to be haldin void of ony buriall, and the samen to be maid in the kirkyaird

appointit thairto as said is: Thairfoir statutis and ordains that na person nor personis be bureit or eirdit [earthed?] in the paroche kirk of the said burgh, sumtyme callit the Freiris Kirk thairof; and gif ony contravenis the samen, ordains the Kirkmaster to poynd the executors of the defunct persone bureit thairin or the [effects?] of the defunct in the said kirk for the soume of x lib (£10) money; and he to keip the samen and be anserabill thairfor to the toun."

House Building.

Although timber was commonly employed in the construction even of the better class of houses, building material of a more durable kind was also in use. We find occasional mention of payments to masons. One of that craft received 25 merks for building a house. Another was feed (in April, 1580), at the rate of 20s yearly, to uphold the tolbooth in slates. And a still earlier tolbooth had been a stone building, for on 22d January, 1577, the Council granted an acknowledgment to James Lidderdale of £110 paid to them for a piece of land and "for the stanis and tymer of the auld tolbuith."

THE REV. JOHN WELSH.

In a minute of date 2d April, 1600, we have incidental mention of the Rev. Mr Welsh, son-in-law of Knox, and for some time minister of Kirkcudbright, in the capacity of defender in a civil action before the magistrates. "The saidis Bailleis decernis Mr Johnne Welshe, minister, pnt. [present] in jugement. be his awin grant, to pay to Williame Fullartoun, burgess thairof, xx lib. money, for the Witsonnday and Mairtimas maill of his house he occupyit in anno 1599 yeir, with ijs. expenses."

THE MINISTER'S STIPEND: A NOTABLE MINISTER.

In 1602 the Council stipulated to pay to a successor of Mr Welsh, the Rev. Robert Glendinning, an annual stipend of a hundred pounds. This, no doubt, would be supplemented by the heritors of the landward part of the parish. At least we know this was the case in 1692, when the burgh's share of the stipend had increased to £183.

This same Robert Glendinning was a man who took a decided stand in troublous times. After he had been settled

in Kirkcudbright for more than thirty years he refused to obey an order of the Bishop of Galloway, and the wrathful prelate issued a warrant for his incarceration. His son was at this time one of the bailies, and the bench withheld the civil sanction to the ecclesiastical decree. This brought down the bishop's wrath on the magistrates of the town, and led to their own imprisonment, apparently with the sanction and by the sentence of the Commissary of Kirkcudbright, in Wigtown Jail; a proceeding which led the Estates in 1645 to issue a commission for the trial of the "insolent persons" who had thus treated the magistracy. The son, William Glendinning, rose from the position of Bailie to that of Provost and M.P., and he took a prominent part in the stirring politics of the time, being one of the Scotch Commissioners who were sent to London to endeavour to prevent the execution of Charles I.

THE RESTORATION.

One of the latest entries in the volume now under notice is an elaborate and solemn oath, signed by John Inglis, Provost; John Moir, Bailie; and several other councillors, deacons, and officials, pledging them to remain faithful to the true Protestant religion, as set forth in the Confession of Faith, and to render obedience and undivided allegiance "to my most gracious sovrane, Charles the Second," then lately called from exile to the throne. Read in the light of historical events, the juxtaposition now seems strangely incongruous.

Incorporation of the Trades.

The minute of 4th October, 1598, contains the Act of Council conferring corporate rights on the Trades: "The saidis Provost, Bailleis, and Counsall, in respect of the supplicatioun gevin befoir thame be the craftismen qlkis ar burgesses of this burgh, anent the hurt susteint be thame be the resorting of unfreman craftismenn in this toun: hes thairfoir grantit to thame deaconis of thair cheissing, to put order thairanent, according to the use of uthir burrowis; and the saidis deaconis to be anshirabill for ilk fault to the toun committi be thair craftismen." This privilege would appear, however, to have fallen into disuse; for a subsequent Act of the Town Council, passed in 1681 (and which is quoted in the appendix to the "History of Galloway,"

with confirmation by the Lords of Council and Session), conferred on the trades the right of electing deacons, as for the first time; the reason alleged on this occasion being that insufficient work was put out by many craftsmen and better supervision was necessary.

A NOTE OF LUXURY.

The services of the dyer, or "litstar" as he was then called, seem to have been much in request, if we may judge from the number of accounts which one "Wm. Quhitford," of that craft, sought to recover, for the "litting" of "blew woll" and "reid woll." The hair powderer was another minister of fashion who found custom, more or less extensive. On 3d May, 1581, William Wilson, "in Sanct Johnne's Clauchane," as surety for James Wilson, "powderar in Kirkcudbryt," is found indebted to John Johnstone, Dumfries, 24 lbs. weight of fine powder, and 12 lbs. of another quality.

A MARRIAGE CONTRACT.

In 1580 Janet Lintoun, widow of William Hay, and now Mrs Dungalson, is the pursuer in an action of a rather curious She sues James Lidderdale of St Mary's Isle for the sum of £40, being half the expense incurred in "lofting" or putting a second storey upon a portion of "the Place," or mansion house, agreeably to a bargain made in the pursuer's own "buith," or shop, in or shortly after the year 1572. had undertaken "to loft the hall, the laich hall, and the chalmer of the Place;" and she now set forth that she had spent on this work, in buying timber and paying "warkmen's feis," the sum of fourscore pounds, of which defender was due to her the half. Lidderdale, to whose oath the claim was referred, "made faith that he promeist the same, bot conditionallie, gif his sone, Jon Lidderdaill, suld haif completit marriage with umall Agnes Hay, hir dochtar, alk wes necht, becaus of hir deceis, and sa he wes nocht undir forder promeis."

EXTRACTS RELATING TO GALLOWAY FROM THE REGISTER OF THE GREAT SEAL OF SCOTLAND. Translated by Dr E. J. CHINNOCK.

"1458. 22nd year of James II. At Edinburgh. 7 October. —The King has confirmed to the knight, William Monypeny of Ardweny and Conkirsalte, and Katerine his wife, the lordship land of Buttilis, together with the enclosure as far as the castle, the lands of Kirkenan, Barloghane, Barnahasteris and Donvall in the barony of Buttilis, in the Stewartry of Kirkeudbrycht, which the said Wil. and Kat. have resigned, to be held by the said Wil. and Kat. and either of them surviving and the heirs lawfully begotten between them, failing whom, by the lawful and nearer heirs of Marjory Stewart, grandmother of the said Katerine, whomsoever; one grain of rice to be paid annually on the feast of St. Peter which is called a vincula, at the castle of Buttilis, in the name of white farm."

"1469. 9th. year of James III. At Edinburgh. 27. Janv. -The King has confirmed the charter of James M'Dowale, Lord of Spottis [by which he granted to Dionicius de Carnis, his brother, for his good services, help, &c., the lands of Gaitgil, otherwise called Litiltoun, amounting to 3 merks of lands of ancient extent in the parish of Borg in the lordship of Galloway, stewartry of Kirkcudbricht, sheriffdom of Dumfres-to be held by the said Dion. & the male heirs of his body lawfully begotten; failing whom, by John de Carnis of Orchardtoun & his heirs whomsoever, by the said James M'D. of the King. One red rose to be paid to the King at the chief messuage of Gaitgil, in the name of white farm. Witnesses:-Rob. Heris of Kirkpatrick-Yrngrav, Geo. Heris, his son & heir apparent, John Rerick of Dalbaty, Fergus Rerik, his son & heir apparent, And. M'Dowale, son of the said James M'D., & his heir apparent, John Bel, notary public. At the burgh of Dumfres. 18 Jany. 1467."]

The following refers to the Castle of Threave:—"1477. 18th year of James III. At Edinburgh. 28 October.—The King has appointed Robert Carlile, son of John, Lord Carlile—warden of the Castle of Traife for the ten years next following, with the power of substituting constables, &c., with all the feus, advantages, and profits as the said John had previously for the guard of the said Castle, namely the two granges of Keltoun and the Treife, and the mill of Keltoune."

"1491. 3rd year of James IV. At Edinburgh. 22 March.

—The King has granted to Thomas Maclellane of Bondby, his heirs and assigns, the land and holding, with the crofts belonging to the same called the Dowcroft, in the burgh of Kirkcudbrycht, formerly belonging to Peter Kessok, and then to the King, on account of bastardy, through the decease of the said Peter."

"1492. 4th year of James IV. At Edinburgh. 20 February.—The King has confirmed the charter of the provost, baillies, and community of the burgh of Kirkcudbrycht [by which they demitted to Thomas Makclellane of Bondby, his heirs and assigns, to fee farm the liberty of the water commonly called the Kirkburne, until it enters the water of Dee, with permission to build a mill and a sufficient mill-house on the north side of the said water, and also to build a fuller's mill and a house for the same upon the said water wherever it seems best, with permission to dig an aquaduct; with one croft, commonly called the Clerkhill, on the south side of the said water, between the King's road on the one side and the road which leads to the parish church of Kirkcudbricht on the other side; and with another croft, commonly called the Crukit Akir, between the church land of St. Cuthbert on the east side, and the commonland of the said burgh on the west side and the lands of Lochfergus on the north side; 40 shillings to be paid yearly, and all the burgesses of Kirkcudbricht to have their woollen cloths thickened and cut in the said fuller's mill for half the price received from others. Witnesses:-John Carnys of Dalbaty, Alan Makclellane, Tho. Makeffet, and Tho. Walker. At Kirkcudbricht, 6 February, 1491 ''7.

"1508. 20th year of James IV. At Edinburgh, 24 February.—The King for good service has granted to his familiar servant George Bosuell and his heirs and assigns, the holding below the burgh of Kirkcudbrycht on the west side of the King's road and the croft of arable land called the Dowcroft, at the east end of the said burgh, below the liberty of the same, which indeed formerly belonged to Peter Kessok, son of Patrick Kessok, burgess of the said burgh, and then belonged to the King, on account of the said Peter's bastardy, who died without lawful heirs. He has also granted to the same George the farms, etc., of the elapsed terms, together with all the goods of the said Peter."

"1510. 22nd year of James IV. At Edinburgh. 26 February.—The King has demitted at fee farm to Patrick Forestare, alderman, William Inglis, and John Maklellane, bailies, and all the community of the burgh of Kirkcudbrycht and their successors, the lands called the Castell manys of Kirkcudbrycht, then amounting to 40 shillings, near the said burgh, in the Stewartry of Kirkcudbricht, in the sheriffdom of Drumfreis; 40 shillings, and 20 shillings beyond, to be paid in increase of the Royal rental."

(Notice that in this document the Provost is called "Alderman.)—E. J. C.

5th April, 1907.

Chairman—Mr Wm. M'Cutcheon.

Scottish Mermaids. By Mr R. J. Arnott, M.A.

Wherever, in Europe at least, is to be found a people upon whom superstition and a fear of the supernatural have a hold the mermaid myth is sure to have a place in the popular traditional and legendary lore. Nor, curiously enough, are mermaids confined to the sea-board, for they have their haunts on the banks of rivers, and here and there on the shores of inland lakes, as well as in the caves or by the rocky bays and sandy beaches of the coasts. I have no intention of seeking to arrive at the origin of the myth, or of inquiring what was the name of the first mermaid, or where she was to be found, although it might not be an altogether impossible task; any more than, in connection with individual local legends, of speculating upon a possible explanation of how they came to exist or whether any substratum of truth may perchance underlie them. There is no particular occasion for dipping farther into classical mythology than to remark in passing that the Sybils, the Gorgons, and the Syrens of the ancient Greeks and Romans all had certain marked features in common, beauty of face and form and profusion of locks being as inseparable from them as from the more modern mermaid. While touching on these features, it may be noted that not only did both syrens and mermaids once have wings, but they did not always have tails. It is not necessary to turn to any of the "Just-so Stories" to learn how the mermaid lost the one or came by the other of these useful and ornamental appendages; for a full and faithful account of both phenomena may be found by those who care to put themselves to the trouble of a little research in the writings of various learned authors, whose earnestness of purpose and belief in the truth of what they are narrating are as far removed from the cheerful inconsequence of Mr Kipling's tales as are his object and style and treatment differ from theirs. It is not without significance of the persistency of the myth, and the perennial power it possesses of appealing to the fancy, that, even in these days when stolid matter-of-factness threatens to blight so much of the fruit of the imagination, the mermaid is still found capable of playing a leading part in the popular reading, just as in the literature of Greece and Rome. For, quite apart from the field of poetry, has not Mr H. C. Wells succeeded in giving us some idea of the perplexities and complications that are liable to arise when a "sea-lady" happens to find her way on shore?

The close similarity existing between the mermaid legends of different times and of various parts of the continent and those of our own islands is, of course, nothing to be surprised at. They all belong to that great body of folklore which is the common property of so many nations and peoples, owing to its having been in the possession of the original racial stock and becoming, through process of time, indigenous to the soil wherever members or offshoots settled.

Before proceeding to deal in detail with Scottish mermaid legends I may be permitted, in a few more introductory words, to indicate the general character of the various forms in which the myth prevails.

The mermaid of whom Tennyson has sung is, it is to be feared, a somewhat elementary, unsophisticated damsel in comparison with the most of her kind:—

"I would be a mermaid fair.

I would sing to myself the whole of the day;
With a comb of pearl I would comb my hair;
And still as I comb'd I would sing and say,
'Who is it loves me? who loves not me?'"

Charming, indeed, she is, but she is hardly the mermaid of the

popular legend. Unfortunately for those mortals whose lot it has been to make the acquaintance of these sea-maidens, they are seldom content that

"All the mermen under the sea Should feel their immortality Die in their hearts for the love of me."

More usually their song is that of the syrens of old-

"Mariner, mariner, furl your sails,
Come hither to me and to me:
O hither, come hither, and be our lords,
For merry brides are we:
We will kiss sweet kisses and speak sweet words:
O listen, listen, your eyes shall glisten
When the sharp clear twang of the golden chords
Runs up the ridged sea.
Who can light on so happy a shore
All the world o'er, all the world o'er?

Whither away? listen and stay: mariner, mariner, fly no more."

But it is little wonder that the mariners "whisper to each other half in fear "when they hear that "shrill music." For while by reason of their partly human form these ocean dwellers are fated to seek intercourse with mortal men and women, it is seldom to the advantage of the latter that this should happen. Even where there appears to be love for love's sake, it never lasts. A mermaid may become the wife of a human being and make her home with him on land, but sooner or later the time comes when she cannot resist the temptation to return to her native element. And where a mortal is induced to consent to marriage with one of the sea-folk something generally happens after a while to sunder what may have proved to be a happy enough union. Such is, for instance, the case pictured in Matthew Arnold's beautiful poem, "The Forsaken Merman," with its haunting refrain:—

"Here came a mortal, But faithless was she! And alone dwell for ever The kings of the sea"—

where "the sound of a far-off bell" at Easter-time is sufficient to bring about the return of the wife and mother to her kinsfolk.

Occasionally the mermaid will use her supernatural influence for the protection or the advantage of a human being; but more generally her appearance or intervention forebodes some impending disaster to those to whom she appears, and her purpose is rather to lure them to destruction than to warn them of the danger in which they stand.

Of most of these aspects of the mermaid's mission and character the following individual legends relating to different districts of Scotland will be found illustrative.

First let me cite, chiefly because of its typicalness of the nature and habits of the legendary mermaid, an example with which you are probably all familiar. It is the "Mermaid of Galloway," of whom we are told, in an almost faultless imitation of the old ballad, by Jean Walker, who was born in the village of Preston Mill, Kirkbean, and lived within sight and sound of the Solway until her marriage with the stonemason-poet, Allan Cunningham. As is the case with many others, I fancy, of these tales, the legend only seems to exist, or at least to survive, in the poem:—

"There's a maid has sat on the green merse side These ten lang years and mair; And every nicht o' the new moon She kames her yellow hair.

And aye while she sheds the yellow burning gowd, Fu' sweet she sings an' hie,
Till the fairest bird that wooes the green wood
Is charmed with her melodie.

But wha e'er listens to that sweet sang, Or gangs the dame to see, Ne'er hears the sang o' the laverock again, Nor wankens an earthlie e'e.

It fell in about the sweet simmer month,
I' the first come o' the moon,
That she sat o' the tap o' a seaweed rock,
A-kaming her silk locks doon.

She kamed her locks owre her white shoulders, A fleece baith bonny an' lang; An' ilka ringlet she shed frae her brows, She raised a lightsome sang.

'I hae dwelt on the Nith,' quo' the young Cowehill,
'Thae twenty years an' three;
But the sweetest sang e'er brake frae a lip
Come through the greenwood tree.

'O, is it a voice frae twa earthlie lips
Whilk made sic melodie?
It wad wyle the lark frae the morning lift,
An' weel may it wyle me!

'The simmer dew fa's soft, fair maid, Aneath the siller moon; But eerie is thy seat i' the rock, Washed wi' the white sea foam.

'How rosie is thy parting lips, How lilie-white thy skin; An' weel I wat thae kissing e'en Wad tempt a saint to sin.'

Then took she up his green mantle,
Of lowing gowd the hem;
Then took she up his silken cap,
Rich wi' a siller stem;
An' she threw them wi' her lilie hand
Amang the white sea faem.

She took the bride-ring frae his finger, An' threw it in the sea: 'That hand shall mense nae ither ring, But in the will o' me.'

She faulded him in her lilie arms,
An' left her pearlie kame;
His fleecy locks trailed owre the sand,
As she took the white sea faem.

First raise the star out owre the hill, An' neist the lovelier moon; While the beauteous bride o' Gallowa' Looked for her blithe bridegroom."

Fortunate, it would seem, then, is he who can stand the sweet temptation. Narrow enough was the escape of the young laird of Lornty, in Perthshire. Riding home late one night, accompanied by his man, he heard what sounded like cries of distress from the direction of a loch near at hand, which lay hidden in a wood. Making his way quickly to the spot, he saw in the water a beautiful young woman, apparently in the last stages of exhaustion. Faintly she called for help, appealing to him by name. Without hesitation he plunged into the loch and was about to catch hold of the maiden by her long yellow locks, that "lay like hanks of gold upon the water," when a warning cry

from his man arrested his action. "Bide, Lornty," he shouted, seizing his master by the arm and dragging him to the shore, "bide a blink; that waulin' madam was nae ither—God sauf us—than a mermaid." Fortunately the laird realised his danger in time. For as he prepared to mount his horse and ride off the woman rose in the water and addressed him in tones full of anger and baffled hate:—

"Lornty, Lornty,
Were it na your man,
I'd gart your heart's bluid
Skirl in my pan!"

That, however, the allurements of the mermaid do not always entail the ruin of their victims we are reminded by the story of Macphail of Colonsay and the mermaid of Corrievrekin (between the islands of Jura and Scarba), which Leyden adapted in his ballad, entitled "The Mermaid," from a Gaelic tradition. One day when Macphail is out in his boat there comes—

"Floating o'er the deep
The mermaid's sweet, sea-soothing lay,
That charmed the dancing waves to sleep
Before the bark of Colonsay.

That sea-maid's form, all pearly light, Was whiter than the downy spray, And round her bosom, heaving bright, Her glossy, yellow ringlets play.

Borne on a foamy-crested wave, She reached amain the bounding prow, Then, clasping fast the chieftain brave, She, plunging, sought the deep below."

He is carried down into a coral cave, and the mermaid asks him to forget his maid of Colonsay and marry her. At first Macphail refuses, but in a short time he yields to her entreaties. They live happily together for several years, in the course of which five children are born to them. After a while, however, Macphail begins to tire of his life beneath the waves, and prevailing upon his consort to carry him near the shore of Colonsay, he escapes to land.

"And ever as the year returns,
The charm-bound sailors know the day,
When sadly still the mermaid mourns
The lovely chief of Colonsay."

One peculiar power the mermaid of Corrievrekin possessed was that of laying aside at will her "scaly train;" only when she did divest herself of it she became so wild and ungentle in her bearing that means had to be taken, for obvious reasons, to prevent her lover from coming into her presence whenever the transformation took place.

Occasionally, as has been remarked, but not often, the appearance of a mermaid brings good fortune to those who encounter her. One Galloway mermaid is related to have come across a youth bewailing the illness of his sweetheart, who was suffering from consumption. Taking compassion on him, she cheered him with the adjuration:—

"Wad ye let the bonnie Mary dee i' your hand, And the mugwort flowering i' the land?"

The lover followed her advice, and the restoration of the girl's health was effected by the administration of the mugwort (which, it may be explained, was supposed to be especially potent for the cure of ailments and diseases, even casting out madness, if gathered on St. John's Day).

A similar reminder, but one which, alas! came too late, was given by a mermaid who rose out of the Clyde, above Port-Glasgow, as the funeral of a young woman who had died of consumption was passing along the high road by the side of the river:—

"If they wad drink nettles in March,
And eat muggins in May,
Sae mony braw maidens
Wadna gang to the clay."

Generally when a mermaid places her knowledge at the disposal of a mortal it is in return for some service rendered to her. One day some Shetland fishermen out at the "haaf" fishing found a mermaid instead of a fish caught on one of their hooks. When dragged on board the boat she pleaded hard to be set free, promising in return that anything they might wish for would be granted them. This seemed a good enough bargain, and the mermaid was returned to her native element. As she was disappearing she sang:—

"Muckle guid I wid ye gie,
An' mair I wid ye wish;
There's muckle evil in the sea:
Scoom weel your fish."

The skipper, thinking he was being merely jeered at for his pains, became very angry, and ejaculated—"Cheated, and by a mermaid!" Only one of the crew of the "sixern" paid any heed to the words of the mermaid. Accepting them literally, he "scoomed weel" his fish, with the result that he discovered among the "scoomings" a valuable pearl, for which he obtained a sum that made the voyage a highly profitable one.

Sometimes the good offices of the mermaid are to be purchased only at the cost of the performance of some feat of not a little difficulty. Hugh Miller tells a story of the Cromarty district in which such a task is required. Like Proteus, in classical mythology, the mermaid in question exerted the power she possessed by virtue of her connection with the invisible world, only when compelled to do so. Should she fall into mortal hands and be overpowered, her release must be purchased by the granting of any three wishes her captor might frame, concerning either his own fortunes or those of his friends. It was seldom, however, the opportunity came the way of any man, for her strength was such she generally emerged victorious from the struggle, and succeeded as well in carrying her assailant with her into the sea.

Early one morning John Reid, a young Cromarty shipmaster, was strolling aimlessly along the shore thinking moodily how badly his suit was faring with Helen Stuart, and how poor was the prospect of its happy issue. Suddenly his steps were arrested by the low notes of the sweetest singing he had ever heard. After listening for a moment or two, he crept noiselessly forward, and on turning the corner of a cliff he saw the musician, "apparently a young girl, who seemed bathing among the waves, and who was now sitting half on the rock, half in the water. Her long vellow hair fell in luxuriant profusion on her snow shoulders, and as she raised herself higher on the cliff, the sun shone on the parts below her waist with such dazzling brightness that the sailor raised his hands to his eyes, and a shivered speck of light, like the reflection of a mirror, went dancing over the shaded roughnesses of the opposite precipice." Then, realising that this was none other than the mermaid of whom he had heard so much, John dashed forward and seized her. Sturdy was her resistance, and a desperate struggle ensued; but eventually the mermaid had to yield. The price she offered for her freedom was that which John had heard tell of, and he at once stated the "wishes three," the fulfilment of which he desired. The first was that neither he himself nor any of his friends should perish by sea; the second, that he should be uninterruptedly fortunate in all his undertakings; the third wish he never communicated to anyone except the mermaid—and yet, somehow, nobody ever failed to guess it! These stated, "Quit and have!" exclaimed the mermaid, and as he released his hold, she sprang into the sea. John was soon able to put the genuineness of her promise to the test. Continuing his walk, he came upon Helen Stuart reclining on the grass, and setting himself beside her, he pursued his wooing with such success that not long afterwards she became his bride. And the mermaid proving as good as her word in every particular, it is needless to say that they lived happily ever afterwards.

The more terrible side of the mermaid's character is nowhere more grimly illustrated than in another of Hugh Miller's northern legends. Where the parish of Tarbat borders on that of Fearn is situated Loch Slin, "a dark, sluggish sheet of water, bordered on every side by thick, tangled hedges of reed and rushes." The very atmosphere is pervaded with the uncanniness of the story. A little girl from a cottage some distance off was passing by the loch one evening on her way home, just when the dusk had begun to draw round its shores, when she heard a strange sound as of continuous knocking. Then she discovered what seemed to be a tall female standing in the water, by the edge of the loch, engaged, apparently, in beating clothes on a stone with the sort of bludgeon still (or at least in Hugh Miller's time) used in the north country for the purpose. Something told the girl that this must be the mermaid of Loch Slin, of whom such eerie tales were told round the fires of a winter's night, and terror-stricken she took to her heels. But as she hurried past she could not help noticing that the woman "seemed to ply her work with a malignant pleasure, and that on the grass plot directly opposite where she stood there were spread out as if to dry thirty smocks and shirts all horribly dappled with blood." Breathless and horrified as she was, the girl was still able to relate her adventure when she arrived home, and there was much speculation as to what this strange spectacle might portend. It was but in keeping with the reputation of the mermaid that it should imply some impending calamity. This surmise proved only too true. On the following

Sunday a terrible and mysterious explosion shattered the ancient Abbey of Fearn, bringing down the ponderous stone roof among the worshippers, and burying nearly half of them in the ruins. In all, thirty-six persons were killed on the spot, and many more were so frightfully injured that they never recovered. Among the victims were several relatives of the girl who had heard the uncanny knocking and witnessed the grim employment of the mermaid of Loch Slin.

There is often a vindictiveness, too, about the mermaid's nature, that leads her to wreak a terrible vengeance upon those who do her an injury or thwart her will or cross her path in any way. Close to the old house of Knockdalion, near the water of Eirvan, there used to be a block of stone on which a mermaid would sit at nightfall for hours at a time, singing her songs and combing her yellow hair. One day, however, the mistress of Knockdalion took it into her head that the singing was annoying her child and keeping him from sleeping, and she had the stone broken to pieces. Great was the mermaid's grief and anger when she appeared that night and found her favourite seat was no longer there. And this was what she sang:—

"Ye may think on your cradle—I'll think on my stane, And there'll ne'er be an heir to Knockdalion again."

Soon after the cradle was found overturned, with the baby dead beneath it. And the mermaid's prophecy proved only too true, for the family became extinct with that generation.

One day some fishermen from Quarff, on the south-eastern coast of Shetland, caught a mermaid on one of their hooks. On seeing what was the nature of their prey, one of them drew his knife and stabbed the mermaid in the breast; whereupon the hook gave way, and she sank. Thenceforward the fisherman in question never prospered, and till the day of his death he was haunted by an evil spirit, in the form of an old man, who used to say to him—"Will ye still do such a thing, who killed a woman?"

Another Shetland story is of a somewhat similar character. A young fisherman one day caught a seal, which he skinned in the usual fashion, afterwards tossing the carcase into the sea. The animal, however, had only been stunned, and very soon revived. He naturally began to feel very cold in the absence of

his outer covering, but what most made him disconsolate was the thought of his forlorn appearance. A mermaid who had observed the incident took pity on his plight, and her efforts to restore to him his lost skin resulted in a sad catastrophe. The mermaid became hooked on the fishing line of the boat to which the captor of the seal belonged. Although the latter, his conscience smiting him for what he had just done, pleaded for the release of the mermaid, she was hauled on board and placed in the bottom of the boat on the sealskin. In a few minutes a sudden squall arose and overturned the boat, drowning the whole of her crew. The seal was able to recover his skin; but, alas! he had to lament the loss of the friend through whose agency this was effected, for the mermaid had become so exhausted by her struggles that she was at her last gasp when she was precipitated back into her native element. Ever since this happened, the legend has it, the seals have constituted themselves the special guardians of the mermaid race.

A still closer relationship, however, than is generally recognised, subsists between the seals and the semi-human denizens of the ocean. In Orkney and Shetland "selkie" is the popular name for the seal; and those of the larger species are often called "selkie-folk," because they are supposed to have the power of turning into men and women. According to one statement, the original "selkie-folk" were fallen angels, who were condemned to this condition because of some fault, not serious enough to necessitate their consignment to the infernal regions. According to another version, they were human beings who, as a punishment for some wrong committed, were condemned to assume the form of the seal and to live in the sea, being only allowed to revert to their human character at certain periods and conditions of the tide, when they were on dry land. When they have doffed their sealskins, these "selkie-folk," of both sexes, are said to be particularly striking for their beauty of feature and fairness of form, and sad havoc have they been known to play with the affections of the sons and daughters of the coast. It is believed to this day in some parts of the islands of the north that a certain horny growth on the palms of the hands and the soles of the feet denotes descent from one of the "selkie-folk," this being the result of an attempt to cut away the webbed membrane appearing between the fingers and toes of the original

offspring. There is, by the way, a beautiful legend that when a young and fair maiden is lost at sea she is not drowned, but taken captive by the "selkie-folk," and becomes the bride of one of them. One curious characteristic about these creatures is that they are never known to appear alone (as is almost invariably the case with the mermaid), but always in groups, basking in the sunshine or gambolling about on some sea-surrounded skerry, with their sealskins lying beside them on the rock. The moment the alarm is given of the approach of anyone, they make a dash for their furry garments, and donning them, are immediately seals again, and plunge into the sea and make off.

A typical story of an encounter with the "selkie-folk" and what came of it is that of the guidman of Wastness, in Shetland. This young fellow, who had successfully withstood the blandishments of the maidens of the country-side, and had escaped the toils of their mammas, one day came upon a group of "selkie-folk" sporting on a rock by the shore. Creeping forward, he secured the sealskin nearest him, before its proper owner could reach it, and set off home with it over his shoulder. Before he had gone far he heard a pitiful wailing behind him, and looking round, saw a beautiful girl following him, weeping dolefully.

This, as he rightly conjectured, was the one of the "selkie-folk": whose sealskin he had seized, and who was unable to escape owing to the want of it. Timorously she approached, and tearfully she begged the restoration of property so necessary to her. The young crofter, struck by her beauty and winsomeness, refused to meet her wish unless she consented to become his wife. After some persuasion, he succeeded in wringing from the sea-maiden a reluctant consent, and she accompanied him home. A thrifty, frugal, and kindly goodwife, too, did she turn out, and the birth to them of seven children—four boys and three girls—seemed to leave nothing lacking for her happiness. But often the mother would turn away from her children and gaze with a longing, far-away look in her eyes, at the sea. The sealskin she had never seen since the day she came as an ocean bride. One day when her husband and eldest sons were away at the fishing, and she was left in the house with only the youngest child, who had been ill, an overpowering desire came over her. High and low she hunted for the missing skin, but she was unable to find it. She was on the point of giving up the search in despair, when the child said she knew where her father kept an old skin bundled up. Sure enough, this proved to be the identical article for which she was seeking, and slipping away from her child with it clasped close in her arms, she made quickly for the beach. Arrived at the water's edge, no time was lost in putting on the skin, and with a glad shout she sprang into the sea. Swimming rapidly towards a group of seals not far distant, she was greeted with warmth on her return to her kith and kin, the demonstrations of a large male seal which had been often noticed in the neighbourhood being particularly marked. Just then the guidman happened to be returning from the fishing, and as his boat sailed past what was his astonishment to hear himself addressed as follows:—

"Guidman o' Wastness, fareweel tae dee! I liket dee weel; doo were guid tae me. But I loo better my man o' da sea!"

When he arrived home he found it was no trick that was being played upon him; and what his youngest child had to tell soon enlightened him as to the manner in which he had lost his helpmeet. Distracted, he haunted the sea-shore for several days and nights; but never a trace did he again see of his "selkie" wife.

A story of a different kind is that relating the experience of a fisherman from Papa Stour who landed on the Ve Skerries with some others to secure some seals. A number had been stunned and skinned, when the rising of a tremendous swell caused the men to dash for their boat. In the hurry, one man was left behind. Realising that he had been deserted by his comrades, he returned to the spot where the carcases of the seals had been left lying. There, to his astonishment, he found what appeared to be a large number of human beings, busy attending to some others who lay on the ground. It was the "selkie-folk" who had come to the rescue of their stunned companions. plight of the latter, even when they had recovered from their swoon, was a sad one, for the fishermen had not forgotten the skins in their haste. Instead of the marooned seal-hunter being, as he had expected, set upon by the "selkie-folk" and put to death for what had taken place, he was courteously approached and questioned concerning the possibility of the recovery of the skins. Ultimately a bargain was struck. One big seal, named Gioga, consented to convey the man to the mainland provided he would undertake to have them returned in as short a time as possible. Gioga even allowed him to cut holes in her shoulders and flanks for his hands and feet, to prevent his slipping off her back. In this fashion the voyage to Papa Stour was safely accomplished; and the Shetlander did not fail to fulfil his part of the bargain in securing the restoration of the captured skins. The truth of this tale is vouched for by the islanders by the fact that some time afterwards the body of a large seal which was washed ashore in that district was found to have holes cut in the skin corresponding to those spoken about by the fisherman in question.

We meet with a variant of the "selkie-folk" legend on the northern mainland. The story is told concerning a fisherman and seal-hunter who lived not far from John o' Groat's House. One day on returning home he was summoned by a stranger to accompany him to a person who was desirous of bargaining with him for sealskins. Mounting the horse that was standing at the door they rode till they came to a steep precipice. There they dismounted, and immediately the stranger seized the fisherman and leapt with him into the sea. How far they sank he could not tell, but ultimately they came to a door in the cliff. Entering, they came into the midst of a large assembly of "Roane" or seals, who were speaking and acting like human folk, but seemed very sad; and to his astonishment the fisherman perceived that both he and his companion had the appearance of seals themselves. The production of a large knife by one of the seals threw the hunter into a great state of fear, and his panic was in no wise diminished when he recognised it as one belonging to himself, which he had lost that very morning after stabbing a seal, which had escaped. He was assured, however, that he was in no danger. His guide explained that the seal that had been stabbed was really his (the guide's) old father, and he was at that very moment lying dangerously ill in an adjoining apartment. What the hunter had been brought for was in order that he might lend his aid towards bringing about the recovery of the invalid. When taken into the presence of the latter, he at once recognised him as the seal that had escaped him in the morning. He was now asked to cicatrise the wound he himself had inflicted

—a tremendous cut in the hindquarter. The operation was performed without difficulty, and the seal arose from his couch in perfect health. The fisherman was then informed that he was free to return to his wife, on the express condition, however, that he would never again maim or kill a seal. On his assenting to this, not without some natural reluctance, he was conducted to the door of the cave, and he and his guide rose to the surface together, finding their former steed awaiting them, ready for a second gallop. Once on land, the guide breathed on the fisherman, and they both became like men again, and mounting, they were not long in reaching the door of the hut. And here, to his great delight, the fisherman was rewarded with a sum of money large enough to make his enforced abstention from seal-hunting a loss which he could afford to bear with perfect equanimity.

To conclude, let me borrow from "Fiona Macleod" an instance of another form assumed by one of these sirens of the sea. As might be expected from the narrator, the circumstances are invested with a supernatural eeriness such as is to be found only in an atmosphere of Celtic mysticism. Murdo MacIan of the Isle is made, in "Sea-Magic," to relate how "a woman often came out of the sea and said strange foreign words at the back of his door—and that in a whinnying voice like that of a foal—came white as foam, and went away grey as rain. And then," he adds, "she would go to that stroked rock yonder and put songs against me till my heart shook like a tallow-flaucht in the wind."

And once, he goes on to say, "a three-week back or so I came home in a thin, noiseless rain, and heard a woman-voice singing by the fire-flaucht, and stole up soft to the house-side; but she heard the beat of my pulse, and went out at the door, not looking once behind her. She was tall and white, with red hair, and though I did not see her face, I know it was like a rock in rain with the tears streaming on it. She was a woman till she was at the shore there, then she threw her arms into the winds, and was a gull, and flew away in the lowness of a cloud."

It is impossible to say in regard to questions such as these, where tradition based upon apparent fact merges into legend founded upon the frankest fiction. On that account, as well as from consideration of length, no attempt has here been made to inquire into, or even touch upon, any of the occasions on which

mermaids are said, with more apparent matter-of-factness than is the case with most of the legends just brought to your notice, to have been seen on our coasts. The task would probably be as thankless as that of investigating the identity of the "mermaids" whose seizure has been recorded with full circumstantiality from time to time. It would probably also prove as futile as the oft-made attempt to grasp the elusive personality of that more up-to-date apparition of the vasty deep, the seaserpent, whose actual capture, in spite of the growing frequency of its appearance even in our own waters, and the general agreement among those who have encountered it of at least the ferociousness of its aspect, has yet to be chronicled.

Notes on Birds in Moffat District. By Mr T. A. Johnstone.

An interesting note of his observations of the bird life of the district, regarding nesting, habits, etc., was contributed by Mr Johnstone.

JUDICIAL OATHS. By Mr M. H. M'KERROW.

A witness in all the courts of justice is required to give evidence on oath. The rules excluding the evidence of certain persons which at one time prevailed in Scotland have been gradually relaxed in practice and by legislation, and it may be laid. down as a general proposition that all persons capable of giving rational evidence are competent witnesses both in civil and criminal causes. The witness by imprecating the wrath of God if he speaks falsely, or by calling attention to the fact that he speaks as in the sight of a Supreme Being, is found by experience to tell the truth more exactly than if he were merely making a statement without such sanction. One of the chief matters in witnessbearing is the appeal to God or sanction of an oath. Sanction of an oath has always been required by the Law of Scotland. Balfour says:—" He wha is producit and ressavit as witness sould sweir that he sall not false say, nor suith conceil wittinglie in that cause, neither for love of the ane partie, nor for the haitret of the uther." The full form of the oath is:- "I swear by Almighty God, and as I shall answer to God at the Great Day of Judgment, that I will tell the truth, the whole truth, and nothing but the truth." There are cases both ancient and modern where depositions of witnesses were set aside because they wanted the words, "as they shall answer to God." The oath is administered in Scotland by the presiding judge or magistrate standing with uplifted hand, the witness also with right hand upraised, repeating clause by clause after him. Not very long ago it would have been deemed impossible for a witness to be sworn except according to this form. Innovations upon the ancient ceremony, perhaps by the disinclination or inability of the judge to stand up, have crept in, and the oath is now usually administered sitting. The next departure was the omission of the "great day of judgment," and the oath as it is now administered is simply, "I swear by Almighty God, as I shall answer to God, that I will tell the truth, the whole truth, and nothing but the truth." A witness may object to take the oath in the above form. If he does so, he may be sworn in whatever form he considers to be binding on his conscience. Whenever the oath is administered, in the form and with such ceremonies as such person may declare to be binding, every such person, in case of wilful, false swearing, may be convicted of the crime of perjury, in the same manner as if the oath had been administered, in the form and with the ceremonies most commonly adopted. 1 and 2 Vict., c. 5. Every person, upon objecting to being sworn, and stating as the ground of such objection that he has no religious belief, or that the taking of an oath is contrary to his religious belief, shall be permitted to make his solemn affirmation, instead of taking an oath (in all places and for all purposes where an oath is or shall be required by law), which affirmation shall be of the same force and effect as if he had taken the oath. The affirmation is in the following terms:-I, A. B., do solemnly, sincerely, and truly affirm, and declare that the taking of an oath is according to my religious belief unlawful, and I do solemnly, sincerely, and truly affirm and declare that I will tell the truth, etc. 28 and 29 Vict., c. 9, sec. 2 and 3. Where a witness makes affirmation he must use these precise words. Anyone making an affirmation who wilfully, falsely, and corruptly affirms any matter or thing which, if deposed on oath, would have amounted to, is "liable to prosecution, indictment, sentence, and punishment in all respects as if he had committed perjury." Peers of the Realm

are authorised to give their verdicts on honour, without the sanction of an oath, when acting on their judicial capacity, but are not so exempted in any case of ordinary witness-bearing. In ancient nations the oaths were taken over the altars and relics of saints. In patriarchal times the oath was sworn by placing the deponent's hand under the thigh of the magistrate—a practice which if followed in modern times would in many cases be productive of much physical inconvenience to the Bench, and no small hazard to the witness. The Jews swore with their right hand uplifted to heaven. The practice is apparently referred to by King David in these words, "Whose mouth speaketh vanity, and their right hand is the right hand of vanity." The practice of the uplifted right hand is followed in Scotland, but not in England. With us the oath is administered as I have said by the judge or magistrate standing. In England that duty is left to an inferior officer of Court, and "the cataract of words poured forth on the cloud of witnesses," is as rapidly sealed by a symbolical kiss on the greasy boards of what is presumed to contain the Gospels. The prayer book has been held a sufficient substitute. In this and many other matters our Scotch legal procedure may claim comparison with that of England or Ireland. A Jew is sworn on the Old Testament with his hat on, a staff in his hand. Mohammedans are sworn on the Koran. A nominate religion is not necessary for the taking of an oath, thus a negro who said he believed in God and a future state was admitted. A story is told of a negro witness who, when in the witness-box, was asked by the judge—"Do you know the nature of the oath?" Witness—"Sah." Judge—"Do you understand what you are to swear to?" Witness—"Yes, sah, I'm to swear to tell de truf." Judge-" And what will happen if you do not tell it? Witness-"I 'spects our side 'll winn de case, sah." A Chinaman takes the oath holding a saucer in his hand, and dashing it to pieces at the conclusion of the formula, indicative of his sense of God's wrath should he falsify the truth, and become a vessel of wrath, and fit for destruction. Some doubt has been thrown on the methods hitherto employed in swearing a Chinaman. Up till now it has been usual to swear Chinese witnesses by breaking a saucer or blowing out a lighted candle. The procedure followed in either of these picturesque methods is first of all to swear the interpreter in the usual way. When the 160

candle is to be used it is lighted by the usher, and the witness kneels while the candle is blown out. The interpreter thereupon swears the witness as follows:—"You shall tell the truth, the whole truth. The light is extinguished, and if you do not tell the truth your soul will be extinguished like the candle." When a China saucer is used, it is handed to the Chinaman, who breaks it while he kneels, and after he has been cautioned to tell the truth, the formula proceeds. "The saucer is cracked, and if you do not tell the truth your soul will be cracked like the saucer." At the Thames Police Court the other day both these methods were called in question by the Rev. George Pearcey, who has had 32 years' experience in various parts of China, and who stated in answer to Mr Mead, the magistrate, that the English forms of swearing were not in vogue in police courts in China. Pearcey, who was acting as interpreter for a Chinaman, asserted that in China the principal and most binding form of oath was the cutting off of a cock's head. He was quite satisfied that a hen's head would not do as well, but the court official pointed out that it would be rather expensive to adopt this custom, as when a large number of Chinese were to be sworn it would take a farmyard to meet the requirements of the court. An inquiry at the Chinese Embassy did not result in much light being thrown on the subject. The First Secretary protested that he did not know what was the correct Chinese method of being sworn. "Fortunately," he said, "I have never been brought before a Chinese police court, and forms of oath may differ very much in various parts of the Chinese Empire. I am not, however, conversant with the law on the subject, and it would therefore be very unwise for one to attempt to make any definite statement." Captain J. A. Morris, the superintendent of the Strangers' Home for Asiatics, West India Dock Road, says that undoubtedly one of the most binding oaths was the cutting off of a cock's head, but the ceremonies of blowing out a light and breaking a piece of ware were also observed in China. From a twenty years' experience of "John Chinaman," however, he had come to the conclusion that the Celestial had no fears of any kind. "No oath," he said, "will bind a Chinaman if he does not wish to speak the truth," When a cock's head is cut off in administering the oath the bird is taken inside a joss-house, and the cutting takes place before a shrine, on which is an idol. The oath is to the effect that if the man does not speak the truth he hopes that his own throat will be cut, as in the case of the fowl, and his blood scattered over the four oceans. It may be interesting to give the form of an oath at one time administered in the Commissary Court of Edinburgh. It was of fearful import, and was abolished on the representation of the Secession Church. The oath was taken by the witness kneeling on his or her right knee upon a cushion, and placing his or her right hand upon one of the holy evangelists, and pronouncing these words—"I renounce all the blessings contained in this Holy Book if I do not tell the truth; and may all the curses therein contained be my portion if I do not tell the truth. I swear by Almighty God," etc.

Since writing the foregoing I have observed that in the Greenwich County Court recently a witness showed some hesitation in kissing the Book, thereupon Judge Willis said:—I do not want anyone to kiss the Book. You can hold up your hand. I was surprised the other day to see it stated that it was Scotch law to hold up the hand, but it is English law, and has been English law from time immemorial. A great Vice-Chancellor of Oxford 250 years ago objected to kissing the Book, and the then Lord Chief Justice swore him by holding up his hand. I should accept the evidence of any person who said he believed in a God, but if he admitted that he was of opinion that he would not be punished for any violation of the law by false swearing I should reject him.

18th April, 1907.

Chairman-Dr MARTIN.

Burns and Moffat. By Mr J. T. Johnstone.

The associations of Moffat with the poet Burns are not very numerous, but though lacking in quantity their quality is excellent, and they are extremely interesting, as some of his finest and sweetest songs have either their theme or their scene in this locality.

In the year 1775 at Craigieburn, Moffatdale, Jean Lorimer was born—the Chloris of after years whose many charms and

bonny blue e'en had such a potent influence on the poet's muse, that no less than thirty of his very best productions were inspired by her, the local song, "Sweet fa's the even on Craigieburn," being one of his sweetest, and is said to have been composed to aid a Mr Gillespie, a fellow-official in the excise, in his wooing of Miss Lorimer.

Another association with Moffat was his friendship with Mr Clark, the parish schoolmaster. Mr Clark while here had a difference of opinion with the local patrons of the school, and in the interests of his friendship the poet, under date of 11th June, 1791, wrote a letter to Allan Cunningham, bespeaking his influence among the Edinburgh magistrates and town councillors of his acquaintance, who were the patrons of the Moffat school, and before whom Mr Clark's difference had to come for consideration. The letter closes recommending Mr Clark to his acquaintance and good offices, "his worth entitles him to the one, and his gratitude will merit the other." Mr Clark subsequently was appointed to a school in Forfar, and it was to Mr Clark at Forfar that Burns, a little over three weeks before his death, penned that pathetic letter beginning "Still, still the victim of affliction; were you to see the emaciated figure who now holds the pen to you, you would not know your old friend," and requesting him to forward by return of post another (guinea) note. The general correspondence between Burns and Clark has not been preserved. Mrs Clark, after her husband's death, destroyed them owing to their rather free language.

Then Moffat is the scene where occurred that "handsome apology for scrimpt nature," the noted epigram on Miss Davies—

"Ask why God made the gem so small, and why so huge the granite?

Because God meant mankind should set the higher value on it."

The occasion of this epigram was the poet and a friend observing Miss Davies, who was very small, riding past in company with a lady of very portly dimensions. The lines were afterwards inscribed on a pane of glass in the window of the room in the inn where he and his friend were sitting.

The precise inn in Moffat which was thus honoured has hitherto been a matter of conjecture, and although I am unable at present to decide the matter definitely, I hope to be able to throw some light on it that will bring it nearer solution. Some

of the editors of the poet's works state the place as being the inn or the principal inn at Moffat; others again state the Black Bull as the place. Mr M'Dowall, in his "Burns in Dumfriesshire," gives the Black Bull, and Mr Kemp in "Convivial Caledonia," does the same. Mr Lowe, in his "Scots Wanderjahre," gives the Spur Inn (now known as Proudfoot House) as the enchanted spot, and says:-" Here it was according to local traditionguide-books to the contrary—that Burns staved briefly in the autumn of 1788, and it was on a window of the Spur that he scrawled the impromptu verse." None of the editors of Burns' works, or any of the above writers on the subject, had seen the original pane of glass, at least while it remained in the inn window. However, we have the evidence of one individual who had seen it. I refer to the Rev. William MacRitchie, minister of the parish of Clunie, Perthshire, who in 1795 made a tour through Great Britain. During this tour he kept a diary, which was published in the year 1897. The diarist travelled on horseback, and "left the Bield, Tweedsmuir, on Friday morning, the 26th June, and arrived at Rae's Inn, Moffat, to breakfast at 11 o'clock a.m., where read the following lines written on the glass in one of the windows of the room where I breakfasted:- 'On seeing Mrs Kemble in the character of 'Yarico' at Dumfries, 1794 .__

"Kemble, thous cur'st my unbelief of Moses and his rod,
At Yarico's sweet notes of grief, the rock with tears had flow'd.
R. B."

'On being asked why God had made Miss Davies so small and Mrs D--- so big:--

"' 'Ask why God made the gem so small, and why so huge the granite?

Because God meant mankind should set the higher value on it.' "

The lines regarding Mrs Kemble are rather interesting as appearing with Burns' initials on the window of Rae's Inn. According to Allan Cunningham, the poet wrote these lines in Mrs Riddel's box in the Dumfries Theatre. Mrs Kemble's first appearance at Dumfries Theatre was in October, 1794, and we find 'them scratched by Burns on a window in Moffat on the 26th June of the following year; but there is no saying how long before that date they were inscribed. The editor of Mr MacRitchie's tour in a note mentions "that in all likelihood they were written at Moffat

for the first time, as it was very unlikely that he would quote himself." Miss Davies' epigram has not the poet's initials. The diarist gives a list of "company at Moffat," presumably staying at Rae's Inn, but he does not state so. These are Lady Lockhart Ross; Mr Irvin, West Indian; Mr Dalziel of Glenae; Mr Ogilvy of Chesters; Mr Hume of Bassington (Bassingdean); Captain Lockhart, Royal Navy, son of the late Lord Covington, one of the Lords of Session; Mr Paisley, banker; Mr Carruthers of Howmains, etc. Mr MacRitchie only rested a few hours at Moffat, as he went on to Dumfries the same day, but he had-staved at Moffat the previous year for a short while.

To endeavour to locate Rae's Inn I have consulted the old minute book of the Justices of the Peace for the county, who were the licensing authorities for granting licenses for retailing ale, beer, and other exciseable liquors, and I find that James Rae, vintner, was granted a license in 1786, and that this license was continued annually till and including 1795. The full list of licenses granted for Moffat in 1795 were as follows:- James Brand, in Auldhousehill; James Rae, vintner; S. M'Millan, merchant; Alex. Craig, merchant; James Proudfoot, innkeeper; William Harkness; Thomas Greive, innkeeper; John Dickson, innkeeper; Archibald Johnstone, innkeeper; Robt. Russell, watchmaker; James Kirkpatrick, innkeeper; John Bell, flesher; Andrew Rutherford; Robert Murray, constable; John Murray, shoemaker; John Lowe, gardener; Wm. Lithhead; James Balchild, vintner; Margaret Bell in Newbigging; Archibald Smith at Annan Bridge-end. In the above list there are two parties described as vintners. At that time this description would apply to persons who kept a superior establishment for the entertainment of man and beast, to that of the ordinary inn or "yill hoose." In these days tea was a luxury, enjoyed by common folks on New-Year's Day or some other "red letter day" in their calendar, their regular beverage being ale, mostly home brewed, while the gentry and upper classes consumed sack, Canary, and other wines. It is most unfortunate that the licensing minutes quoted do not give the names of the inns for which the licenses were granted, but there can be no doubt that the vintners' establishments would be the King's Arms (now the Annandale Arms) and Rae's Inn, James Balchild being in the King's Arms and James Rae in his own establishment. Corroboration of the fact of the vintners being the principal inn is given in the licensing list for 1803, where John Wrght, vintner, is granted a license. From another source I learn that Wright was tenant of the King's Arms.

The present proprietor's titles for the Spur Inn (now known as Proudfoot House) only date from 1818. In that year the proprietor, Alex. Craig, disposed of the property to James Carr, Harrington, Cumberland. Alex. Craig is described in the disposition granted to James Carr as innkeeper, and his name appears on the licensing list from the year 1784 till after 1795, and in the list he is described variously as merchant or innkeeper. As Mr Craig would be proprietor of the Spur Inn for a number of years before he sold it, this, I think, disposes of any claim the Spur Inn may have to the epigram. The titles to the property prior to 1818 would in all probability be recalled by the superior, and the existing titles granted. Nearly all the old titles in Moffat were recalled by the superior and new titles granted in the early decades of the 1800's. According to the titles of the Black Bull, which date from the year 1779, Elizabeth Duncan and John Spence Duncan were the proprietors, and in 1786 one Archibald Murray acquired a part interest, and it remained in their hands till 1821. Neither the name of Duncan or Archibald Murray appears on the licensing list (the names of a John and Robert Murray do). It is therefore evident that the Black Bull was not occupied by any of its proprietors, but was in the hands of a tenant, whose name will appear on the licensing list already given for the year 1795, but whose identity is at present unknown. But at that time the Black Bull had no claim to being one of the principal inns of Moffat, as it was the recognised headquarters for the carriers' carts, of which over 80 passed through Moffat every week going to and from Edinburgh, Glasgow, Dumfries, and Carlisle, and this characteristic it retained till the entry of the "iron horse" destroyed the carriers' trade. With regard to Rae's Inn, the Raes were a well-known Moffat family, the last of whom emigrated to Australia in the year 1848. Rae Street, a narrow street on the west side of the High Street, next the Buccleuch Hotel, derives its name from them. The Buccleuch Hotel (it was not known by that name till after 1860) was their property and in their occupation till they left the place, when they sold it to Mrs Cranstoun, at that time tenant of the Annandale Arms, and I think we may safely assume that Rae's Inn in 1795 occupied nearly the same site. Mr Fingland, the present owner, informs me that his titles, which date from 1799, are in James Rae's name. The fact of the titles not bearing an earlier date is easily accounted for. Formerly all the buildings with their grounds in Moffat were held from the superior on short leaves, and from about the year 1772 till the end of the century nearly all these leaves expired and fell again into the hands of the superior and his successor, the Earl of Hopetoun, who removed a great number of the buildings altogether, and set back the building line on the west side of High Street at least 30 feet, and then re-feued the ground again. Mr Rae's original title had in all likelihood lapsed, and the present title represents the refeuing and rebuilding of the premises, which were acquired by Mrs Cranstoun in 1848, and afterwards altered by her to the Buccleuch Hotel, as we now know it. The Buccleuch Hotel will be at least 30 feet back from where the original building stood previous to 1799, Churchgate, the entrance to the town on the Dumfries road, at that time being only a street twelve feet wide. So that, taking into consideration the history of this property and its connection with the Raes, the fact that James Rae is always described as a vintner, the quality of the visitors he accommodated, as shown by MacRitchie's list, all point to Rae's Inn being a house of superior character and accommodation, and justify the assumption that the famous epigram was written in a building now non-existent but somewhere near the site of the present Buccleuch Hotel. It is possible that at some future time some definite information may crop up and decide the point; meantime I have been unable to get any further information.

Nothing is known authentically about the further history of the pane of glass, except that it has disappeared. Tradition asserts that it was taken away to Russia by the Czar Nicholas I. when he visited Scotland, but a more feasible explanation may be given. In 1779 relics of the poet were not so highly prized as they are now, and when Rae's old inn was removed the window with the pane of glass would most likely disappear along with the building.

Another of our local links with the poet is the famous convivial song, "O, Willie brewed a peck o' maut." A number

of the editions of the poet's works, Allan Cunningham's for instance, give the scene as the Laggan in Nithsdale, a small estate which William Nichol had bought on the advice of the poet, and the occasion the house-heating on Nichol's entry into possession. All our local guide-books and Kemp's "Convivial Caledonia" refer it to a wayside ale-house at Craigieburn, on the site of the house now known as Burns' Cottage. In the chapter on "Remarks on Scottish Songs" Burns refers to Moffat as the scene. "This air is Masterton's, the song mine. The occasion of it was this:-Mr Wm. Nichol, of the High School, Edinburgh, during the autumn vacation being at Moffat, honest Allan, who was at that time on a visit to Dalswinton, and I went to pay him a visit. We had such a joyous meeting that Mr Masterton and I agreed each in our own way that we should celebrate the event." The probable time of this visit to Moffat is by Robert Chambers' "Life and Works of Robert Burns," vol. iii., p. 64, fixed between August 13th and September 25th, 1789. There can be no dubiety about the meeting taking place in Moffat, but I very much doubt of its taking place at or near the present Burns Cottage at Craigieburn. the licensing court minutes already referred to the name and address of the applicant for a license, if he resided outside the town of Moffat, are always given. Thus John Johnstone had a license for Auldhouse Hill, afterwards held by James Brand; Thomas Henderson for Nethermill Burnfoot, and Archibald Smith at Annan Bridge-end. If there had been a licensed house at Craigieburn the name would have been mentioned. Licenseholders in Kirkpatrick-Juxta, Wamphray, and Johnstone have all their residences given as well as the name of the parish. That being so, we may presume that place in the town of Moffat was the scene, and here tradition asserts that it occurred in a small inn at the Kirkyard gate. Now, in the year 1764 one Archibald Blacklock feued a site and built a house, which in its titles is described as bounded on its north side by "the new entrance to the kirkyard." And this individual, Archibald Blacklock (or another of the same name), held a license according to the minute book from 1779 to 1792, so that Archibald Blacklock's house fulfils all the requirements of the tradition, and unless the existence of an ale-house at Craigieburn can be proved from some other source we may reasonably conclude that the "three merry boys' held "their joyous meeting" and preed the "barley bree" till "wha last beside his chair shall fa', he is the king among us three," in the inn beside the kirkyard gate.

There is another tradition regarding a verse-making competition between Burns and three Englishmen, which occurred on one of his visits, but as the same story is claimed as having occurred at several other places I do not guarantee the tale. It refers to the tale of Burns opening the room door of an inn and drawing back when he saw the room was occupied by three strangers, one of whom observing Burns before he got the door closed shouted, "Come in, Johnny Peep." Burns joined the company, who proved to be all good fellows, and a merry meeting resulted. In the course of the sitting one of the strangers proposed that each should write a verse of poetry and put it with half-a-crown under the candlestick, the one producing the best verse to have his stake returned, while the balance was to be spent in liquor to prolong the evening's enjoyment. The lines produced by Burns were:—

"Here am I, Johnny Peep;
I saw three sheep,
And these three sheep saw me;
Half-a-crown a-piece
Will pay for their fleece,
And so Johnny Peep gets free."

Burns was acclaimed the victor, one of the strangers exclaiming that he must either be Bobby Burns or the Devil, the happy party not separating till the early hours of morning.

The place where this is said to have occurred at Moffat was in an ale-house which would occupy the site of what is now the Buccleuch Hotel bar; at that time it was the house adjoining Rae's Inn. It was firmly believed in by the late Miss Cranstoun, of the Annandale and Buccleuch Hotels. This family came to Moffat in 1820, and occupied the Spur Inn till 1838, when they removed to the Annandale. And in 1820 the traditions regarding these matters would be much fresher and stronger than they are now, and also more reliable.

These are all the associations of Burns with Moffat of which I am aware, and I am sorry that in discussing them there is so little evidence to rely on, and so much which is circumstantial. In concluding I must express my thanks to Mr M'Kerrow, our treasurer, in borrowing for me the Justices' Minute Book, and to



LINCLUDEN COLLEGE, NEAR DUMFRIES. Showing Tomb of Margaret, Countess of Douglas.



OLD BRIDAL STONE, CROUSE FARM, KIRKCOWAN, WIGTOWNSHIRE



the other gentlemen who kindly allowed me a reading of their titles or gave me information about them.

ANCIENT SANITATION. By Mr J. P. SHANNON, A.R.S.I.

In this paper Mr Shannon gave a succinct historical review of sanitation from its earliest practice, referring to the early ordinances relating to health recorded in sacred and profane works. He pointed out the great work done by the Romans, as revealed by their great Cloaca Maxima and other structures such as the great aqueducts and those in their colonies. He also referred to the use made of natural medicinal waters by the Romans. The science of hygiene formed the subject of another portion of the paper, and was dealt with on broad general lines.

Notes on Bird Migration in the District.

Mr Robert Service contributed some valuable oral notes on the migration of birds in the district, of which he had recently made observation. One of the features of 1907 that would be remembered, he said, was the very striking fact that the birds made so extremely early an arrival from the south. There had already been recorded the unprecedented number of five species, all in before the end of March. The middle of April and onwards marked the average dates for the arrival of these birds in this district of Solway. The wheatear, the first of the five species to arrive, generally came in the closing days of March-mostly before March was quite out, but usually we were two or three days into April before there was a general appearance. This year many of them were seen along the Stewartry coast newly arrived on the 19th March, that is, a full week before the earliest of them were usually noted here. The ring ousel or mountain blackbird came first perhaps among the whole of our migrants to the hill country from the head waters of the Ken to Upper Annandale—a country which constituted the headquarters or metropolis of the mountain blackbird in the whole of Great Britain. It was a species which would linger very long in the winter months. Readers of White's "Selborne" would remember how the old naturalist saw it at Christmas on Dartmoor. He (Mr Service) had many a time recorded its appearance in this

district during practically the whole of the winter months, so that it was a species which in a mild season actually would live through the winter in Scotland, and so obviate the necessity of migrating at all. But that observation applied rather to odd individuals of the species; the great bulk returned to winter quarters round the southern shores of the Mediterranean and further to the east. It came very quickly back again, however, and along the south of France and in the milder latitudes in the east of Spain it arrived very early in February. This year the first of the species were seen close to Sanguhar on 25th March, or something like a fortnight earlier than the usual date. Another of those species, odd members of which might occasionally linger through a mild winter in the south-western corner of England-Cornwall, Isle of Wight, and such districts-was the chit-chaff. It was one of the three warblers which formed such a very large proportion of the summer birds throughout Great Britain. One or other, and in many cases the whole three, were to be found in every district from the south of England right up to the Shetlands. In this district we didn't as a rule see a chit-chaff before 15th April, but this year it was seen on 1st April, and within three days thereafter its familiar double note could be generally heard. The swallow and sand martin were two really typical migrants. Many people thought they alone were the migrating birds, and that all the others were more or less stationary. He didn't understand how such an erroneous notion had arisen. The swallow and sand martin came pretty often together. As a rule, the sand martin was a day or two in advance, and nearly the whole of the "early swallows" which were paragraphed in the newspapers were in reality, not swallows, but sand martins. This year the swallow appeared on 30th March, the earliest date that had ever been recorded in Scotland. The same evening sand martins were seen, and next day both species were pretty general over the whole country. It was towards the early afternoon of the first April before anything like large parties appeared, and these were seen all over Galloway especially-not so many in Dumfriesshire, except towards the western portion, but all over western Galloway they were comparatively abundant. The arrival of the species he had named pointed out a very interesting circumstance, and that was that there was a migration line overseas from the western portion of France and right up from Spain which, given an uninterrupted belt of good weather in front, would bring the birds up to the south-western portion of Scotland days in advance of what might be expected in other districts of the British Isles. That was a fact which he (Mr Service) had discovered and pointed out, and it was only now being thoroughly established. He thought he might fairly claim to have made at least that little discovery. Mr Service closed with the narration of a curious incident that occurred in the end of the first week of April. It was a Saturday evening at dusk, when a very general migration was going on all over this locality. One of his children in walking along the road happened to hear a small party of thrushes passing overhead, and immediately one of them fell dead with a stone-like fall. What caused that occurrence had been a puzzle to him ever since. He thought himself the bird had taken some sudden illness—heart disease or some trouble of that kind—because there were indications about it to that effect when he dissected the body. On the other hand, there might have been a collision among the birds in the air, as sometimes happened in the case of starlings.

THE HOSPITAL OF SANQUHAR. By Mr W. M'MILLAN.

In the latter end of the 12th century a new development of the monastic spirit which had crept into the Church took place. It was then that the Military Religious Orders were founded, in which the duties of monk and soldier were combined. The two principal orders were the Knights' Templars and the Knights of St. John of Jerusalem. The latter had their origin in Palestine, their aim being to protect the Christian pilgrims going to Jerusalem. The dress of the Order consisted of a black robe and cowl with a white cross of eight points upon the left breast. The occupation of Jerusalem by the Europeans greatly modified and enlarged the scheme of the "hospitallers," as these knights came to be called. Lands and lordships in Western Europe were bestowed on the brotherhood by crusading princes and nobles, and, in addition to the "hospital," which they managed at Jerusalem, there were many more established throughout the countries of the west and south of Europe. One of these hospitals stood on the farm of Newark, in the parish of Sanquhar, about a quarter of a mile south-east of the Royal Burgh. It stood on the little knoll known as the "King's Scaur," between the river Nith and the "King's Burn." Standing on this eminence, it could easily be observed by anyone who needed its succour or shelter. This one owed its foundation to the Rosses of Sanquhar and Ryehill, and in all likelihood to that Sir Robert who, as is related in a curious old metrical romance—only a fragment of which is now extant—joined with other Nithsdale Barons in the crusade under Richard Coeur-de-Lion, which in 1190 set out to drive the infidel from the Holy Land. In the interesting old ballade we are told how

"The stalwart Richard, England's Gloire
To Haly Eardt was bown;
His brand he branglit sae brilzean,
He dang the dour Mahoun.

The stark and Hawtaue Maccusweel,
Then of stranid sae grene.
Had graithed him with the Holy Corse
To fare with Englande's Kynge.

Sir Roger de Kilpatrick,
Child of Killosburns towers,
Had in his basnet heezed the corse
Zeid frae his lady's bowers.

Sir Rab, the Ross o' gentil Laits, Thane of Hie Sanchar's Peel, On his caprousie heezed the Corse, He stalwart was and leel.

Torthorwald's stark and douchty wight, Zeid with the valiant throng, Myself graithed out in Abergown Went in the lave amang.

In twa-score carvels frae Cockpool
We brilzean London raucht
A mighty meany valiant thrang
Wha fremit ferlies saucht.

Wi' winsome fasche away we sailed Far ower the sea sae braid, At Scanderson we rowed tae swaird For Haly Eardt we gaed."

There are in all fourteen verses left of the ballad, which is preserved in a manuscript of the late Dr Grierson, Thornhill. The Rosses were of Norman descent, and came to Scotland about the 12th century. They bore as their arms-Gules, three water budgets argent. The water budgets, bouggets, or buckets, were worn as a badge by the Ross family, "because," says the family historian, "they were indicative of an ancestor of the family, who, having been engaged in the crusades, had been forced in the desert in Palestine to fight for and carry water in leathern vessels called budgets or bouggets, which were usually slung across a horse's or camel's back." The coat-of-arms and the old ballad are therefore evidences that one of the Rosses had taken part in these old religious wars, and, what more likely than that, "Sir Rab" on his return, being full of religious zeal, should follow the example set before him in other parts of the country and establish an hospital under the safeguard of his own ramparts? Whether this institution was established as early as the crusades or not, it was nevertheless an ancient foundation, for in 1296 Bartholomew-de-Eglisham, its chaplain and superintendent, swore fealty to Edward I. of England at Berwick-on-Tweed, where so many of the nobility and clergy took the oath of allegiance that thirty-five skins of parchment were required to hold their names. On one of the rolls the name "Bartholomew-de-Eglisham, chapeleyn gardein de novel lew de Sene-whare," occurs immediately before "Patrick or Matthew de Parton del comte de Dumfries." At this period the Grand Master of both the Hospitaller and Templar Orders submitted to Edward I. This Bartholomew was in all probability a Norman, as many of that race were to be found in the Churches of Scotland at that period. The country was then in a very unsettled state, and the brethren doubtless did their share in civilising those who lived in the valley. The monks were drawn chiefly from England, a country which was at that time in a much more advanced stage of civilisation than the wilder Scotland. Not only had they to heal the sick and preach the Gospel, but some of them were skilled in the manufactures of the day, and many occupations till then unknown were commenced, to the benefit of the district generally. The hospital at Newark was dedicated to St. Mary Magdalene, to whom many hospitals were dedicated. The church or chapel attached to it was, however, dedicated to St. Nicholas, the saint whom the children of to-day remember as "Santa Claus." The principal fair of the Royal Burgh of Sanquhar was fixed for the 22nd June, the festival day of St. Mary, so it may be that the Hospitallers had some influence in fixing that date. The Church of St. Nicholas seems to have been in existence until the Reformation, for in the Register of Deeds there is a decreet aribitral between John Chrichton of Ryehill and Edward Lord Chrichton of Sanquhar ordaining the former to pay to Mr Robert Chrichton, parson of Sanquhar, as chaplain of St. Nicholas, Newark, £40 yearly. (It was this Robert Chrichton who, in 1562, was committed to ward in Perth for having celebrated the mass in Sanquhar Parish Church.) Edward Lord Chrichton succeeded his brother in 1562, so that St. Nicholas Church must have been in existence then.

TRACES OF THE BUILDING.

Though all trace of the building is now gone on the surface, there is no doubt but that if excavations were made the foundations would be laid bare, for when the field was ploughed some time ago some large stones from the building were turned over. There are also many stones in the dykes around, which seem to have belonged to a building of some importance. In the roadside dyke at Castlemains were many sculptured stones, which were supposed to have come from the hospital, but these were removed about ten years ago to the Old Castle by the late Marquis of Bute. These stones did not seem to have belonged to the Castle, as no others like them were to be found on the building, nor were any found around except a few which had probably found their way there from the hospital also. There is also a finely carved head built into the wall of a house known as "The Ark" at the Townfoot. This is also thought to have come from Newark. A little while ago one of the stones from a Gothic window was dislodged by a flood, and now lies on the river-side beside the site of the institution. The writer of the statistical account of the parish of Sanguhar in 1793 says:-"Near the residence of the Rosses (Ryehill) there seems to have been a large pile of building, perhaps the Hospital of Senewhare, a religious foundation, though this cannot be ascertained. Several of the stones of a Gothic figure are built into the walls and windows of houses near where this edifice once stood. There is also in the open field a large font or rock basin. Human bones have been found in digging and ploughing up the field in which it stands, and a key of enormous size much consumed with rust was found about twenty years ago, and is now lost. In his "History of Sanquhar" (1853) Dr Simpson says:—
"If a conjecture may be hazarded, we may suppose that the church at the west end of Sanchar—(the one erected on the site of the present Parish Church)—took its rise in Celtic times, and that the church at the east end of which nothing now remains originated with the family of Ross, on whose lands it was reared. It seems that there was a church and churchyard before the hospital was erected on the spot, and that the Rosses endowed it." Whether this conjecture of the Doctor be correct or not it is impossible now to tell. Many years ago a tombstone bearing the following inscription was unearthed not far from the site of the hospital:—

Hir Lyes
The Gude Sir John Ross of Ryehill;
Hir lyes
The Gude, Gude Sir John Ross of Ryehill;
Hir lyes
The Gude, Gude, Gude Sir John Ross of Ryehill.

This stone is now lost.

In addition to this establishment at Sanquhar there were others belonging to the Hospitallers throughout Dumfriesshire. Traces of the Order are to be found at Ruthwell, where they had their preceptory; at Spitalfield, near Dumfries; at Howspital and Spitalrigging, near Annan, and at Trailtrow, in Annandale; but their largest institution was that at Sanguhar. In his "History of Dumfries " the late Mr M'Dowall, in speaking of the Knights Hospitallers, says:-"Their largest hospital in the county grew up under the shadow of Sanguhar Castle, on the northern bank of the Nith. Many years after all traces of it had disappeared the plough turned up numerous relics of its inmates, the mouldering memorials of a brotherhood who were men of note in their day, though they are now all but forgotten throughout the district -a fate which they share in common with their more distinguished fraters, the military monks of the Temple." These establishments flourished for about three centuries, but gradually fell into decay. Some are inclined to think that the Reformation was to blame for the destruction of such edifices, but this is hardly correct. As the late Marquis of Bute, in his "Essays on

Home Subjects," points out, these ecclesiastical buildings had suffered by neglect in the years preceding 1560, as well as from English soldiers in times of invasion. Mr M'Dowall in his work quoted above states that "at the Reformation, the property being secularised, Ross of Ryehill is said to have secured a considerable portion of it." This is, to say the least, very doubtful. The last of the Rosses in Upper Nithsdale was Isobel de Ross, who married William-de-Crichton about 1350. At the time of the Reformation Ryehill was held by a branch of the Crichton family. The sick cared for within these institutions were generally those afflicted with the terrible scourge, leprosy; which was at that early period very prevalent, and which claimed many victims. (It was of this disease that King Robert the Bruce died The want of cleanliness, of vegetables, in 1329.) fresh meat in winter, but above all the terrible hardships to which some of our countrymen were exposed concurred to make leprosy as common in Scotland then as it is in some Eastern countries to-day. At these places, too, travellers who needed shelter could rest for the night in something the same way as travellers do to-day at the Hospices among the Alps. It certainly seems a little strange to us with our modern ideas of sanitation and public health that a hospital for lepers should be used also as a hotel for travellers, but in those days such things do not seem to have troubled our fathers.

Addendum to "Old Public Libraries," Vol. XVII., p. 39. By Mr G. W. Shirley.

The Society Library was dispersed by auction in Edinburgh on the 15th and 16th March, 1875. Mr W. Macmath, Edinburgh, possesses a copy of the sale catalogue, and bought at the sale what was believed for long to be the only copy of Burnside's History (Catalogue number, 73, Folio). Mr Macmath now has that copy and another similar one which had been in the possession of William Bennet, editor of the Dumfries Monthly Magazine. The original History by Burnside is now in the possession of the Society.

FIELD MEETINGS.

18th May, 1907.

(From the Dumfries and Galloway Standard.)

AMISFIELD TOWER AND TORTHORWALD.

The first of the season's field meetings of the Dumfriesshire and Galloway Natural History and Antiquarian Society took place on Saturday afternoon, when a party numbering twenty-eight paid a visit to Amisfield Tower and Torthorwald Castle. The day was pleasant for driving, and the wayside trees, with their various stages of leafage, afforded material for interesting observation. At Amisfield Tower a hospitable reception awaited the visitors at the hands of Mr and Mrs Farish. The many handsome trees in the policies were greatly admired. In the extensive and trimly kept walled garden are two apple trees on which mistletoe is growing—on one of them a many-branched plant. Several cherry trees, covered with a close mass of blossom, presented a particularly beautiful sight.

Attention was chiefly directed to the old tower, which adjoins the mansion-house to the north. It is externally in perfect preservation, and in the interior the winding stone stair is intact from the basement right up to the little watch-box, or "cape tower," perched high on the top of the south-east angle tower, from which a magnificent prospect can be obtained. It commands a long stretch of the Solway shore, which would be the quarter from which danger was chiefly to be apprehended in the days when the owner of the tower and his retainers had figuratively at least to sleep with spur and spear. A good many of the original wooden beams survive, but in a decayed state; and the inaccessible corners were on Saturday vocal with the chirp of adolescent jackdaws. There has been a castle of Amisfield, or

Hempisfield, as it is sometimes styled in early documents, since the twelfth century; but the tower now standing is of later date. The main building is a square keep, of three storeys, basement, and attic, built of whinstone, each storey consisting of a single large apartment, with some subsidiary accommodation; but its height is greatly increased by projecting turrets, which add to it also a very picturesque feature. These turrets are of red sandstone; and the south front of the tower, in which is the entrance, is enriched with door and window settings of freestone, elaborately carved. They are square in form, but at a little distance above each is a rough circular arch in the whinstone. This may either indicate that the richer work is a late insertion in an older building, or it may be that the arch was formed to protect the freestone lintel from the superincumbent weight, which, even as it is, has proved too heavy in one instance and has cracked the lintel. On the same front are two shields in freestone, marriage stones, commemorating Sir John Charteris and his wife, Agnes Maxwell, daughter of John, Lord Herries (first of the Maxwells to bear that title). The husband's shield, with a plain saltire, bears the initials I. C. and the date 1600. On the other the three hedgehogs of Herries are carved on two quarters, and in the others a label of three points; surmounted by the initials A. M. and the same date. A massive door from the tower, which is now in the Antiquarian Museum in Edinburgh, also bears the date 1600 and a representation of the incident of Samson rending the lion's jaw. The following detailed description of the tower we take from Messrs Ross and M'Gibbon's valuable work on "The Castellated and Domestic Architecture of Scotland." viz.:-

"This striking tower is situated on level ground above the steep bank of a stream about four miles from Dumfries, and near the station of Amisfield. It is one of the most picturesque of the late tower-built houses in the country. In plan it is a simple parallelogram, 31 feet 6 inches by 29 feet. The ground floor contains the entrance door and a straight stair to the first floor. It has one vaulted apartment, forming the usual cellar or store, and a smaller cellar next the entrance door, which may have been a guard-room. The first floor comprises the hall, 21 feet long by 15 feet wide, with large fireplace, almouries, etc., as usual. The recess adjoining the staircase seems to have been

partitioned off as a separate chamber. One small cupboard has a little window to the outside, and may have been a place for keeping victuals in. This hall was probably used as a kitchen and servants' hall. The second floor contains the more important upper hall or proprietor's living room, having windows on all sides, some of them provided with stone seats in the ingoings. There are also a garde-robe and almouries in the thickness of the walls. This room is only 22 feet by 21 feet. Above the first floor the staircase is carried up in a circular turret, corbelled out from the square angle, about seven feet from the ground. Over the corbelling there is a door by which access could be obtained to the tower without opening the strong doors and defences of the lower doorway. This door would probably also be connected with the enclosing wall of the courtyard. The way in which the outer circle of the stair turret is managed shows a little straining after effect. The third floor was evidently the proprietor's family bedroom. There is access from it by a few steps to the angle turrets at three of the angles. The form of these is unusual, from their being composed of a corbelled projection, partly circular and partly square. Each turret is provided with shot-holes, so that the face of the walls is protected on all sides. Above this floor the stair turret is made square in plan, and is overhung in a very extraordinary manner, the whole turret being very skilfully corbelled out from and balanced on the plain square angle of the ground floor. Above the third floor there is an attic room of the same dimensions. A small corbelled turret in the angle of the main staircase contains a very narrow stair to the attic floor and to two rooms (one above the other) immediately over the main staircase. These rooms are 9 feet by 8 feet. Still higher than this, and overhung and balanced on the apex of the gable, are two stories, and a still smaller stair than the last leading to the "cape-house" or watchtower, about 6 feet by 5 feet, forming the highest point of the building. Altogether this building affords a fine and telling example of the love of corbelling so prevalent in the fourth period of Scottish architecture. The windows are much more enriched than usual, and the enrichments all show the tendency, then so common, of reverting to the early types. Round the windows we find the dog tooth; the top of the tower shows the billet and cable, while the projecting dormer has the cable and

guilloch combined with the small shafts and corbels so common in Scottish architecture at that time. This is probably the most striking example of the adherence to the old keep plan, so remarkable in Scotland, while its external appearance is so entirely altered by the multiplicity of the turrets and ornaments piled up upon it as almost completely to conceal its origin."

The fireplaces both of the first and second floor are flanked by pillars of Norman style, and of a character too ornamental to support the idea that the first floor formed servants' quarters.

The estate of Amisfield was in possession of the Charteris family from the twelfth century until quite recent times. It was sold by George Charteris, who died in 1861, to John Irving, a planter in Jamaica, and has since passed through several hands. The family has long also been established in the east of Scotland, and is now represented in the female line by the Earl of Wemyss, whose family name is Charteris Douglas, and whose seat near Haddington is named after the Dumfriesshire property Amisfield House. A Charteris of Amisfield was witness to a grant of lands in Annandale made to Robert the Bruce by William the Lion in 1165. In 1298 a successor, Andrew Charteris, after having sworn fealty to King Edward, became suspect, and his "Castle of Amisfield and land of Drumgrey " were gifted by Longshanks to the Earl of Warwick, and landed estate in England belonging to him was also forfeited. It was not a long alienation, however, as he made his peace with the English King in 1304; and he managed to keep his estates notwithstanding that he joined Bruce in the enterprise inaugurated at Dumfries less than two years later. It was a family prominent in Border wars. The head of the house fought for James III. at Sauchieburn, and incurred another forfeiture, which, however, was annulled. The Sir John whose marriage stone is set in the front of the tower was associated with his father-in-law that was to be (Lord Herries) in a royal commission to establish order on the Borders after the clan battle of Dryfesands, in 1593. A Charteris of Amisfield frequently sat in the Scotch Parliaments of the seventeenth century, and Sir John was associated with Grier of Lagg in the persecution of the Covenanters. We don't know whether it is to that period that the origin of the family ghost is referable. takes in legend the form of a headless lady dressed in white;

but it is disappointing that no modern record exists of her appearance.

James V. and James VI. were both visitors to Amisfield. In the Antiquarian Museum at Edinburgh are shown two posts of bed which the latter sovereign is said to have occupied during one of his journeys to England. A visit of the earlier James is associated with the story of a dramatic personal exercise of his prerogative as the fountain of justice. While on a progress through the borders, it is said, he received a complaint that Charteris had turned a deaf ear to a poor widow's appeal for help when a party of English raiders had carried off her son and two cows, that formed her whole living. Leaving his retinue at a distance, he approached Amisfield alone, tethered his horse to a tree, and going to the door on foot, he there "tirled at the pin." Charteris was at dinner and refused to be disturbed. Even when the porter was bribed to carry a message that the English had come over the Border and the beacon should be lighted, he threatened the fate of Haaman to any who should dare again to disturb him. Then King James blew his horn, summoned his men, and sent in a message that he had been refusing admission to "the Gudeman of Ballengeich." All then was obsequiousness on the part of the baron, but he was told that he must rescue the widow's son and restore to her tenfold what she had lost, or he would be hung as high as Haaman. An ancient stump is still pointed out in the grounds as the remnant of the tree that served his Majesty for a tethering post.

A little way west of the tower is a camp, in form of an oval shaped piece of slightly raised land, surrounded with ditch and rampart, and on it are some stones suggestive of foundations of buildings. It is possible that there is here the site of the original castle of Amisfield. In the "Statistical Account of Dumfriesshire" it is suggested that this "may possibly have been a Roman station, where a cohort or two may occasionally have been placed. What renders this more probable is that the old Roman road from Burnswark by Trailflat passed close by."

Before leaving Amisfield a short business meeting was held under the presidency of Dr Martin, Holywood. The Rev. A. G. M'Kinnon, Lochmaben, and Mr J. R. Wilson, solicitor, Sanquhar, expressed the thanks of the society to Mr and Mrs Farish for the opportunity afforded to see the interesting old tower and

for their kindly hospitality; and Mr Farish, in reply, expressed the pleasure which the visit had afforded them.

Driving by way of Tinwald Parks, the party next proceeded to Torthorwald; and there they were met by the Rev. J. Marjoribanks Campbell, who communicated to them some notes regarding the old castle and its history. It occupies a commanding position, overlooking the valley of the Lochar and the town of Dumfries. Acres of Lochar Moss, near to its western extremity, are at this season covered with the white tufts of the cotton grass; and as seen from the height it presented the appearance of a field of snow dotted with gaunt Scotch firs. Only a fragment of the castle remains, and there is no access to its upper floors; but it is pleasing to observe that further decay is being arrested and some judicious work of preservation has been undertaken by the proprietor, Mr D. Jardine Jardine of Applegarth. The walls have been of great thickness, nine and ten feet, and in some places apparently even more; and the inner packing has been of rough stone mixed with burned shell lime, forming a mass almost as hard as rock. Fragments of shells can still be detected in the mortar. Mr Campbell suggested a Saxon origin of the name, and that it meant the tower of Thor in the Wood. It was a square tower of two vaulted storeys, basement, and attic rooms, measuring some 51 feet by 28 feet, and 45 feet high from the ground to the apex of the second storey. There has been a circular staircase in the north-east angle. The castle was last repaired as a place of residence in 1630. The roof is stated to have been still standing in 1790. Mr M'Dowall places Torthorwald in the second class of the castles of the district, but its extensive earthwork fortifications entitle it to rank even with those of the first class. large raised courtyard is protected by its steep sides, and also by a deep ditch, still wonderfully intact; and beyond this again lay a tract of marsh and an earthen rampart. About 1124 John de Soulis received of Bruce the barony of Torthorwald. It passed by marriage into the hands of the Kirkpatricks, and was thereafter in the hands of the Carlyles from 1357 to 1570. One of that family, Sir William de Carlyle, married Lady Margaret Bruce, sister of King Robert. His son received a charter of the lands of Calyn and Roucan. His descendant, William de Carlyle, was created Lord Torthorwald, and in 1443 he presented a bell to the parish church of Dumfries, which is now

preserved in the Observatory. The title fell into abeyance in 1579. It was revived by a new creation in favour of Sir James Douglas of Parkhead, who had married a grand-daughter of the last of the Carlyle barons. This Sir James it was who assassinated the Earl of Arran, ex-Regent, and set his head on a lance on the battlements of Torthorwald, in revenge for the death of his father, the Regent Morton, whom Arran had brought to the block. About 1640 the estate was sold to the first Viscount Dalrymple, and it continued in the Queensberry family until the time of the eighth Marquis, by whom it was sold to the late Mr Jardine of Dryfeholm. The title of Lord Torthorwald was revived in 1793 by the Carlyle family, whose last male descendant died in London several years ago.

During the Carlyle regime a royal charter was granted to John, Lord Torthorwald, in 1743, erecting the town of Torthorwald into a free burgh of barony, to be called "Carleill," with a weekly market and right to have "baxters, brousters, fleshers," and workmen in arts and trades; but a thinly-sown wayside line of cottages, dwindled in numbers of recent years, attests the failure to realise the project.

20th June, 1907.

(From the Kirkcudbrightshire Advertiser.)

ORCHARDTON.

On Saturday afternoon, through the kindness of Mr and Mrs W. D. Robinson-Douglas, a company of over thirty members of the Society were privileged to visit the beautiful grounds of Orchardton. The company journeyed by rail to Dalbeattie, where they were joined by a few of the Galloway members of the Society. Brakes were in waiting at the station to drive the party to Orchardton. The day was all that could be desired, and, the sun shining brightly, the country was looking its loveliest. The drive was by way of Munches, Kirkennan, and Palnackie, and the company were loud in their praises of the romantic and beautiful scenery. On arrival at Orchardton House, the visitors were most courteously received by Mr and

Mrs Robinson-Douglas, who were accompanied by Mr and Mrs Ovens of Torr and Professor Scott-Elliot and Mrs Scott-Elliot of Newton. The party were first shown Mr Robinson-Douglas's notable collection of beetles-a collection stated by Professor Scott-Elliot, the president of the society, to be one of the best private collections in the country. The company also had the privilege of seeing a beautiful collection of photographs by Mrs Robinson-Douglas. There was a fine array of Galloway books, in which the company were much interested. One is a manuscript record of an action at law brought by "Sir Robert Maxwell of Orchyardtoun, Bart., against Sir Thomas Maxwell, Barbara and Agnes Maxwell, and others," and which dragged its course through the courts for a period of sixteen years. This Sir Robert was "The Wandering Heir" of Miss Goldie's "Recollections," who, reared in France and entering the French army, came to this country as a soldier of Prince Charlie. narrowly escaped being shot at Dumfries, where he was captured after the slaughter of Culloden, made his way back to France, then returned to this country and began a legal process to eject the cousin who was in possession of his estate. The trouble dated back to the time of Sir Robert Maxwell, fifth of Orchardton, who, dying in 1729, had settled the estate on heirs male of his second marriage, to the exclusion of an older son, and stipulated in the settlement that if any of the heirs should be Popish and profess the Romish religion they should be debarred and the right of succession should pass to the next in blood being a Protestant. Sir Robert, prior to raising his suit, subscribed the formula against Popery, and alleged that at the time of his father's death he was a minor, not in a position to make his election of religion, and that he had been purposely reared a Roman Catholic and kept out of the way. He won his plea, but the year before his death (which occurred in 1786) he was obliged to sell the estate, being one of many Scottish landed proprietors who were involved in the failure of the Ayr bank of Douglas & Heron. The purchaser of Orchardton was Mr James Douglas, great-grandfather of Mr Robinson-Douglas, who, along with his brother Sir William (founder of the towns of Castle-Douglas and Newton-Stewart and builder of Gelston Castle), was a prosperous London and American merchant. A striking portrait of the old gentleman, by Raeburn, is one of a series of family

portraits, which, with other valuable paintings, adorn the walls of Orchardton.

Professor Scott-Elliot accompanied the visitors through the beautiful gardens and hothouses, pointing out and explaining many rare and valuable plants. Placed in a highly favoured situation for the growth of comparatively tender plants, and lending themselves, by their picturesque position, to the adornment prompted by a refined taste, the gardens and grounds at Orchardton are particularly attractive, both in their arrangement and in the plants to be found there. Since Mr Robinson-Douglas succeeded to the estate many improvements in these have been effected. The grounds are now amongst the most beautiful in the Stewartry, and they were much admired by the party. The avenue, bordered on either side by handsome trees, is also beautified by large masses of rhododendrons, not quite past bloom when the party visited Orchardton. At the garden front there are also many large beds of azaleas, which were still in bloom on Saturday. Here, and elsewhere in the grounds, are many choice shrubs, several of which are not to be met with elsewhere in the Stewartry, and some bloom well here which are not to be found elsewhere in Scotland in flower. The botanical members of the party were much interested in some buddleias, among them being the rare colvillei, which has flowered at Orchardton for the first time, and whose flowering is probably unique in Scotland. Another rare plant in this country is one of the crinodendrons (Tricuspidaria lanceolata), a beautiful shrub, with large crimson flowers on long pendant stalks. It is only hardy in a few favoured places in Scotland. This is grown in the rock garden, which is a beautiful little spot, furnished with many choice rock plants and shrubs, such as bamboos, Japanese maples, the New Zealand broom (called Notospartium Carmichælae), cytisuses, and a host of others, arranged in a natural way among the rocks, through which little runnels trickle, widening out into small pools in which gold fish disport themselves, and some of the smaller exotic water lilies grow. A small artificial lake has also been constructed here, and this is margined with choice moisture-loving plants; while the water hawthorn or aponageton and a number of the new hybrid water lilies flower freely in the pond. In the shrubberies and on the walls are many choice things, such as the New Zealand

Edwardsia, new Deutzias and mock oranges, the Californian carpentaria, which blooms well; many fine roses, and a great number of rare and beautiful plants from Chili, New Zealand, North America, &c. Herbaceous plants are also largely cultivated, among the most noteworthy of these being Eremurus himalaicus, a lilywort from Turkestan. The more formal parts of the garden were backward on account of the wet season, but the fruit and vegetables, like the other parts of the gardening department, reflected great credit on Mr P. Wilson, the head gardener. The greenhouses greatly delighted the company, and a splendid bougainvillea, with a superb plant of a near ally of the potato, from Costa Rica, called Solanum Wendlandi, specially delighted the horticulturists of the party. A number of the company visited the shore under the guidance of Professor Scott-Elliot, whose botanical knowledge was of the highest value to the party, and examined a number of native plants which grow there.

Coming out into the open beyond the gardens, a splendid view was had of Almorness Bay, with Heston Island in the foreground, and, away in the distance, the Cumberland coast line. Interesting features here were the various beaches, the Professor pointing out how the sea had gradually receded from the shore.

On returning to the mansion-house, the visitors were sumptuously entertained to tea.

Professor Scott-Elliot said, before they parted, he had a few words to say, with which they would all agree—that they should accord a very hearty vote of thanks to Mr and Mrs Robinson-Douglas for having so kindly permitted them to come down there that day. (Applause.) The district was not only historically interesting, but the gardens, as they must all have perceived, were simply crammed with rare plants from Chili. Japan, Palestine, and Eastern Europe, and, in fact, from all over the world. Nobody who had the smallest practical knowledge of gardening could but be aware of the time and trouble entailed in providing and keeping in good order such a collection. The charm there was that every plant seemed to have been consulted as to what it liked best, where it would like to grow, and then it was discovered how to make them join in one harmonious whole, and blend so artistically together. gardens would be very difficult to match anywhere in the world. In addition to the gardens they had also been privileged to view the rich collection of bettles made by Mr Robinson-Douglas—a much better and larger individual collection than in any other district of Scotland. It was a very valuable scientific work, which he was afraid was being neglected as a study of these different groups of insects, fungi, etc. Not so long ago there seemed to have been more people who took up and studied one special group. Now, he thought that they, as a society, should go in strongly for the different groups of natural history, and that they ought to specialise more, and really make some serious effort to study these groups more than they had done lately. He asked them to give both Mr and Mrs Robinson-Douglas a hearty vote of thanks, not only for their kindness in asking them there, but also for taking such trouble and care in making the day so interesting as it had been.

Mr William Dickie seconded. They had seen a very beautiful place under the best of auspices, and they had had the advantage of having the guidance of a gentleman who was the creator—in a secondary sense, but still in a very real sense—of the beautiful scene. They had also had the advantage of the guidance of Professor Scott-Elliot and Mr Arnott—two gentlemen who were thoroughly experienced, and who had the tact and ability to impart the knowledge they possessed.

Mr Robinson-Douglas said he would just like to thank the members, in Mrs Douglas's name and his own, for the very kind way in which they had received the remarks by Professor Scott-Elliot and Mr Dickie. It was a great pleasure to them both to see them there that day, and to be able in any way to interest them in the various things they had at Orchardton. What was the greatest pleasure of all was that those who were really acquainted with the various branches should see what they could there, and be able to enjoy themselves. He had been privileged to compare notes with some of them, and it was very interesting to know even the little he did know, and to have some knowledge of the much greater researches that might be made. It was perhaps a much better plan, as their president had suggested, that there should be a little more specialising in natural history. The subject, from every point of view, was too vast ever to be accomplished by any one individual. There was an immense deal in the Stewartry and Dumfriesshire yet to be discovered

which was in the hands of their society to do, and might be carried out in a more useful and scientific and elaborate degree than he had been able to do. He understood the party were now going from the new Orchardton to the old one. carried the history of the name back a good many centuries, away back early in the fifteenth century. The previous name of the place was Irisbuttle, and it was not clear when the name Orchardton first appeared. At anyrate it had been the name now since early in the fifteenth century. They would see the site of the old house which was inhabited up till about 1760, or something like that. Round the tower there a considerable amount of controversy had been raised, and about which a good many theories had been started. He thought it was now almost certainly decided that it was similar, although of an unusual shape, to the ordinary keep or peel tower that belonged to the large mass of the houses in the country at that time. Its chief interest was that it was round instead of square. It was of considerable antiquity, even for towers of that kind. Although not much remained now, there was just enough to see where the rooms had been, and what they were used for in times of emergency. He hoped it would be of interest to them, passing from the present to the past. (Applause.)

The company then entered the brakes, and were driven to the Round Tower. Perhaps the best account of the tower is that given in "A History of the Family of Cairnes or Cairns and its Connections," by H. C. Lawlor. The author traces the history of this family in its various branches. Alexander Carnys, the Provost of Lincluden, who died in 1422, during the term of his office, had accumulated considerable property in the Stewartry, Orchardton being one of the possessions of the family. Here John Cairns erected a residence. Mr Lawlor says:—"That he was a man of strong original ideas and strong individuality of taste there can be little doubt. The castle which he built was unique in Galloway, and almost so in all Britain. It consisted of a rectangular block measuring about 80 feet by 60 feet. The height cannot be estimated, as of this portion of the castle only a fragment of the strong arched basement remains. But, from the depth of fallen masonry within the four walls, it could be estimated that the building was of considerable height. However, a remarkable feature of the castle was a massive circular peill at

the end of the main building, and communicating therewith by an arched doorway on the first floor. The remarkable structure has withstood the ravages of time to a wonderful extent, and while the original woodwork has disappeared, the masonry is almost intact. The basement consists of a vaulted chamber of small dimensions. The walls of the basement are almost eight feet thick. This chamber or dungeon is entered by a doorway communicating with the outside, but the stone work round the doorway being of a much more recent date than the castle itself, indicates that originally the dungeon was entered only by a trap door in the vaulted roof which forms the floor of the first storey. The first floor of the peill was the entrance hall of the castle, and round the walls are remains of carving which indicate that it was originally handsomely decorated. The floors above the entrance hall were of timber, and have long since disappeared. The main entrance, which is approached externally by a flight of steps, has an arched doorway formerly leading into the rectangular dwelling portion of the castle, which has now fallen away. The walls on the first floor measure six feet in thickness, and the side door from the hall leads to a circular staircase, built in the thickness of the wall, to the upper floors and the roof, which has a flagged pathway, some eighteen inches wide, surrounded by battlements, still in fair preservation. . . . It is quite probable there was a castle on this spot before 1456, but there is no doubt that the circular tower and other improvements were added about this period by John Cairnis, who made this his residence, giving it the name of Orchardton, the name by which the lands of the present estate shortly afterwards came to be known. Orchardton is first mentioned as the residence of John Cairnis in the records of 1467. The round peill was an object of renown through Scotland, and is still visited by many tourists and antiquaries. . . All accounts seem to unite in overlooking the fact that the tower was merely a stronghold or keep of a larger residence, now almost entirely demolished by the ravages of centuries." In the wall of the first storey of the tower is a recessed apartment, with an arched framework of light-coloured sandstone and Gothic design, and set into it is a carved stone, hollowed on the upper surface and with a small central hole, which is obviously a fragment of a piscina. This suggests that the apartment had been used for ecclesiastical as well as residential purposes. A tradition says that this stone was taken from the ancient chapel of Kirkmirren, of which the site is pointed out near Potterland.

After a short stay at the Tower, the homeward journey was resumed, Dalbeattie being reached shortly before eight o'clock, after a delightful day's enjoyment.

NATIVE PLANTS FOUND AT ORCHARDTON.

Professor Scott-Elliot adds the following notes:—Amongst the more interesting wild plants may be mentioned the Spearwort, Ranunculus Lingua, Myriophyllum spicatum, and Carex Pseudocyperus, all of which were in flower in or near the small pond by the house. Along the seashore there was a beautiful example of Armeria mudflats, composed, besides Thrift, of Glaux, Aster Tripolium, Plantago lanceolatus, Cochlearia, Triglochin palustre, and several Scirps and Rushes. Still more interesting was the enormous extent of mud covered at high tide whereon hundreds of tiny plants of Salicornia herbacea could be observed. Amongst other plants were Potentilla reptans and Sherardia arvensis growing in the park below the house. The Skullcap and Cow Wheat are also common, but members had not time to make an exhaustive list.

13th July, 1907.

CAPENOCH.

(From the Dumfries and Galloway Standard.)

What scientists there may be in the counsels of the Natural History and Antiquarian Society did not justify their prescience when they fixed upon Saturday last for a Mid-Nithsdale excursion. The day proved to be another dripper sandwiched between one of those rare dry blinks that had still the touch of a snell spring in their evening temperature and the broiling days that we are all hoping mean the advent of a real though belated summer. Climatic miscalculations notwithstanding, however, they made a very pleasant afternoon of it, and they saw much to excite their interest and to extend their acquaintance with nature. In view

of the wet condition of the fields, a proposed climb of Tynron Doon was dropped from the program, and instead the company gave a short time to a visit to the museum in Thornhill, which is still known by the name of its founder, Dr Grierson. There they were impressed with the methodical arrangement of the extensive and miscellaneous collection, and with the orderly and cleanly manner in which everything is kept. Occasional gifts still swell the contents of the museum, among the latest being a very extensive collection of bird eggs given by Mrs Dickson, late of Dabton. Mr P. Stobie, in name of the society, tendered to Mr Kerr, the curator, their thanks for his kindness in permitting them to see the museum and in piloting them through it, and also through the grounds, which are rich alike in botanical and antiquarian interest.

Driving from Thornhill to Capenoch, the party were hospitably received by Mr and Mrs Hugh S. Gladstone, who had driven over from their own residence of Lann Hall to do the honours of the house. There being a lull in the rainstorm, the "mere males" for the most part elected to accompany Mr Gladstone on a tramp up the hill to the Far Loch, through the wood by "the Picts' Cairn," and back by way of the home farm. And it was a walk replete with pleasure. The beautiful ornamental grounds end in a gem of a pond fringed with rhododendrons, eucalyptus, and various trees. A belt of hard wood is traversed, passing on the way a square-shaped sheet of water, haunt of the heron and the curlew. Then the path leads along a hillside planted with young larch; and we emerge at a narrow, sinuous sheet of water, known as the Far Loch-because, we suppose, of its situation, furthest from the mansion-house-and which forms a paradise for the birds, in the observation and photographing of which Mr Gladstone finds an engrossing pursuit. Here are found wild duck, teal, wigeon, little grebe, and an occasional pochard. A pair of carrion crows nest regularly in a clump of firs on its margin, but care is taken not to allow them to multiply. A pair of oyster catchers or sea pyets have lately been frequenting the lower lochs, indicating that this bird, which is found in great flocks on the Solway shore, is coming inland to nest. The wigeon does not nest here yet. The curious floating nest of the little grebe has been observed here during the last five years. But this year the pitiless rain has filled the little craft to such an

extent as to submerge it and to chill the eggs. The same cause has played havoc with the young of game birds. Those of the pheasant in particular have been largely drowned out; and Mr Gladstone mentioned that he had lately seen eight hens, only one of which had a brood-and that brood consisted of a solitary bird. Woodcocks, it was stated, are nesting in increasing numbers in the district. Roe deer frequent the wooded heights, and one was observed crossing the fields, alarmed no doubt by the invasion of its sanctuary. Picturesque animals though they are, their destruction of crops and trees turns the hand of both landlord and farmer against them. An occasional white hare is met with in the district-not the blue hare of the north, which assumes a white coat in winter, but white specimens of the ordinary brown hare-and two of them at present have their home on Capenoch. At the farm are several young specimens of the wild grey goose-the Grey Lag-brought by Mr Gladstone from the Outer Orkneys.

"The Picts' Cairn," which was passed on the way to the loch, is a little hill almost perfectly round in form, and with flat summit. On one face is a mass of large and more or less loose stones; but these appear to be fragments detached from the native rock, rather than any artificial accumulation. It is a spot which would certainly form a very good natural stronghold, but nothing was seen to explain the origin of the name which it locally bears. From this elevated spot an extensive view is obtained over the valley, through which flow the streams of Nith and Scar, and away to the background of massive hills dominated on the one hand by the Green Lowther, on the other by Queensberry. Capenoch, situated on a most pleasant spot near the base of the hill, is a stately modern mansion, built of a light reddish sandstone, but incorporating part of an old baronial tower two centuries old and with walls seven feet thick. Scar borders the policies and gardens, and near to the sawmill its waters tumble over a mass of broken rock with effects turbulent and picturesque. The more placid Shinnel flows through the policies, a bridge carrying the avenue across it just before it loses itself in the larger stream. The grounds are plentifully studded with handsome trees, oaks and other native species, and there is a nice selection of more recently planted conifers. beech tree presents a singular feature, and was the subject of

some speculation. Most of the branches bear leaves of the ordinary shape; but on others the leaves are narrow and elongated; and the ordinary and "sport" form of leaf are found growing together on some branches. We believe the true explanation is that a fern-leaved beech has been grafted on a common beech, and is gradually reverting to the original type, as often happens.

The gardens are extensive, and rich in fruit, both hardy and under glass, and in bedding out plants; and give evidence of very skilful management.

The ladies passed most of the time in the gardens and the house, under the kindly pilotage of Mrs Gladstone. Reuniting forces, the party proceeded to the dining-room, where tea awaited them. Before rising from the table Dr Martin, Holywood, a vice-president of the Society, and the Rev. T. Kidd, Moniaive, expressed their thanks to Mr and Mrs Gladstone for their great kindness. Some time was thereafter spent in examining the valuable collection of birds, the wonderful series of photographs of bird life, and other things of interest indoors. A recent addition to the ornithological specimens is a fine female raven, shot at Glenwhargen, for the injury which these birds do to sheep has produced war on the family long settled there. A volume inspected with peculiar interest was a large scrap book of the South African War, and particularly of the experiences of the 3rd King's Own Scottish Borderers, as an officer of which Mr Gladstone took part in the campaign. A singularly pathetic memento which it contains is a letter of a Boer named Meyer, who had been sent into the Boer lines with letters intended to induce his compatriots to come to terms of submission. Being captured, he was tried by a military tribunal and sentenced to be shot. It was while awaiting the execution of the sentence that he wrote this letter of farewell to his wife. He tells how the sentence had been pronounced by an old friend of his own, named Joubert, who could hardly control his feelings in court in the discharge of the stern duty, and who afterwards came to him in tears. The writer indulges in no language of reproach or complaint, but sends a pious last message to each of his half-dozen little ones and to the wife who would be a widow ere the missive reached her. It is a document fitted to bring home to the heart the essential bitterness of war.

THE APPARENT ORIGIN OF A PLACE-NAME. By Mr James Barbour, F.S.A.Scot.

(Read at Thornhill Museum.)

Spade-work has accomplised much in revealing details of ancient monuments and adding to our knowledge of their history. It is not so common by the use of the same implement to recover long lost evidence of a place-name, but the following note furnishes a seeming instance of the kind.

Such names are frequently derived from some peculiarity attaching to the place itself, and if in course of time the distinguishing characteristic comes to be obliterated, the name, by the rule of guess work, a more popular method of investigation than spade work, is said to owe its derivation to some ancient, unknown, or never-existing tongue, should it have a somewhat mysterious sound; otherwise it is considered fanciful, the whim of an old laird.

In the parish of Kirkmichael, Dumfriesshire, there is, on the left bank of the Water of Æ, a farm bearing the very ordinary and modern looking name of "Hazeliebrae." There are no hazels at or near the place to account for the name, nevertheless it appears in the Old Valuation Roll, and how long it has been in use no one can tell. An interesting discovery has now, however, been made having the semblance of a solution of the question. On proceeding to excavate a pump well water was reached at a depth of 8 feet, and a sample being submitted for examination to the county analyst, Mr Davidson, it was found to contain an unaccountable amount of vegetable matter. This, it was thought, came from the surface, and in order to get free of it the well was carried deeper, but almost immediately the source of contamination was discovered at the bottom of the excavation, consisting of a stratum about 6 inches in thickness of vegetable remains, showing brushwood and leafage, in which were recovered a number of hazel nuts. The stratum was much compacted as if by the application of pressure over a lengthened period. The overlying strata from the ground surface consisted of a stratum 7 feet deep of reddish yellow loam inclining to clay, dry, and sufficiently soft to admit of being removed by the spade alone; a bed about 12 inches deep of stones 4 or 5 inches across mixed with gravel, from which the water submitted for analysis was taken; the 6-inch deep bed of vegetable remains, and underlying this a 12-inch deep stratum of grey clay or earth, on which the plants had been nourished, and shingle of unknown depth, yielding an abundant supply of water. The level of the shingle of the bottom of the well corresponds approximately with the bed of the river, which is distant about 150 yards. The name of the place is seemingly fully accounted for. The hazels have been revealed, and the brae, the crown of which is occupied by the farm steading, begins to rise at the well. It is characterised as a "Hazeliebrae."

I don't pretend to account for the accumulation of 8 feet of earth over the stratum of vegetable remains at the bottom of the well. If due to silt from the overflow of the river, the floods must have risen to a height of 12 feet or so above the present level, and have submerged a large area of land. A similar instance of long covered vegetable remains was exposed in the course of excavating the reservoir for Ruthwell Water Works. The strata consisted of (1) 2 feet of moss, (2) 2 feet of clay, (3) soil containing sprigs and hazel nuts, and again clay; and many years ago the late Mr Gibson, a member of this Society, reported to the Royal Geographical Society another find of the same kind in the excavations for a gasometer at the Dumfries Gasworks. These circumstances are interesting, as going to show alterations of level of the surface of the ground, and prevalence of a brushwood covering.

14th September, 1907.

(From the Dumfries and Galloway Standard.)

JARDINE HALL, SPEDLINS, AND CORNCOCKLE.

The last field meeting for the season of the Dumfries and Galloway Natural History and Antiquarian Society was held on Saturday last, when on the invitation of Mr D. J. Jardine of Applegarth the members paid a visit to his seat, Jardine Hall, and viewed the romantic Spedlins Tower and the sandstone quarry on Corncockle Moor, features of the estate which appeal strongly to the archæologist and the geologist respectively. The

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company numbered sixty, the larger number travelling from Dumfries, and smaller contingents coming from Moffat, Lockerbie, and Annan. Assembling at Lockerbie, they left the town by way of Dryfe Bridge, where the remnant of the old churchyard recalled the rhyme about "spades and schules," and cast their eye over the battlefield of Dryfesands. Turning to the right at the hamlet of Millhousebridge, they drove along the left bank of the Annan by a finely wooded road to Jardine Hall. Arriving in front of the stately mansion-which dates from 1814, but has been something like trebled in size by its present owner—they were cordially welcomed by Mr Jardine, and found a generous luncheon awaiting them in a marquee which had been erected on the lawn. Thus fortified, they crossed the Annan by a footbridge and proceeded to Spedlins Tower, which crowns a rising ground on the right bank of the river. It is a border keep of the larger class, and its outer walls are practically perfect, thanks largely to the care of Mr Jardine, who has had judicious repair carried out where required, and has erected a protecting fence around it. The roof is a double one, with stone gutter between. Circular angle turrets, with massive rope mouldings, give a decorative element to the architecture. The tower was the family residence of the proprietor of Applegarth estate until the erection of a new dwelling-house, where the gardens now are, and which was in turn superseded by Jardine Hall early in last century. Now many lintels of the tower have given way under the pressure of superincumbent masonry, and time has otherwise made considerable ravages with the interior walls. The tragic story of the starving of a prisoner in the dungeon is the incident that seizes the popular imagination in regard to Spedlins. According to the commonly accepted account it was an unfortunate miller who met this fate. Until a comparatively recent date a mill stood in close proximity to the castle, and the point where the "race" entered the Annan is still pointed out. Tradition has it that Porteous, the tenant, set the mill on fire, and for the deed was consigned to the dungeon, and there forgotten when the baronet and his retinue rode off to Edinburgh. Several of the visitors descended by a ladder into the dungeon. It is really a cupboard built in the thickness of the outer wall, and entered from the top by an opening at the foot of the staircase that leads from the great hall to the apartments above. It is fifteen feet deep, nine feet in length, by four broad. There is no air-hole in the walls, although we understand there was one communicating, not with the outer air, but with a vaulted chamber below, which has now been overlaid by soil. The entrance is now covered by a thick board. Probably a stone flag would be used when the tower was inhabited. In any case, whenever the chief or any of the household left the banqueting hall to go to the bed-chambers or to the battlements they must have walked over the head of the wretch occupying the dark and noisome cell. It would hardly seem necessary to starve one kept under such conditions: he could be poisoned by merely keeping the door shut. We reproduce at the end of this article the ballad in which Robert Chambers has enshrined the doleful seventeenth century tale. Mr Chapman, factor on Applegarth estate, accompanied the party on their visit to the tower, and in the great hall he read the following notes regarding its history and architecture:-

"Spedlins Tower, the ancient seat of the Jardine family, is a fine specimen of the plain square tower or keep, of which there are many examples in the Border district. It measures 46 ft. 6 in. long by 39 ft. wide, and 48 ft. high to the eaves. There have been four floors, viz., the basement, 10 ft. in height; the principal floor, consisting chiefly of a hall measuring 28 ft. by 20 ft. 6 in., by 18 ft. high; the third floor, which evidently consisted of four rooms 10 ft. high; and the fourth floor, which also bears evidence of four rooms 8 ft. in height. Above that again there seems to have been an attic floor. The walls of the two lower stories are very strong and substantially built, being from 9 ft. to 10 ft. in thickness. The walls of the upper portion are much thinner, being from 3 ft. to 3 ft. 6 in. thick. The lower floors are constructed on arches reaching across the full width of the building, while the upper floors have been carried on wooden joists, the joist-holes being still seen in the walls. Both Grose and M'Gibbon, the authorities on Scottish antiquities and castellated architecture, were of opinion that the two vaulted stories were built in the fifteenth century, and that the date 1605, on the square tablet at the top of the Tower on the east side, represents the date of the additional two stories. The tablet bears a coatof-arms as well as the date, of which I have taken an impression and have made a drawing from it as shown. I have also noted the following differences between the lower and upper portions,

viz.:—The building stones of the lower portion are mostly larger and packed in between with small stones, formerly termed block and sneck, while those of the upper portion are more regular and squarer dressed, and do not show nearly so much rock face, besides being less weathered. The windows of the upper portion are all safed with arches over the lintels, while the lower are not, except the large window in the hall, which has evidently been introduced at the time when the addition was built. The rybats of the upper windows are rounded at the edge, instead of being splayed like those of the lower stories. In the south-west corner is the dungeon (formed entirely in the thickness of the wall of the tower), measuring 9 ft. by 4 ft. wide and 15 ft. deep. Entrance to the dungeon is had by a hatchway at the foot of the staircase. It was in this dungeon that "Dunty," or as tradition has it a miller named Porteous, was imprisoned by one of the baronets, and having been forgotten was unfortunately left to die of starvation. His ghost is said to have haunted the building until the family chaplain exorcised and confined it to the dungeon in which it remained quietly as long as the family Bible was kept in the Castle. The story, however, is well-known, and need not be recapitulated in full here. Particular note should be taken of the elaborate design, and measures 8 ft. wide by 5 ft. high. The tower is built of Corncockle red sandstone, which stands the weather remarkably well; in fact the rope mouldings and corbelling of the turrets are almost as perfect as the day they were dressed. Although roofless, it is in a remarkably good state of preservation for such an old building, the present proprietor, Mr D. Jardine Jardine, having had it all carefully pointed and repaired a few years ago."

Having surveyed the tower, the party broke up into groups. Some wandered through the policies and inspected the gardens; others, under the guidance of Mr Chapman, walked to Corncockle Quarry, where also they were met by Mr Burke, manager for Messrs Benson, the lessees. A vast quantity of rock has been quarried during the last twenty years, but the supply has still been only slightly tapped. There is on one side a solid rock face 120 feet in height, which has not yet been touched; and in the bottom of the quarry great blocks are being cut out, as large as 22 feet in length and $2\frac{1}{2}$ feet thick. It is a sandstone of compact grain, of which large quantities are sent to the cities for

building purposes. On one of the exposed faces were seen a series of the fossil footprints which have made this quarry familiar to the students of geology. Something of a sensation was created when, in 1827, the versatile Dr Henry Duncan, minister of Ruthwell, announced the discovery of the footprints of quadrupeds at Corncockle, for it was part of the geological faith at the time that no animals so highly organised as these indicated had existed in the New Red Sandstone period. Professor Buckland, of Oxford, was the first scientist to admit the authenticity and significance of the new discovery, and he indulged in the witticism that as the footprints which he saw all pointed southward they showed that even in these early days the inhabitants of Scotland had set their steps towards England. Professor Sedgwick, of Cambridge, and Sir Roderick Murchison were doubtful for a time, even after a personal visit; but the evidence was too clear, and it was strengthened by the subsequent discovery of footprints and detached bones of still larger animals in the same formation in Saxony and near Liverpool. To these gigantic animals of croco-dilian character, found in the Saxony rocks, the name Cheirotherium was given, because of the resemblance of the footprints to a human hand; and they are also known as Labyrinthodon, a fanciful name based on the structure of the teeth. The smaller Corncockle impressions have been likened to such as would be made by land tortoises. It has been conjectured that the triassic rocks, to which this sandstone belongs, were laid down in a great salt lake or inland sea, round the margins of which these ungainly animals left their footprints on soft sand. hardened strata had been tilted up when nature was in one of her violent moods, and at Corncockle you see a regular progression of the footprints going down a steep angle of something like forty degrees. Some excellent examples of the fossils are preserved in the mansion-house of Jardine Hall.

The gardens at Jardine Hall are extensive, and the company found much to admire, although the severe frost experienced about ten days before had disastrous effects upon many of the plants, and in consequence the beds and borders were not so gay as they would have been in ordinary circumstances. In the open space at the garden front of the mansion there are a number of choice trees and shrubs, including some old yews, some very fine Douglas firs, good specimens of Abies Nobilis, fine Welling-

tonias, Cedars of Lebanon, cut-leaved hornbeans, Tilia cordata, American and other oaks, such as Quercus rubber and Quercus castaniæfolia; with large beds of good shrubs. A Douglas pine (Abies Douglasii) is one of the finest to be seen in Scotland. has attained to a height of eighty feet; at five feet from the ground its girth is 11 feet 5 inches; and its branches cover a great space 69 feet in diameter, the lower ones resting upon the ground. This growth has been attained, it is understood, in something like seventy years. The flower garden is prettily laid out, and is well furnished with hardy flowers, roses, and wall plants, while annuals are largely utilised for the autumn display. As already indicated, the bedding plants had suffered from frost, but in ordinary circumstances they would have been very pretty with their skilful arrangements of begonias, fuchsias, asters, stocks, and other seasonable flowers. The vegetable and fruit garden is very extensive and in excellent order. The glass department is also extensive, and includes a spacious conservatory, filled with suitable plants, such as swainsonias, begonias, petunias, schizanthuses, pelargoniums, etc., admirably cultivated. The vineries, peach-houses, and other glass structures showed large crops of excellent fruit; and the ferneries were specially attractive to those who are interested in these plants.

At half-past five the company again assembled in the marquee, where they partook of tea; and Professor Scott-Elliot of Newton, president of the society, tendered their very cordial thanks to Mr Jardine for his kind invitation to visit a place where there was so much of interest to see and for the noble hospitality which he had extended to them. Mr Jardine assured his guests that their visit had been a great pleasure to him.

At a business meeting the following new members were proposed and admitted: Mr Dickson, rector of Moffat Academy; Mr Malcolm, rector of Lockerbie Academy; Provost Byers, Lockerbie; Mr A. Chapman, Dinwoodie Lodge; Mr Gooden, Inland Revenue service; Miss Annie Gordon, Kenmure Terrace, Maxwelltown.

THE PRISONER OF SPEDLINS.

To Edinburgh, to Edinburgh, The Jardine he maun ride; He locks the gates behind him, For lang he means to bide. And he, nor any of his train,
While minding thus to flit,
Thinks of the weary prisoner,
Deep in the castle pit.

They were not gane a day, a day,
A day but barely four,
When neighbours spake of dismal cries
Were heard from Spedlins Tower.

They mingled wi' the sighs of trees,
And the thud-thud o' the lin;
But nae ane thocht 'twas a deein' man
That made that eldrich din.

At last they mind the gipsy loon, In dungeon lay unfed; But ere the castle key was got The gipsy loon was dead.

They found the wretch stretch'd out at length Upon the cold, cold stone,
With starting eyes and hollow cheek,
And arms peeled to the bone!

Now Spedlins is an eerie house,
For oft at mirk midnight
The wail of Porteous' starving cry
Fills a' that house wi' fright.

"O let me out, O let me out, Sharp hunger cuts me sore; If ye suffer me to perish so, I'll haunt you evermore!"

O sad, sad was the Jardine then, His heart was sorely smit; Till he could wish himself had been Left in that deadly pit.

But "Cheer up," cried his lady fair,
"'Tis purpose makes the sin,
And where the heart has had no part
God holds His creature clean."

Then Jardine sought a holy man
To lay that vexing sprite;
And for a week that holy man
Was praying day and night.

And all that time in Spedlins house Was held a solemn fast,

Till the cries waxed low, and the boglebo in the deep Red Sea was cast.

There lies a Bible in Spedlins ha', And while it there shall lie Nae Jardine can tormented be With Porteous' starving cry.

But Applegarth's an altered man—
He is no longer gay;
The thought of Porteous chings to him
Until his dying day.

ABSTRACT OF ACCOUNTS

For year ending 30th September, 1907.

CHARGE. I. Arrears of Subscription recovered

7.	Annual Subscriptions, I	83 at :	5a 01 .	+ 00 64				. £1		
3.	"Transactions" sold	00 40 .	υσ, – 1 τ			•••				
4.	Sum uplifted from Savir	D.	· · · ·	•••	•••				11	. (
	Interest thereon		ınk	•••	•••	£17				
	interest thereon	•••	•••	•••	• • • •	1	12 1	0		
5.	Excess sum often	1 .		· .				- 18	12	10
•	Excess sum after payis	ng hi	res fro	m Lock	kerbie	to J	ardin	е		
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7	Nam in Deposit Receipt	Exca	vation	Fund				. 2	11	į
٠.	Arrears Outstanding	•••	•••	•••					17	
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								£75	7	. (
	D-1 1 D 1	DI	SCHA	RGE.						
	Balance due Bank							£6	12	3
٤٠	Rent, Taxes, and Insura	nces							16	Ċ
5.	Frinting and Stationary	~_			•••	•••	•••		10	,
	Annual Subscription for	or An	nals of	Ē						
	Scottish History					£0	7 6	į.		
	Receipt Book				•••	0	7 6			
	J. Anderson & Son, Per	iodica	ls etc			9	8 2			
	J. Maxwell & Son, Prin	ting a	and Ad	dressin	CP.		0 2	•		
	FOST-Cards Calling	Mont	more			0	10 0			
	"Dumfries Standard,"	"Tra	nenatio	na 32 of			12 6			
	,	2.100	11046610	1113, 600	٠	27	12 0		_	
	Advertising Meetings							39	7	8
	Miscellaneous -	•••	•••	•••	•••	•••	•••	. 2	19	6
	A. Turner, Chemist, Ox	XI.CO.D	oto							
	Honorarium to Lecture	ygen,		•••	•••	£0	9 0			
	J. W. T Smart, Joiner	• • • •	•••	•••	•••	1	1 0			
	Janitor of Library		•••	•••	••		2 10			
	Cheque Pool-	•••	•••	•••	•••	0	10 0			
	Cheque Book Bank Commissions	•••	•••	•••	•••	0	0 10			
	Dank Commissions	•••	•••	•••		0	1 3			
	Posts and Outlean							2	4	11
	Posts and Outlays-									
	Secretary		•••			£l	12 6			
	Treasurer					1	0 0			
	Posts of "Transactions	***				0	7 11			
	P.1							3	0	5
	Balance in Bank						•••	6		4
	Sum in Deposit Receipt			•••		•••	•••	2		5
į	Arrears outstanding			•••		•••	•••	$\frac{2}{2}$		6
						***		4.	4 4	U
								£75	7	0

Galloway Natural History and Antiquarian Society for the year ending 30th September last, and certify that the foregoing Abstract exhibits a true and correct account of the Treasurer's operations. (Sgd.)

JOHN SYMONS, Auditor. BERTRAM M'GOWAN, Auditor.

Dumfries, 3rd October, 1907.

EXHIBITS AND PRESENTATIONS.

Остовек 12тн, 1906.

Mrs M'Dowall, Cresswell Terrace—MS. of her late husband's (Mr M'Dowall) "History of Dumfries."—Presented.

NOVEMBER 9TH.

- Mr J. G. Drummond—A large collection of Postage Stamps.
- Mr James Campbell—A collection of Postage Stamps.
- Mr R. Service, jun.—A collection of Postage Stamps.
- Mr H. Edgar-A collection of Postage Stamps.
- Dr J. W. Martin—A number of Canadian Pamphlets, principally on archæological subjects.
- Mr R. Service—A very fine Stone Axe of the adze form, 11½ inches long, tapering from 3½ in. broad at one end to 1½ in. at the other, 3 in. diameter at thickest, but tapering to an edge at each end; shown on behalf of Mr John M. Corrie, and found at Todstone, near Dalry, in 1880, but not previously recorded.
- Mr R. Service—A Whorl, found on Mollance, Castle-Douglas, sent by Mr J. M. Stewart, gardener, there. Of the usual form, but with incised lines.
- Mr R. Service—From Sandhills, on shore of Island of Coll, Pieces of Pottery, Bronze Ring, Pin, Needle, Blue Bead, and Small Copper Coin (a halfpenny of period of Richard II. or Richard III.), from Mr R. Sturgeon, formerly of Lochfoot.
- The Photograph Survey Committee—A number of Photographs of the Antiquities of the district, contributed to the Society by a number of ladies and gentlemen.
- Miss M. Fleming-Hamilton, Craiglaw—Photographs of the Standing Stones of Laggangairn, illustrating her paper.

NOVEMBER 23RD.

- Mr R. Service—A Photograph of the fine Group of Scotch Firs at Shambeliie on the east side of the Newabbey road.
- Mr R. Service—A Pair of Jack Snipes to record their early appearance. These birds migrated at an early date this season, and were first seen on October 14th, 15th, and 18th, 1906.

DECEMBER 7TH.

- From Edinburgh Royal Botanic Gardens—A very extensive collection of Specimens of Fungoid Diseases, Insect injurious to British Forest Trees, Cones, etc. Sent through the kindness of Professor Bayley Balfour.
- Mr Wellwood Maxwell of Kirkennan—Specimens of Forest Trees grown in manured and unmanured soils, with other Forestry Exhibits.
- Mr W. J. Maxwell, Terregles Banks--A Tree Measurer of his own design and one of the usual pattern.
- The President—A number of Books on Trees, etc., and Specimens of Diseased Branches.
- The Secretary—Books on Trees and Shrubs.
- The Ewart Library-Books on Forestry and Gardening.

DECEMBER 21st.

- Mr James Barbour—A Portrait of Dr Burnside, author of the MS. "History of Dumfries," in the possession of the Society. Mr Barbour kindly presented this portrait to the Society. Also the Original Plan of the Roman Camp at Birrens—presented to the Society. Also a fine Engraving of the Eastern Chancel of Holywood Abbey, drawn by John de Wyck and engraved by P. Mazell.
- Mr W. M'Cutcheon—A number of Cards of Views in the Juras, to illustrate his paper.

JANUARY 18th, 1907.

- The Photographic Committee—Several additional Photographs of the Local Antiquities.
- Mr R. Service—A very fine Bronze Celt, found when some of the piers of the Old Bridge of Dumfries were removed, and which had been recently presented to the Observatory Museum by Miss Fraser, Ardwyn, Dumfries.

Mr C. S. Robertson, Creetown—Drawing of Cist and Urn recently found on Barholm, Creetown.

FEBRUARY 1ST.

Bailie Lennox—A Photograph of the New Church, Dumfries.— Presented to the Society by the exhibitor.

FEBRUARY 15TH.

Mr D. Halliday, Lockerbie—A number of Relics and Photographs of Italian Antiquities.

MARCH 1st.

Mr James Lennox-Lantern Slides of Dumfriesshire Towers.

MARCH 15TH.

- Mr Haining, Queensberry Street—A number of Old Documents relating to Dumfries, including an early voters' roll of the burgh, posters, old election addresses, etc.
- Mrs M'Quhae, Glasgow Street—Two Burgess Tickets of the Burgh of Dumfries, which she presented to the Society.

APRIL 5TH.

Mr M. H. M'Kerrow—Pewter Candlestick, found at Castledykes; also Documents illustrating his paper on "Judicial Oaths."

APRIL 18TH.

- Mr John T. Johnstone, Moffat—Engraved Portrait of Robert Burns, by James Chapman, published by Vernor & Hood, 1st April, 1801.
- Mrs Thompson, Inveresk, Dumfries—Flower Paintings and a collection of Dried Alpine Flowers.
- Miss Annie Murphie, Cresswell House—A Copy of Curtis's "Flora Londinensis."
- Mr John M. Corrie, Observatory Terrace—Sword Blade of rapier-like form of Andrea Ferrara.

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LIST OF EXCHANGES.

- 1. The British Museum.
- 2. The Advocates' Library, Edinburgh.
- 3. The British Natural History Department, South Kensington, W.
- 4. The Yorkshire Naturalists' Union, The Museum, Hull.
- The United States Department of Agriculture, Washington, U.S.A.
- Peabody Museum of American Archeology and Ethnology, Harvard University, Cambridge, Mass., U.S.A.
- 7. Meriden Scientific Society, Meriden, Connecticut, U.S.A.
- 8. Minnesota Academy of Natural Sciences, Minneapolos, Minesota, U.S.A.
- 9. The Hawick Archæological Society, Hawick.
- Harvard College of Comparative Zoology, Harvard, Cambridge, Pennsylvania, U.S.A.
- Hon. Secretary, Austral Association for Science, 5 Elizabeth Street, Sydney, Australia.
- 12. The Edinburgh Botanical Society, St. Andrew Square, Edinburgh.
- 13. Historical Society of Lancashire and Cheshire, Liverpool Institute, Liverpool.
- 14. New York Academy of Sciences, New York, U.S.A.
- Philadelphia Academy of Natural Sciences, Philadelphia, Pa., U.S.A.
- Rochester Academy of Sciences, Rochester, New York, U.S.A.
- Staten Island Association of Arts and Sciences, Staten Island, New Brighton, Borough of Richmond, New York, U.S.A.
- Liverpool Institute of Commercial Research in the Tropics, Public Museum, Liverpool.
- Buenos Ayres Museo Nacional, Museo Nacional, Buenos Ayres, Argentina.
- The Librarian, Brooklyn Institute of Arts and Sciences, Brooklyn, New York, U.S.A.

- The Edinburgh Geological Society, Edinburgh. (D. Gloag, India Buildings, George IV. Bridge, Edinburgh, Secretary.)
- 22. Geological Society of Glasgow, Bath Street, Glasgow.
- 23. Wisconsin Academy of Arts and Sciences, Wisconsin, U.S.A.
- 24. Banffshire Field Club, Banff.
- 25. Berwickshire Naturalists' Club, c/o Rev. J. Marshall Aitken, Ayton, N.B.
- 26. Glasgow Natural History Society, Bath Street, Glasgow.
- 27. Perthshire Society of Natural Science, Natural History Museum, Perth.
- 28. Stirling Natural History and Archæological Society, Stirling.
- Belfast Naturalists' Field Club, 19 Glandore Gardens, Belfast, Ireland.
- 30. Cardiff Naturalists' Society, Cardiff, Wales.
- Essex Field Club, Essex County Museum of Natural History, Romford, Essex.
- 32. Holmesdale Natural History Club, Reigate.
- 33. Marlborough College of Natural History, The College, Marlborough.
- 34. Nova Scotia Institute of Science, Halifax, Nova Scotia.
- 35. Smithsonian Institute, U.S. National Museum, Washington, U.S.A.
- Brooklyn Institute of Arts and Sciences, Brooklyn, New York, U.S.A.
- Davenport Academy of Natural Sciences, Davenport, Iowa, U.S.A.
- 38. Elisha Mitchell Scientific Society, Chapelhill, N. Carolina, U.S.A.
- U.S. Geological Survey, Secretary of Interior, Washington, U.S.A.
- 40. U.S. Bureau of Ethnology, Washington, U.S.A.
- 41. J. C. Ewing, Librarian, Baillie's Institution, Glasgow Archæological Society, 88 West Regent Street, Glasgow.
- 42. The Missouri Botanical Garden, St. Louis, Missouri, U.S.A.
- 43. Society of Antiquaries of Scotland, Queen Street, Edinburgh.
- 44. Bodleian Library, Oxford.
- 45. University Library, Cambridge.

LIST OF MEMBERS OF THE SOCIETY

SESSION 1906-7.

Those who joined the Society at its reorganisation on 3rd November, 1876, are indicated by an asterisk.

LIFE MEMBERS.

Duke of Buccleuch and Queensberry, K.G., K.T.	10th Jan.,	1895.
Earl of Mansfield, Scone Palace, Perth	10th Oct.,	1897
F. R. Coles, Edinburgh	11th Nov.,	1881.
Wm. D. Robinson Douglas, F.L.S., Orchardton	11th Nov.,	1881.
Thomas Fraser, Maxwell Knowe, Dalbeattie	.2nd March,	1888.
Alex. Young Herries, Spottes, Dalbeattie.		
J. J. Hope-Johnstone, Raehills, Lockerbie	3rd May,	1884.
Wm. J. Herries Maxwell, Munches	1st Oct.,	1886.
Sir Mark J. M'Taggart Stewart, Bart., Southwick	7th June,	1884.

HONORARY MEMBERS.
Baker, J. G., F.R.S., F.L.S., V.M.H., 3 Cumberland
Road, Kew2nd May, 1890.
Brown, J. Harvie, F.L.S., Dunipace House, Larbert.
Carruthers, Wm., F.R.S., British Museum.
Chinnock, E. J., LL.D., 41 Brackley Road,
Chiswick, W5th Nov., 1880.
M'Andrew, James, 69 Spotteswoode Street, Edinburgh.
Sharp, Dr David, F.R.S., Cambridge.
Shirley, G. W., Dumfries
Wilson, Jos., Liverpool

CORRESPONDING MEMBERS.

Anderson, Dr Joseph, LL.D., H.R.S.A., Assistant Secretary Society of Antiquities of Scotland, Keeper of the National Museum of Antiquities, Edinburgh.

Borthwick, Dr A. W., B.Sc., Royal Botanic Gardens, Edinburgh.

Bryce, Professor Thos. H., M.A., M.D., F.R.S.E., F.S.A.Scot., Lecturer on Anatomy, Glasgow University, Member of the Royal Commission on Ancient and Historical Monuments, 2 Grantley Terrace, Glasgow.

Curle, James, W.S., F.S.A.Scot., Priorwood, Melrose.

Gregory, Professor J. W., D.Sc., F.R.S.., F.R.S.E., F.G.S., M.I.M.M., etc., Professor of Geology, Glasgow University.

Holmes, Professor E. M., F.L.S., F.R.B.S., Edinburgh and London, F.R.H.S., etc., 17 Bloomsbury Square, London, W.C.

Johnstone, R. B., Hon. Secretary and Editor, Andersonian Natural-

ists' Society, 17 Cambridge Drive, Glasgow.

Keltie, J. Scott-, I.L.D., F.S.A.Scot., Secretary, Royal Geographical Society, Hon. Member Royal Scottish Geographical Society, 1 Savile Row, Burlington Gardens, London, W.

Lewis, F. J., F.L.S., Lecturer in Geographical Botany, The

University, Liverpool.

Macdonald, Dr George, M.A., LL.D., 17 Learmonth Gardens, Edinburgh.

Reid, Clement, F.R.S., F.L.S., F.G.S., 28 Jermyn Street, London, S.W.

Rhys, Professor Sir John, M.A., D.Litt., Professor of Celtic, and Principal of Jesus College, Oxford, Fellow of the British Academy.

Smith, Miss Annie Lorraine, B.Sc., F.L.S., Temporary Assistant, Botanical Department, British Museum, 20 Talgarth Road,

West Kensington, London, W.

Watt, Andrew, M.A., F.R.S.E., Secretary Scottish Meteorological Society, 122 George Street, Edinburgh.

ORDINARY MEMBERS.

Arnott, S., F.R.H.S., Sunnymead, Maxwelltown5th Feb., 1893.

Arnott, Mrs S., Sunnymead, Maxwelltown5th Jan., 1906.
Atkinson, Mrs, The Ladies' Club, Castle Street,
Dumfries
Barbour, James, F.S.A.Scot., St. Christopher's,
Dumfries3rd Dec., 1880.
Barbour, Robert, Belmont, Maxwelltown4th March, 1887.
Barbour, Robert, Solicitor, Maxwelltown11th May, 1889.
Barker, John, Redlands, Dumfries23rd Sept., 1905.
Beattie, Thos., Davington, Langholm30th May, 1896.
Bell, Richard, of Castle O'er, Langholm30th May, 1896.
Bell, T. Hope, Morrington, Dunscore
Bennet, Thos., Knockbrex Gardens, Kirkcudbright, 5th April, 1907.
Blacklock, J. E., Solicitor, Dumfries8th May, 1896.
Borland, John, Auchencairn, Closeburn7th Sept., 1895.
Bowie, J. M., The Hain, Dalbeattie Road, Maxwell-
town
Browne, Sir James Crichton, 61 Carlisle Place,
Mansions, Victoria Street, London, S.W3rd Sept., 1892.
Brown, Stephen, Boreland, Lockerbie
Brown, T. M., Closeburn, Thornhill
Bryson, Alex., Irish Street, Dumfries
Byres, J. R., Solicitor, Lockerbie14th Sept., 1907.
Cairns, Rev. J., Ivy Lodge, Albany, Dumfries6th Feb., 1891.
Campbell, Rev. J. M., St. Michael's Manse, Dum-
fries
Carmont, James, Banker, Dumfries6th Feb., 1891.
Clarke, Dr, Charlotte Street, Dumfries6th June, 1889.
Charlton, John, Huntingdon, Dumfries15th Dec., 1905.
Chapman, A., Dinwiddie Lodge, Lockerbie
Chrystie, Miss, Irving Street5th Jan., 1906.
Coats, W. A., of Dalskairth
Copland, Miss, The Old House, Newabbey5th July, 1890.
Cormack, J. F., Solicitor, Lockerbie4th June, 1893.
Corrie, John, Burnbank, Moniaive 6th Aug., 1887.
Cowan, John, Glenview, Maxwelltown 15th Dec., 1905.
*Davidson, James, Summerville, Maxwelltown3rd Nov., 1876.
Davidson, J., Hillhead, Bankend Road, Dumfries 10th May, 1895.
Dewar, R. S., 35 George Street, Dumfries3rd Nov., 1905.
Dickie, Wm., Merlwood, Maxwelltown
Dickson, J., Moffat Academy, Moffat14th Sept., 1907.
*Dinwiddie, W. A., Bridgebank, Buccleuch Street,
Dumfries3rd Nov., 1876.
Dinwiddie, R., Overton, Moffat Road, Dumfries9th Aug., 1905.
Dods, J. W., St. Mary's Place, Dumfries2nd March, 1883.
Drummond, Bernard, Pumber, Dumfries7th Dec., 1888.
Drummond, J. G., Sandon, Moffat Road, Dumfries, 17th Nov., 1905.
Duncan, Jno. Bryce, of Newlands, Dumfries 11th Feb., 1898.
Dunlop, Rev. S., Irongray Manse, Dumfries 10th June, 1905.

Edgar, H., Ferguslea, Maxwelltown	20th Jan., 1905.
Edie, Rev. W., Greyfriars' Manse, Dumfries	15th Dec., 1905.
Farish, W. R., Amisfield House, Amisfield, R.S.O	17th Nov., 1905.
Fergusson, Rev. G. F., St. Mary's Place, Dumfries	15th Dec., 1905.
Gilchrist, Mrs, Linwood, Dumfries	2nd June, 1883.
Gillespie, Wm., Solicitor, Castle-Douglas	14th May, 1892.
Gladstone, H. Steuart, F.Z.S., Lannhall, Thornhill	l, 15th July, 1905.
Gladstone, Mrs H. S., Lannhall, Thornhill	13th July, 1907.
Glover, John, W.S., 1 Hill Street, Edinburgh	23rd Nov., 1906.
Glover, J. J., Hazelwood, Maxwelltown	22nd Oct., 1897.
Gooden, W. H., Glebe Terrace, Dumfries	.14th Sept., 1907.
Gordon, Robert, Brockham Park, Betchwor	th.
Surrey	. 10th May 1895.
Surrey	14th Sept. 1907
Grahame, Mrs, Springburn Cottage, Kilbarch	an
Renfrewshire	28th July 1906
Grierson, John, Town Clerk, Dumfries	6th Oct 1889
Grierson, R. A., Solicitor, Dumfries	15th Monch 1007
Grierson, R. A., Solicitor, Dumfries	octh Ten 1000
Halliday, T. A., Leafield Road, Dumfries	20th Jan., 1900.
Halliday, Mrs, Leafield Road, Dumfries	26th Jan., 1906.
Halliday, W. J., Esthwaite, Lochmaben	bth April, 1906.
Halliday, D., Lockerbie	24th Feb., 1906.
Hannay, Miss, Langlands, Dumfries	6th April, 1888.
Hannay, Miss J., Langlands, Dumfries	6th April, 1888.
Hare, H. Leighton, Lochvale, Dumfries	10th June, 1905.
Hardy, Miss, Moat House, Dumfries	1st Oct., 1897.
Hastie, D. H., Victoria Terrace, Dumfries	24th Feb., 1906.
Henderson, James, Solicitor, Dumfries	9th Aug., 1905.
Henderson, John, Solicitor, Dumfries	5th July, 1890.
Henderson, Thos., Solicitor, Lockerbie	17th Oct., 1902.
Herries, Right Hon. Lord, Everingham Park, Yo	ork-
shire	
Hill, Edward J., Ladyfield, Dumfries	25th Nov., 1904.
Houston, James, Marchfield, Dumfries	9th Aug., 1905.
Hunter, Dr Joseph, Castle Street, Dumfries	24th June, 1905.
Irving, Colonel, of Bonshaw, Annan	
Irving, John, Balmacneil, Ballinluig, Perthshire	16th Oct., 1903.
Irving, John A., West Fell, Corbridge-on-Tyne	7th Dec., 1906.
Irving, Major, Burnfoot, Ecclefechan	1907.
Jackson, Colonel, 6 Fruid's Park, Annan	9th Aug., 1905.
Johnson-Ferguson, Sir J. E., Bart., of Springle	cell.
Ecclefechan	30th May, 1896.
Johnson-Ferguson, A., Wiston Lodge, Lamington	
Johnstone, John T., Victoria House, Moffat	
Johnstone, Mrs, Victoria Terrace, Dumfries	17th Feb., 1896.
Johnstone, W. S., Victoria Terrace, Dumfries	11th Feb., 1898.
Kidd, Rev. Thos., U.F. Manse, Moniaive	29th June 1895
Kirkpatrick, Rev. R. S., The Manse, Govan	17th Feb 1896
manse, Govan	1000.

Laidlaw, John, Plasterer, Lockerbie18th Oct., 1901.
Law, Rev. James, South U.F. Manse, Dumfries2nd June, 1905.
*Lennox, Jas., F.S.A.Scot., Edenbank, Maxwelltown, 3rd Nov., 1876.
Loreburn, The Right Hon. Lord, 6 Eton Square,
London, S.W9th Jan., 1891.
Malcolm, A., Redbank, Dumfries2nd Oct., 1894.
Malcolm, W., Lockerbie Academy, Lockerbie14th Sept., 1907.
Malcolm, Colonel, Burnfoot, Langholm
Mann, R. G., Cairnsmore, Marchmount Park, Dum-
fries
Manson, D., Acrehead, Dumfries
Manson, Mrs, Acrehead, Dumfries16th June, 1906.
Matthews, Wm., Dunelm, Dalbeattie Road, Dum-
fries
Martin, D. J. W., Newbridge, Dumfries16th Oct., 1896.
Marriot, C. W., Howliggate, Goldielea27th June, 1907.
Maxwell, Sir H., Bart., of Monreith, Wigtownshire7th Oct., 1892.
Maxwell, W. J., Terregles Banks, Dumfries6th Oct., 1879.
Maxwell, Wellwood, of Kirkennan, Dalbeattie5th Nov., 1886.
Maxwell, John, Tarquah, Maxwelltown20th Jan., 1905.
Maxwell, John, Tarquan, Maxwellown
Milligan, J. P., Aldouran, Castle-Douglas Road,
Maxwelltown
Milligan, Mrs, Aldouran, Castle-Douglas Road,
Maxwelltown
Millar, F., Bank of Scotland, Annan3rd Sept., 1886.
Moffat, James, Bank of Scotland, Annan.
Mond, Miss, Aberdour House, Dumfries 9th Sept., 1905.
Murdoch, F. J., Cluden Bank, Holywood
Murphie, Miss Annie, Cresswell House, Dumfries23rd Nov., 1906.
Murray, Mrs, George Street, Dumfries6th April, 1883.
Murray, Wm., Murraythwaite, Ecclefechan8th Feb., 1895.
Murray, Mrs, Murraythwaite, Ecclefechan29th July, 1905.
M'Call, James, of Caitloch, Moniaive
M'Cargo, James, Kirkpatrick-Durham24th April, 1896.
M'Cormick, Andrew, Solicitor, Newton-Stewart3rd Nov., 1905.
M'Craken, Miss, Fernbank, Lovers' Walk9th Nov., 1906.
M'Cutcheon, Wm., B.Sc., Inverie, Park Road, Max-
welltown
Macdonald, J. C. R., W.S., Dumfries6th Nov., 1885.
M'Gowan, B., Solicitor, Dumfries
M'Jerrow, David, Town Clerk, Lockerbie22nd Feb., 1906.
Mackenzie, Colonel, of Auchenskeoch
M'Kerrow, M. H., Solicitor, Dumfries19th Jan., 1900.
M'Kerrow, M. H., Solicitor, Dumfries19th Jan., 1900. M'Kerrow, Matt. S., Boreland of Southwick9th Jan., 1890.
M'Kerrow, M. H., Solicitor, Dumfries
M'Kerrow, M. H., Solicitor, Dumfries
M'Kerrow, M. H., Solicitor, Dumfries

MacKinnel, Mrs, The Sheiling, Castle-Douglas Road,
Dumfries
M'Kinnon, Rev. Albert, Lochmaben9th Nov., 1906
M'Kinnon, Mrs, Lochmaben9th Nov., 1906
M'Lachlan, Mrs, Dryfemount, Lockerbie26th March, 1906
M'Lachlan, Jas., M.D., Lockerbie25th Oct., 1895
Neilson, George, LL.D., Wellfield, Partickhill Road,
Glasgow13th Dec., 1895.
Neilson, J., of Mollance, Castle-Douglas13th March, 1896.
Nicholson, J. H., Airlie, Maxwelltown9th Aug., 1904.
Ovens, Walter, of Torr, Auchencairn
Pairman, Dr., Moffat
Palmer, Charles, Woodbank Hotel, Dumfries29th July, 1905.
Payne, J. W., 8 Bank Street, Annan
Penman, A. C., Airlie, Moffat Road
Penman, Mrs, Airlie, Moffat Road
Phyn, C. S., Procurator-Fiscal, Dumfries
Primrose, John, Solicitor, Dumfries
Proudfoot, John, Ivy House, Moffat
Rae, Rev. R. Neill, The Manse, Lochmaben21st Dec., 1906.
Rawson, James, Glebe Terrace, Dumfries4th Oct., 1907.
Reid, James, Chemist, Dumfries.
Robertson, Dr J. M., Penpont3rd Feb., 1886.
Robson, John, Westbourne, Maxwelltown
Robison, Jos., 2 Castle Street, Kirkcudbright23rd Mar., 1907.
Rogers, Miss, The Oaks, Rotchell Park21st Dec., 1906.
Romanes, J. M., B.Sc., 6 Albany Place, Dumfries18th Jan., 1907.
Ross, Dr J. Maxwell, Duntrune, Castle-Douglas
Road11th July, 1891.
*Rutherford, J., Jardington, DumfriesNov., 1876.
Saunders, Wm., Rosebank, Lockerbie.
Scott-Elliot, Professor G. F., F.L.S., F.R.G.S., of
Newton, Dumfries4th March, 1887.
Scott, Alexander, Solicitor, Annan7th Nov., 1890.
Scott, Rev. J. Hay, F.S.A.Scot., Sanquhar6th Aug., 1887.
Scott, R. A., per Geo. Russell, Banker, Dumfries1st Oct., 1890.
Scott, W.S., Redcastle, Dalbeattie14th Jan., 1898.
Scott-Elliot, Mrs, Newton, Dumfries26th Oct., 1906.
Scott, Hart W., The Hovel, Maxwelltown9th Nov., 1906.
Semple, Dr., D.Sc., Airlie, Moffat Road, Dumfries12th June, 1901.
*Service, Robert, M.B.O.U., Maxwelltown
Service, Robert, Jun., Janefield, Maxwelltown24th March, 1905.
Shannon, John P., Noblehill Mill, Dumfries18th Jan., 1907.
Smith, R. G. Edington-, Buccleuch Street,
Dumfries .9th Nov., 1906. Smith, Miss, Llangarth, Maxwelltown .6th Oct., 1905.
Starke, J. G. Hamilton, Troqueer Holm2nd March, 1877.
Southe, o. G. Hammon, Froqueer Hom

Stephen, Rev. W. L., St Mary's Manse, Moffat 28th June, 1904.
Stewart, William, Shambellie, Newabbey21st Dec., 1906.
*Stobie, P., Cabinetmaker, Dumfries3rd Nov., 1876.
Street, Rev. W. J., U.F. Manse, Maxwelltown17th Nov., 1905.
Street, Rev. W. J., U.F. Manse, Maxwelltown17th Nov., 1905.
Symons, John, Royal Bank, Dumfries2nd Feb., 1883.
Symons, John, Solicitor, Dumfries6th Nov., 1885.
*Thomson, J. S., Jeweller, Dumfries3rd Nov., 1876.
Thomson, Wm., Solicitor, Dumfries1st Oct., 1898.
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fries
Tocher, John, Chemist, Dumfries19th Jan., 1900.
Turner, Alex., Chemist, Dumfries17th Oct., 1905.
Veitch, W. H., Factor, Hoddom26th Oct., 1900.
Waddell, J. B., Victoria Terrace, Dumfries11th June, 1901.
Waddell, Mrs, Victoria Terrace, Dumfries11th June, 1901.
Wallace, M. G., Terreglestown, Dumfries11th March, 1898.
Wallace, James, The Hope, Moffat18th May, 1907.
Wallace, Miss, Lochvale House, Lochmaben7th Oct., 1892.
Wallace, James Cecil, The Hope, Moffat18th May, 1907.
Watt, James, Crawford Villa, Johnstone Park,
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Watt, Miss, Crawford Villa, Johnstone Park,
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Watson, Thos., Castlebank, Dumfries9th Jan., 1880.
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Dumfries
Wightman, Abel, Lockerbie
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tion 28th July, 1906.
Wilson, John, Solicitor, Dumfries29th July, 1905.
Wilson, Mrs, Castledykes Cottage, Dumfries24th May, 1905.
Wilson, Miss, Castledykes Cottage, Dumfries24th Feb., 1906.
Wilson, J. R., Solicitor, Sanquhar2nd Oct., 1885.
Witham, Colonel J. K. Maxwell, C.M.G., of Kirk-
connel, Dumfries7th March, 1890.
Witham, Miss Maud, Kirkconnel, Dumfries6th Feb., 1890.
Yerburgh, R. A., of Barwhillanty, Parton, R.S.O.,
per F. A. Maryiate, 25 Kensington Gore,
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FOUNDED NOVEMBER, 1862

SESSION 1907-1908.



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AND

Journal of Proceedings

OF THE

DUMFRIESSHIRE AND GALLOWAY



Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862.

SESSION 1907-1908.



Office=Bearers for 1908=1909.

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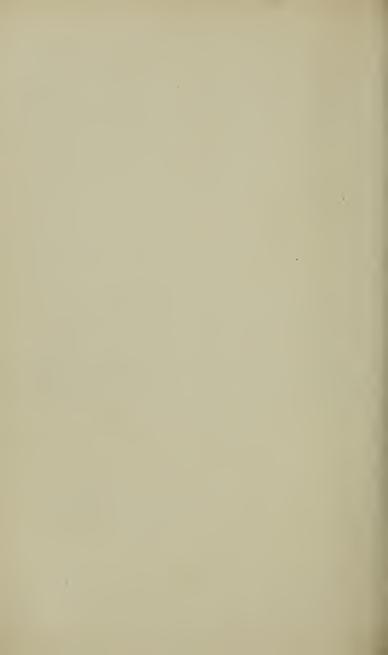
OMISSION.

The Note by Lady Johnson-Ferguson on Ancient Tombstone referred to on Page 211 has been accidentally omitted, but will appear in next volume.—Ed.

EDITORIAL NOTE.

The contributors of the papers are responsible for the statements and views expressed therein, and publication is not to be held as expressing the concurrence of the Society or the Editor.

The Editor desires to acknowledge his indebtedness to the "Dumfries and Galloway Standard," "Dumfries and Galloway Courier and Herald," and "Kirkcudbrightshire Advertiser," for reports of several meetings and discussions.



Transactions and Proceedings

OF THE

DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY & ANTIQUARIAN SOCIETY.

* SESSION 1907-8.

4th October, 1907.

ANNUAL MEETING.

Chairman—Professor Scott-Elliot.

The Secretary and Treasurer submitted their Annual Reports, which were approved of. An Abstract of the Accounts appears in this issue. The Annual Report of the Photographic Section was submitted by the Secretary, Mr W. A. MacKinnel, and approved of.

On the nomination of the Council the Office-bearers were elected for the session. (See p. 3, vol. xix.)

1st November, 1907.

Chairmen—Professor Scott-Elliot, President, and Mr R. Service, Hon. Vice-President (during the delivery of the former's address).

PRESIDENTIAL ADDRESS.

Notes on Winter Botany. By the President, Professor G. F. Scott-Elliot, M.A., F.R.G.S., &c.

A wood in spring or summer is as different from itself in winter as a man-of-war at a royal review to the same ship cleared for action in time of battle. The whole process by which leaves, useless twigs, and all sorts of herbaceous material is broken up and overcome before the next spring's vigorous growth begins, is of extraordinary interest. The formation of cork and the leaf fall are well known, but the destruction of all those many herbaceous stems that last but for one season is not so well understood. Perhaps the most remarkable point about them is the way in which they survive, often until well on in winter time, just indeed so long as the dead, dry, withered, and yet elastic, stalk can be of use in disseminating the fruits and seeds. When the last spore is shed the destruction of the stalk soon follows.

Herbaceous stems consist generally of a ring of woody or collenchymatous mechanical tissue, often raised into ribs or flanges. Outside this there are, successively, first soft parenchyma, and then the tough, more or less thickened epidermis. So soon as the last seeds are definitely formed and separated from the wall of the ovary, the drying of the stalk begins (probably the water is no longer assisted in ascending the stem by the demands of the ripening seeds). Then, as the cells in the upper part of the stalk gradually die, less and less water ascends until they become like those of dried herbarium specimens which may last 100 years or more if kept thoroughly dry and free from certain insects.

But the lower part of the stalk just above the ground is kept generally more or less moist by surrounding vegetation: in Umbelliferæ also the part just above the node is kept fresh and humid by the remains of the vagina; similar sheathing leaf bases or stipules have the same effect in other plants.

It is at these spots that the first fungus attack usually begins. They remind one of the decay of an ordinary paling stob, which usually sets in at the neck. That part of the stob which is in air may be quite sound* and also the basal end planted in the earth, but just at or near the surface of the ground, where the conditions frequently change from moist to dry, fungus attacks are favoured and the stob rots through.

^{*} The gates of Constantinople destroyed by the Turks in 1453 when eleven centuries old of Cypress (C. sempervirens) in air and the wood of Juniperus oxycedrus, buried in the earth in Malta, were quite sound after respectively 1100 years and 400 years.—Boulger "Wood," 1902.

The herbaceous stems are attacked in these moist and sheltered places by such fungi as Heterosphaeria patella, Melanomma, etc. The stalk eventually rots and is easily broken at the base by wind or accidents of sorts. Having been felled, the hollow centre is a neat and cosy refuge for insects and animals, and the whole stalk is soon attacked by a variety of fungi. A favourite position for Sphaerias is the soft tissue outside the mechanical cylinder, and by their agency the epidermis is soon broken away.

As regards the breaking up of leaves, a vast number of fungi attack dead rotting leaves when lying on the soil, but a very large part of the work must be done by animals. A curious fungus is Typhula Grevillei, whose minute club-like fructifications may be found between the leaves and not upright. In such a position the spores must be distributed by worms, insects, or other animals which probably devour the fungus or the leaf substance, and so distribute the spores.

But the most interesting facts are those connected with the rotting of tree stumps and the decay of fallen branches and twigs. The first point that one notices is the indestructible character of the cork sheet in which the woody parts are enclosed. It is not at all unusual to find cylindrical tubes of almost unbroken cork with the whole of the wood inside reduced to powder. This is the more remarkable, as the Discomycete fungi, for instance, show extraordinary powers of adapting themselves to the most inappropriate foods. Species exist which grow on charcoal, leather, modelling clay, plaster, and fir tree resin. Yet, though 133 species at least grow on wood, those occurring on "bark" are very few, and even of these most, like Lachnella calycina, really live on the phlæm and cambium, and only burst through the cork from the inside.

Perhaps more remarkable is the resistant power of the sawn surface of the stump. This may remain discoloured and more or less hard for years after the tree is felled. It is apparently saturated with resin, and has a very scanty and difficult flora in which blue Algae (Chroococcus, Glaeocapsa, etc.) are common. Underneath this surface the wood may be entirely honeycombed or crumbling, powdery, and almost destroyed. But if hypnums or other mosses, liverworts, or lichens cover such a surface, it is soon decayed.

Both insects and the mycelia of the larger fungi generally make their attack between the bark and wood. There are the cambium of living cells, as well as soft phloem and the youngest wood. Having burrowed through and devoured all this material, the most usual proceeding is for the fungus to penetrate by the medullary rays (also full of starch, vegetable fat, and oil) so as to reach towards the pith.*

Quite frequently the whole wood then becomes a mass of thin papery sheets reminding one of the leaves of a book and exceedingly thin. A favourite place for Discomycetes is the smooth, still hard, surface of the wood covered over by the loose shell of bark, and where worms, wood lice, centipedes, slugs, small shells, insect larvæ, etc., find shelter. The shining white translucent Lachnella Hyalina often occurs in this position. Here also Myxomycete fungi are to be found. The plasmodia may be often noticed, and very often the fructifications, though these are perhaps more usual where the bark has come off.

On the other hand, many Sphæriaceae grow and feed beneath the bark, but, when mature, their little rounded black shoulders burst up through the bark and the minute opening is exposed to the air. Others, such as Nectria, Hypoxylon fuscum, and many others, combine to form a circular or lens shaped mass (stroma), which breaks up through the bark and so attains the air and light; in these the small pores may be observed, and are obviously excellently adapted to the purpose of spore dissemination

It is as regards the dissemination of the spores of all these four groups (Agaricineae, Discomycetes, Sphæriaceae, and Myxomycetes), that one finds oneself face to face with difficult but most interesting problems.

How is it that, e.g., Arcyria Punicea occurs on dead wood in Britain, France, Germany, Poland, Italy, the Cape, Java and Borneo, New Zealand, the United States, the West Indies, Guiana, and Brazil?† Probably that form was differentiated at the very origin of the species of trees, and has accompanied trees in all their migrations all over the world. More remarkable,

^{*} cf. Lindroth Naturw. Zeits. f. Land u. Forst. Band II., 1904 (Polyporus nigricans) Biffen, Journ. Linn. Soc., April, 1899.

perhaps, is the specialisation shown by some of the Ascomycetes.

We find that on Vaccinium, for instance, there are 2 sp. of Phacidium and one of Crumenula. On beechmast there grow—Hymenoscypha 1 sp., Helotium 1 sp., and Lachnella 2 sp.; whilst upon Castanea cups a Lachnella has been found. These forms have not, so far as I know, been discovered elsewhere, except just upon those particular substances.

On the other hand, others occur on widely different plants, on the wood of many different trees or on all sorts of herbaceous stems. There are also cases in which these saprophytic minute fungi attack closely related plants such as Poplar and Willow. All this resembles very closely what we find in the flowering plants, and is most easily explained by the simple supposition that the ancestors of any given Discomycete have, during the whole course of the evolution of, for example, Castanea, continued to live on Castanea, dividing from their relations on beechmast and acorn, at the time those trees were differentiated.

The spores are in some cases certainly distributed by insects. Take, e.g., Typhula Grevillei between dead leaves lying flat upon one another. Surely no explanation is possible except that insects or animals, probably worms, devour the fungus and deposit the spores in their casts. Nor, I think, can we help the belief that insects must generally introduce the spores of Discomycetes under the bark of a dead twig. The exposed ring of infectible tissue is not only very narrow but in most cases it is vertical, and the chance falling of a spore exactly at the right spot seems exceedingly unlikely.

On the other hand, an insect which touches a Typhula in the dead leaves, or which is leaving beechmast or dead logs, will very probably proceed to visit other dead leaves, beechmast or dead twigs. The probability of infection is obviously enormously greater than that of purely chance infection by wind. Insects undoubtedly do visit both large and small fungi, although observation of insect visits on very minute Lachnellas, etc., is an exceedingly difficult matter.

I do not mean to imply that the wind is not utilised. Indeed, special arrangements for darting out or ejaculating spores are by no means unusual, as in the Puffball, Peziza, Barya, Ascobolus, etc. Falk has also explained how, in the common agarics, the spores dropping from the under surface of the hat are caught up

by draughts due to differences of temperature and may be distributed to a distance of a metre from it. The higher temperature found in fungi which are fully ripe and on the point of decay might, as he suggests, assist in producing those draughts.

But this writer would surely agree that the insect that laid its eggs in that agaricus and its daughter larvæ later on could not avoid carrying off spores when they left the fungus! Those spores would surely be rubbed off amongst dead leaves or inside the bark, and have a very favourable chance of germination.

Then, again, pollen grains are for the most part insect carried, and when we find an identical ornamentation consisting of tiny microscopical spines on pollen grains, on spores of Tilletia, etc., parasitic on anthers, and on Myxomycete spores (which are often bright red or yellow), is it not most reasonable to conclude that insects are the most important agents in their distribution?

It is quite likely that birds, rabbits, and squirrels carry spores from one plantation to another. Mr W. R. Stewart, of Glasgow, told me that he had often seen birds attacking the larger fungi, and both he and Mr M'Cutcheon have observed squirrels eating fungi.

Whether spores can survive being swallowed by animals, and especially worms and insects, is a difficult question. Mr Massee thinks that the Mucors and Mould fungi are swallowed by animals, e.g., rabbits, and pass through their intestines without injury.* The spores of Ascomycetes and Basidiomycetes are said by Falk (l.c.) to be destroyed by digestion in animals. These two opinions are scarcely reconcilable, for the Ascospores are much better protected than those of Mucor.

Spores even of these minute fungi are both long lived and resistant. Mr Lister found that spores of a Reticularia, which had been dried three years before, germinated in four hours when placed in suitable media. Even the fungi themselves are sometimes capable of resisting both heat and, what is still more remarkable, drowning. Polyporus Betulinus, etc., dried at a temperature of 37 degs. C., revived afterwards when placed in moist air.† A Discomycete fungus (Humaria oo-cardii) has been

^{*} Massee Annals of Botany, Vol. XVI., 1902, p. 57

[†] Gatin Guzewska Comptes Rendus, 12 Dec., 1904.

discovered growing quite happily at a depth of eight metres below the surface of the water.*

So a squirrel nesting in a tree infected by Polyporus Betulinus might produce infection on any one of the trees that it visits during a very long time, and the spore might sleep three or four years in a crevice of bark until it got the chance of germination.

The air, of course, is, as we know, full of fungus spores. Such minute dust particles as they are must be carried enormous distances. Klebahn found thousands of rust spores deposited on plates (12 cm. in diameter) placed in the open air, and Saito† has carried out similar experiments.

But, on the whole, I think that insects and other small animals have the chief part in this work of conveying those minute destroyers of dead wood and breakers up of vegetable matter to their appointed place for functioning.

The number of smaller fungi recorded for this district is very small.

The following minute agents of decay have been found by myself in Kirkcudbrightshire:—

†361 Peziza (Humaria) humosa. On refuse, by-path to river between Hardlawbank Bridge and Lincluden, December 22nd, 1898.

360 Ascobolus viridis. Same place and date.

1322 Hymenoscypha scutula. Dead herbaceous stems, Dalry, October, 1907.

1325 H. fructigena. Rose twigs, Dalry, October, 1907.

1328 H. coronata. Herbaceous stems, Dalry, October, 1907.

1332 H. clavata. Wet herbaceous stems, Newton, October, 1907.

1345 H. petiolorum. Exact colour of dead oak leaf, small wood near Cluden Mills, October, 1907.

364 Lachnella calycina. Larch disease, Newton (very common), December, 1898.

1326 Phyllachora junci. On rushes, Bogue, Dalry, October, 1907.

^{*} Lindau, Botan. Centralblatt Band 96, p. 41.

[†] The numbers refer to my herbarium (Cryptogamous).

- 1353 L. nidulus? On Spiræa stems, Cluden Mills, October, 1907.
- 1333 Lachnea scutellata. Islesteps, October, 1907.
- 1321 Tapesia cæsia. On dead oak leaves, Newton, October, 1907.
- 1344 Solenia anomala. Cluden Mills, on wood, October, 1907.
- 1331 Calloria leucostigma. Newton, October, 1907.
- 1347 C. luteorubella. On wood, Newton, October, 1907.
- 1337 Phacidium coronatum. Oak leaves, Dalry, October, 1907.
- 1342 Helotium herbarum. On nettle stalks, Cluden Mills, October, 1907.
- 1343 Helotium claroflavus. On beechmast, Cluden Mills, October, 1907.
- 1349 Mollisia cinerea. On wood, October, 1907.
- 362 Fenestrella princeps. On hawthorn twigs, above Lincluden, December, 1898.
- 1323 Melanomma pulvispyrius. Newton, Heracleum stalks, October, 1907.
- 1327 Ceratosphæria rhenana. On rose twigs, Dalry, October, 1907.
- 1340 Gibberella pulicaris. Barberry twigs, Newton, October, 1907.
- 1341 Nectria ditissima. On wood, Newton, October, 1907.
- 1350 Hypoxylum fuscum. Cluden Mills.
- 1351 Phoma complanata. Herbaceous stafks, Cluden Mills, October, 1907.
- 1326 Phyllachora (late Dothidea) junci. On rushes, Dalry, October, 1907.
- 1320 Comatricha obtusata. Newton, on dead branches, October, 1907.
- 1330 and 1335 Trichia varia. Holywood and Islesteps, on Xylaria and wood, October, 1907.
- 1334 Arcyria punicea. From Dr Martin, Newbridge, October, 1907.
- 1336 Stemonitis fusca. Islesteps, on old stump, October, 1907.
- 1348 Physarum nutans. Dalry, October, 1907.
- 1339 Typhula Grevillei. Between sodden leaves, Newton, October, 1907.

Miss A. Lorraine Smith, a distinguished Dumfriesshire

botanist and an excellent authority on fungi, has found the following in Dumfriesshire:

Haplographium pinetum. On dead fir leaves. Remarkable for the dark brown and rather stout stem and a head like Penicillium. (New to Britain.)

Periconia pycnospora

All unusual forms on vegetable rubbish. Acremoniella pallida Gorvtrichum cæsium

Gibberella cyanogena. Cabbage stalks.

Leptosphaeria acuta. Nettle stems.

Ticothecium pygmaeum. On the apothacium of a Lecanora.

Sporodina grandis, with zygospores on Agarics.

Ascophanus equinus. On dung.

Steganosporium pyriforme. On sycamore branches.

Rhytisma acerinum. On sycamore leaves.

Urocystis Anemones. On buttercup.

Melampsoridium betulinum. On birch.

Phragmidium violaceum. On Rubus.

Phragmidium subcorticatum. On Roca canina.

Puccinia graminis.

Puccinia Poarum.

Cystopus candidus. On Shepherd's Purse.

Erysiphe Martis. On dead flies.

Leptosphæria vagabunda and its attendant;

Coniothyrium vagabundus, a new disease of gooseberries, has been observed at Annan and Worcester. It strips the bushes of leaves.

15th November, 1907.

Chairman-Dr Martin, Vice-President.

THE UNDEVELOPED RESOURCES OF OUR MARINE FISHERIES. By Mr Wilson H. Armistead.

Although the salmon does not come entirely under the heading of Marine Fisheries, no study of its life and habits is complete without considering its existence in salt water, and before passing on to questions which are entirely marine, I should like to say a few words about this most important fish. The decrease of salmon in our rivers has been the subject of much discussion for many years, and though every now and again there comes a season which is so much better than the preceding ones, that we are inclined to hope things are improving, invariably there succeeds a series of seasons which destroy all hope of a permanent improvement.

So great is the value of the salmon in our rivers that one would think it should be a matter for national consideration, and from time to time the Government has made very definite attempts to improve matters, and the Fishery Boards for England, Scotland, and Ireland have this question very much at heart. But I wish to show how, under existing conditions, Governments and Fishery Boards are alike powerless to prevent things going from bad to worse. I am fully satisfied, after carefully studying the matter from every available point of view, that the great difficulty in the way of real advance is the existence on all rivers of such widely different interests, all centreing in this much valued but most unfortunate fish.

Conflicting Interests.

Though I wish to deal with the subject solely from a national point of view it will be necessary to consider some of these conflicting interests, and for our present purpose we may divide them into two classes—(1) Sporting interest; (2) Commercial interest. Now it has been the custom hitherto to discover by means of elaborate calculations which of these two interests is the most valuable to the country, and, having decided that point, to advocate the fostering of that particular interest with little regard for the other. Again, another method has been adopted which is, perhaps, even worse than the preceding one; the fostering of both interests by means of concessions to each, which have served to embitter the feelings of both parties. If only they could be persuaded that their interests are identical and in no way conflicting, a very real advantage would have been gained in the right direction. As things stand, the feeling of the fishermen towards the river proprietors is very bitter, and I know from personal observation that the feeling of the river proprietors is equally bitter against the fishermen. It is the old story of a house divided against itself, and the inevitable result. The fishermen claim that the salmon are worthless till they have been

for some time in the sea, and that they, as fishermen, have a moral right to the fish in the sea. The proprietors claim that, but for their rivers, which contain the spawning grounds of the salmon, and which are for two years the nursery of the young fish before ever they go to sea at all, there would be no salmon for the fishermen to catch. Further, they point out that they are at considerable expense in various ways, but chiefly in providing watchers to protect the spawning fish—and that, considering all this, it is very hard lines that men who have done absolutely nothing for the welfare of the salmon should have the first and best chance of capturing them. Each of these arguments appears to their supporters unanswerable, and each party regards the other as defrauding it of its just rights. This is no exaggeration of the case. Feeling runs very high, and in the fight to obtain each its share the poor unfortunate salmon goes to the wall. As my interests are centred entirely in the welfare of the salmon, perhaps I may claim to take an impartial view of the matter, and I have a very severe indictment to bring against both parties.

SPORTSMEN FIGHTING AGAINST EACH OTHER.

First, I will deal with the sporting interest. Here I find the camp again divided against itself. The interests on a salmon river are so various and of such different degree, owing to the large number of proprietors and their position on the river, that an adjustment of the rights of each seems to be impossible. When once a salmon is out of the sea and safely into fresh water, he belongs legally to the owner of the land through which the river runs. His value undergoes a change, for now he is not regarded solely as a marketable product at so much a pound, but as a sporting asset to any estate on which he may be found. He is angled for with rod and line, and the value of any stretch of salmon river is enhanced by the number of salmon which can be taken from it in ways which are according to the accepted idea of sport. Here we have scores, sometimes hundreds, of proprietors on the same river, each with an inducement to take as many salmon as he can from his particular stretch, and in many cases the feeling between upper and lower proprietors is as bitter as their feeling against the fisherman and his nets. There is more reason for this than might appear on the surface. The most valuable parts of a river from the salmon's point of view are

the upper reaches and small tributaries, for here are the chief spawning grounds, and it is the proprietor of these waters who gets the least benefit from the salmon, because they arrive there last. Often they do not reach the head waters until the close time, so that the proprietor whose stretch of water is of the most value to the river as a whole, gets absolutely no benefit from the salmon fishing. What does he do? If he is fond of fishing he turns his attention to trout, and sees that his water is well stocked with these, and the result is that the spawning beds are overcrowded with fish. Early trout eggs are rooted up by salmon, and their eggs are in turn rooted up by the late trout. It is a fearful state of affairs, which can only result in disaster to the river as a whole, and the irony of it is that the unfortunate fisherman gets the blame when salmon get scarcer. It is all very well to say that the fisherman does nothing for the benefit of the salmon, which, by the way, is not altogether the case, as will be shown later, but it must also be borne in mind that neither is he guilty of wasteful mismanagement.

How Angling is Harmful.

Another point which I should like to emphasise strongly is that angling for salmon with rod and line is the most harmful manner of catching the fish in a river, and where fly fishing only is allowed this applies equally to trout, because it is the young and lusty fish which are caught by such lures, and these are precisely the fish which should be allowed to remain as breeders. Think what it must mean to any river to have the cream of its stock taken every year, and the old and infirm left to spawn. If you examine the fish on the spawning beds, you will find a very large majority of old fish, particularly males, which ought, for the benefit of the river, to have been taken out long ago. This is one of the services the fishermen render a river—the nets catch their fair percentage of old fish which are past being of value as There are several important reasons why old fish should not be allowed to become too numerous in any river:—(1) As breeders they are inferior, producing fewer eggs for their weight, and eggs of an inferior quality, which produce weakly alevins. (2) Old fish spawn later than those in the prime of life, and very frequently root up eggs already deposited in order to lay their own. (3) Old males are quarrelsome brutes, and by reason of their abnormally developed lower jaw are dangerous to younger fish, and the wounds they inflict become covered with fungus (Saprolegnia ferax), which will eventually kill the fish if it does not immediately return to salt water. (4) Saprolegnia, being contagious, is a very dangerous disease to have set going amongst a crowd of spawning fish. (5) Even where the old males do not start it by wounding others, they are very liable to it themselves, and so become a source of danger. From what has been said, it will be seen how desirable it is that the breeding stock should be young and healthy. A method of removing old and undesirable fish will be discussed presently.

THE UPPER PROPRIETORS' GRIEVANCE.

As an illustration of the difficulty in fairly distributing the advantages of the presence of salmon in a river, I may mention a case in point. On a certain river there was a pretty lively state of affairs between the conservators, the proprietors, and the fishermen. Again and again adjustments had been tried and bye-laws altered, but the unfortunate conservators were at their wits end, and did not know what to do, for each move brought a storm of abuse from one or other of the factions, and while the uproar was at its height a letter was received from one of the upper proprietors which threatened to make matters worse. This gentleman stated that over 70 per cent. of the salmon in the river spawned in his waters, but they did not arrive there till after the close season had set in, and he asked for a week's rod fishing to be allowed him in consideration of the protection he and his keepers afforded the salmon while on the spawning beds. request was refused, and nothing more was heard of the matter till spawning time. Then the conservators heard that Mr So-and-so had been blowing up the salmon on the spawning beds with dynamite in order that he might turn his piece of river into a well-stocked trout water. Naturally, there was a row, and though the conservators were able to prevent him repeating the outrage, considerable mischief had already been done, and they were not able to prevent him erecting a trout hatchery and turning down many thousands of trout. This, of course, meant destruction to quantities of salmon eggs on the spawning beds.

THE FISHERMEN'S CASE.

The fishermen on the coast are well aware of what goes on up the rivers. They know what the proprietors think of them, and they know what they think of each other. They are men who have to earn money for a living, and they have wives and families to maintain. They fish in the sea, which is free to all, and they find salmon there. Salmon are of considerable value, consequently the fishermen lay out what money they can afford in boats and nets, and, having sunk their capital, they must make it as productive as possible. The law, from their point of view, harasses them considerably, but in the main they abide by it, and, if they were the only people taking toll of the salmon, the crop in the rivers would be in a very different state from what it is at present. As has been pointed out, they do not take only the cream of the breeding fish, but they catch their fair percentage of fish which are no longer of any use to the river owing to their age. Where I find fault with them chiefly is their conniving at legal practices. The majority of the fishermen are law-abiding, but they will not interfere with the minority who break the law. In this they make a great mistake, for they allow their trade to become a byeword for poaching, and as a class they are distrusted. This prejudice against their integrity will take a long time to overcome, and it is a pity that a number of worthy men should be dubbed rascals for the sake of the few who really are so. Again, they have an idea (for which, it must be confessed, there is some ground) that the river proprietors would like to do away with all salmon netting, consequently they do not trust strangers with information, and it is very difficult even for their friends to get at the truth. Their grievances are many, because they are misunderstood, but no one with a knowledge of what goes on up the rivers can justly accuse the fishermen of being the cause of the present scarcity of salmon. The case for both parties at present stands thus-conflicting interests, jealousy, distrust, and ignorance as to cause and effect. suggest a remedy may seem a bold thing, but there is a way out of the difficulty, and I am inclined to think it is the only one. Mutual interest or co-operation would place things on a very different footing, and the result would not be a thing of the distant future, but each year would show a steady advance till a very great improvement would be arrived at.

A PROPOSED REMEDY.

As an outline of the plan, I would suggest the following:-A salmon river from source to estuary, with all its tributaries, should be taken as a complete whole. All the interests should be ascertained, including a fixed number of fishermen's claims in the estuary. These interests, or holdings, should be valued, and a small tax made on the valuation. The funds thus derived could be utilised for the proper farming of the river so as tomake it produce its utmost. One or more hatcheries could be built, and by means of stations erected at suitable points, every salmon entering the river could be counted, and a complete control over the fish exercised. Every fish past its prime could be marketed, and suitable breeders selected for the filling of the hatcheries with eggs. The cost of working the scheme when ascertained could be raised by making a charge of so much per lb. weight for every fish caught, and in this way the take of fish would reduce or abolish entirely the original tax on the holdings. By means of effective co-operation, the welfare of the river as a whole would be the desire of each one holding an interest. As a rough outline of what I am convinced is a thoroughly practical idea, this may serve for the foundation of a scheme to be perfected by an abler head than mine. If there are difficulties to be overcome, as indeed there are sure to be, at least tackling them will not be so hopeless a matter as the present state of affairs. In connection with the above, the following paragraph, which I came across in a recent publication, may be of interest:- "Some years ago 5000 young salmon were released from the Clackamas Hatchery, Oregon, after having been carefully marked by the removal of part of the dorsal fin with a razor. No fewer than 450 of these fish were secured in the second, third, and fourth years following their release, which means that for every thousand young salmon released two thousand pounds of adult fish were caught for market a few years later. The cost of producing and turning out the young salmon worked out at about four shillings: a thousand." In concluding this subject, I may say that it is my opinion that the only way to get a salmon river to vield its utmost is by co-operation and scientific farming of the water.

OYSTERS.

Passing now to a very different creature, and one which is:

entirely marine, I should like to say a few words concerning the oyster. This shell fish is, and has been, a considerable source of revenue to many districts, but unfortunately there are many places where they were once plentiful and now do not exist. This is not always due to man's meddlesomeness, and in many cases the cause of their disappearance is a complete mystery. I knew a very fine bed away up the West Highlands, north of Strome Ferry, some years ago, which existed in a sheltered bay about two fathoms down in beautifully clear water—they were very little molested, and to all appearance had been established there for generations. One fine day the building of a shooting lodge was commenced fully a mile away on the shore, and before it was completed the oysters had died out. No one knew why, but as the building and destruction of the bed happened at the same time, the natives concluded they had something to do with each other. At anyrate, no other explanation was ever forthcoming, but it must be admitted that other beds have disappeared with even less apparent cause. The partial failure of the oyster crop round our coasts, excepting in the few places where they are cultivated, has led to a supply of foreign shell fish, often of very inferior quality, finding its way into the English and Scottish markets, and the buyers have become so accustomed to this regular supply that they will not trouble their heads about intermittent consignments from our own coasts. As the result of enquiry, I find that the buyers require—(1) Regular supplies; (2) Even sizes: (3) Oysters not more than five years old. It appears that an oyster is at its best at four years of age, and where they are under cultivation they are despatched when they have attained it.

Solway Possibilities.

Perhaps it is not very well known that there are considerable oyster beds in the Solway lying untouched. In Wigtown Bay there is a large bed seldom, if ever, fished, and off St. Bees Head they are lying many feet thick on the bottom, but I was told they were not marketable. One consignment of 400 dozen sent to Manchester did not make enough to pay the railway carriage. From time to time I have examined these oysters. They are huge fellows, well nournished, but the bulk of them are ancient and tough. Their shells are overgrown and heavy,

and consequently they won't sell. But there was one important and interesting thing I noticed about them—they had young oysters no bigger than the half of a threepenny bit sticking to them. It was curious that all I could procure were either very old or very young; but here, at least, were the essential facts which proved that ovsters thrive in these waters. It is interesting to note that, even where ovsters are under cultivation, it is often impossible to get them to spawn, and "seed" has to be procured from more favoured places, but here was the seed too. One of the great difficulties in this part of the world which has to be overcome in ovster cultivation is the destruction worked by hard frost. No certain success can be relied on if an oyster bed is allowed to dry each ebb. Consequently, we find that there are no oysters in the Solway which can be gathered by hand at low tide with the exception of a few small and insignificant beds which are only accessible on very rare occasions; such as, for instance, when there is a strong east wind and an unusually low ebb. After a heavy south-westerly gale, I have seen the western shore of Heston Island strewn with oyster shells, but I have never been able to locate the bed from which they come. It cannot be very far away, nor can it be very deep, or a rough sea would not disturb it. There is no great difficulty about farming ovsters under water, provided the depth is not more than a fathom or two, and in a sheltered estuary a depth of a few inches would be sufficient to prevent even a severe frost damaging the shellfish, for the rise and fall of the tide would prevent any thickness of ice being formed.

DIFFICULTIES AND HOW TO MEET THEM.

With regard to the beds already mentioned, the way to make them productive would be to dredge up the old oysters from a part of the bottom and collect the seed which is adhering to them, and this should be planted again on the space cleared. By planting a given area each year an annual crop could be relied on, and, once the whole bed had been treated in this way, the labour of farming the oysters would be much reduced. Owing to the fact that the natural conditions required for successful oyster culture are not thoroughly understood, it is much safer to tackle an existing bed than to make fresh ones. There are many places where oyster farming has been tried under con-

ditions which seemed all that could be desired, but without satisfactory results, so that the presence of a natural bed is really the only thoroughly reliable indication of the suitability of any given piece of sea bottom. Two winters ago a smack from Garlieston started dredging on a bed which lies close to that town, and, after great difficulty in finding a market, an outlet was at last found for them at the price of two shillings a hundred. Even at this ridiculously low figure the men were able to make good wages, but owing to the irregular size and great age of most of the oysters procured, the market did not hold, and after a few months the demand ceased altogether. Here we have a valuable fishery absolutely wasted owing to want of proper management. The same thing applies to the large beds lying between St. Bees Head and the Isle of Man. Some of the Whitehaven fishermen told me they believed these beds were fully twenty feet deep, and I saw large quantities which they had brought up in their trawls while fishing for flat fish. One great difficulty in the way of improvement is the fact that any man or body of men who undertook the work would have no security from outsiders, who might come in and reapthe benefit of their labours. There are a number of people who are fully alive to the value of these beds if taken in hand, but they are naturally not willing to move in the matter without some guarantee that their interest would be protected. As things stand at present, the beds, if put in working order, might be cleared in a few weeks by a fleet of dredgers, which would gather the harvest, and for the sake of present gain would destroy all prospect for the future. The Inspector of Fisheries for Ireland reported some years ago that on one part of the Irish coast one bed of ovsters gave employment to 2000 fishermen, but so recklessly were they fished that the freight, which once reached £1000 per week, had fallen to £300 per annum. The French people have been very active in the development of their ovster fisheries, and I find in an old report by Dr Henry Lawson the following interesting note. Referring to the success of systematic cultivation he says:-"The most convincing evidence of all is that afforded by the Isle of Ré. Five years since the shores of this island were barren and uncultivated; now they give employment to 3000 men, and the crop of ovsters produced in 1861 was valued at £320,000 sterling." The oyster farms

on the island of Ré are, however, much more valuable and productive now than at the time Dr Lawson wrote of them. It is impossible, in so short a time, to discuss the most approved methods of oyster farming, but perhaps enough has been said to show that it would be worth while considering the matter, and before leaving the subject I may mention that a conclusive answer to those who have thought in the past that our waters were too cold for any successful work in this direction, is the fact that the Norwegians are successfully cultivating oysters on their coast, and sending large quantities of "seed" to this country.

LOBSTERS.

In conclusion, I should like to say something about the lobster fisheries on our coasts. The value of this crustacean to a large population of fishermen all round Great Britain and Ireland is considerable, and, like many other branches of the fishing industry, it has been falling off of late years owing to mismanagement. From Heston to the Burrow Head, wherever the shore is rocky, lobsters are to be found, and here, too, they seem to be very much scarcer than they used to be. This is hardly to be wondered at when we consider the methods which have been adopted, and are adopted at the present time, I believe, on the Scottish shore. There appears to be no close season whatever, and a large number of the lobsters caught are actually carrying their eggs, almost ready for hatching. This waste is bound to tell in time on the quantity of lobsters, and, indeed, it would seem that the time when they will be comparatively rare is not far off. The hatching of lobster eggs is not a difficult matter, and the spawn taken from underneath the female lobster, where it will be found for some weeks prior to hatching off, can be easily dealt with if it is carefully removed from the parent and placed in a suitable tank. On some parts of the coast lobster smacks used to have wells in them, to which the fresh sea water had access, and it frequently happened that a batch of eggs attached to a captured lobster would hatch off and the young would be found in large quantities in the water. From this occurrence the idea of floating receptacles for the spawn was originated-in America, I believe-and these were anchored over the lobster ground, and all spawn removed from the captured lobsters and placed in them.

Though this was a very rough and ready way, it proved of considerable use, for the young lobsters, immediately after hatching out, found their way through the perforated bottom of the tanks into the sea. A single lobster may have anything from 5000 to 100,000 eggs, so that it will be seen that the destruction of these is a grievous waste. Many attempts have been made to rear young lobsters, but with only partial success, for by nature they are cannibals, and the loss from this cause when they are kept in confinement is enormous. Some years ago I had the opportunity of seeing the then most approved method of hatching young lobsters. The eggs were placed in glass jars, and a current of sea water was made to flow through them from underneath by means of a glass tube reaching to the bottom of each jar. When I saw them, the young lobsters had all hatched out, and they looked like a swarm of small yellow ants. These voungsters were to be liberated in a few days, and it was surprising to see what a small space was required for the hatching of many millions of eggs. Since then I saw in an American fishery report that a method has been devised for rearing young lobsters up to a stage when they are easily dealt with. The idea is an ingenious one. By means of a small engine and pump a rotary current is kept up, which keeps the tiny crustacea in a continual swirl, so that they have no time for fighting and eating each other, and in spite of this somewhat drastic treatment they seem to thrive.

A NATIONAL DANGER.

Great strides have been made in the past forty years in the development of inland fisheries owing to the benefit which is derived by individuals undertaking this work. With marine fisheries the case is different. Any attempt to cultivate the fish in the sea is a matter not for individuals but for the community, which it will ultimately benefit. Much valuable work has and is still being done by the various Fishery Boards, but the apathy on the part of those to be benefited is very discouraging. The fishermen are not altogether to blame for this, for they have little time to devote to anything but the catching of fish, and while year after year improved appliances are helping to secure the harvest of the sea, little is being done to ensure its continuance. When a fishing ground is played out a move is made to

fresh quarters, and so year after year the smacks have to go further afield. This is particularly the case with the sole fishing industry. It is not long since the papers were full of accounts of a splendid sole fishing ground which had been discovered in the Bay of Biscay. It was thought a wonderful thing that the enterprise of fishermen and owners of trawlers should be so great that they would go as far afield, but now we hear little of the Biscay fishing ground, and, instead, it is the coast of Morocco! Huge steam trawlers, fitted with every modern appliance, including an ice-plant capable of producing two tons of ice daily, are raking the bottom of the sea off the coast of Africa to supply the British markets with soles. Where will they go next? How long will it be before all the available fishing grounds will have been spoiled? When this does occur people will wake up to the necessity of doing something. The supply of sea fish poured into this country daily is greater than it has ever been, and consequently it is cheaper, but it would be a great mistake to suppose that because this is the case fish in the sea are more plentiful than ever. It simply means that the fishing industry, instead of being carried on by sailing boats using antiquated appliances, is now in the hands of men who have scientifically perfected their methods of capture so that the harvest can be reaped as clean on the sea bottom as can a field of oats on land. Only it is all harvest, there is no seed time, and the inevitable result must be disaster to an industry which is of vast national importance. We are within measurable distance of a scarcity of marine fish. This, of course, means high prices, and thousands of people will be deprived of one of their most valuable forms of food. So long as the present state of prosperity continues, people will not listen. When the result of blind activity and enterprise is the impoverishment of our fisheries, there will be a host of voices raised in condemnation. The old question of "Why was not something done in time?" will have to be answered, and the inevitable judgment formed by those who suffer will be "culpable negligence." It is little good looking round to see who is responsible. The matter is not one for private enterprise, neither are the Fishery Boards to blame, for they would gladly do more, but they cannot. Again and again their voices have been raised in warning, but who will take heed? The Government cannot justly be blamed, for if they were to interfere at the present time with the fishing industry such a turmoil would be raised that it might even lead to a change of government. Immense sums of money are invested in the fleet of magnificent trawlers which scour the seas for thousands of miles to provide fish for the million, and this financial interest is so wide that it would be as difficult to control by legislation as the drink traffic. It seems, then, that we must just wait until a national calamity arrives, which will demonstrate beyond all doubt what a blind policy has been pursued for years by those who take fish from the sea.

CUP AND RING MARKINGS IN WEST KILBRIDE. By Mr John Corrie.

During a recent holiday spent at Ardrossan I had an opportunity of examining for the second time some remarkably fine cup and ring markings which are to be found in the parish of West Kilbride. The best defined markings occur upon an outcrop of old red sandstone rock on the lands of Hopeton. Other markings, similar in character, but less clearly cut, were to be met with upon the "Diamond Craig," near Fairlie. Many of the markings take the form of cups, some solitary and some in groups. A number of the cups are surrounded by rings, and some have a gutter or grove running up from them. (Typical examples of the different forms were shown on sheets, which Mr Corrie exhibited to the meeting. One showed a cup surrounded by two concentric rings with a groove running out from the inner ring.) Close to the outcrop of rock at Hopeton there is the outline of a stone circle, and near the same spot a stone hammer and an arrow point of flint were found some years ago. The significance of these curious sculpturings I do not propose to touch upon. Valuable notes upon the subject will be found in the published transactions of the Society, and Professor Simpson's work is probably upon the shelves of the library. I have only to add that I have found no traces of these markings in my own district. Possibly their absence may be explained by the intractable nature of our Glencairn whinstone.

"THE CLOCHMABON." By the Rev. R. NEILL RAE, Lochmaben.

This ancient landmark forms the centre of a story which carries us back into the unknown past. The documents at our disposal tell us of the many events which took place around the old "Stone of Mabon." But they do not help us to understand the name it bears, still less can they tell us why, when, and by whom it was erected here. In the "New Statistical Account," Dumfriesshire (published in 1845), pp. 267-7, we read that "Not many years ago there stood in the parish of Gretna, on the farm of Old Gretna, a circle, oval in form, of whitish stones, placed upright, and enclosing half-an-acre of ground. In the process of agricultural improvement these stones had been removed, not long before, with the exception of the largest one." This is the Clochmabon, and, along with its fellows, must have been brought from a distance of 10-12 miles. entailed may be judged from the fact that it is a granitic boulder; according to Dr Neilson, 6 feet or so in height and 9 or 10 in circumference; another account (Graham's "Lochmaben," Five Hundred Years Ago) makes it 8 ft. by 21 ft.; whilst yet a third says "It measures 118 cubic feet and is computed to weigh 20 tons." It stands a few yards above high-water mark, close to the junction of the Sark and Kirtle with the Esk. But the one fact, which must be closely grasped if we would understand the importance of the Clochmabon from the earliest times, is the circumstance that it marks the northern end of the one great ford across the Solway. What that meant in early times may be judged from the fact that, even within recent years, before the Scotch and English Customs Duties were united, the district was inhabited by several daring bands of smugglers, who doubtless found the ford convenient for the conveyance, "duty free," of Scotch whisky to their customers on the other side.

The stone is frequently mentioned in the records of the Western Marches. The warden courts for the Western Marches were held here; when prisoners were brought for ransom or exchange, offences against the Border laws were tried, and, according to custom, a sort of market was held during the period of the meeting; and arms were strictly forbidden within the circle.

In Asloan's Manuscripts (1448) we read that the battle of Sark was called by contemporaries the battell of Lochmaben Stane. In Pitcairn's Criminal Trials (vol. 1, part 1, p. 398), it is told how on 11th May, 1557, Roger Kirkpatrick of Closeburn, William Kirkpatrick of Kirkmichael, and Thomas Kirkpatrick of Friars' Carse, got remission from the Queen for abiding from the army ordered to assemble at Lochmabenstane on Feb. 6, "to meet the warden before sunrise, to pass fordwart with him to the day of Trew, for meiting of the wardane of Ingland."

On the 11th June, 1464, in the reign of James Third, commissioners met here to adjust the terms and conditions of a truce; as they did also on 6 Nov., 1398 (Foedera of that date, Bain's Caledonia IV., p. 512), at Clockmaban Stane to carry out the agreement which had been made between the Duke of Rothesay and Lancaster as to the exchange of prisoners.

Dr George Neilson, in his "Annals of the Solway" (p. 15), shows that in the documents of an earlier period it is the ford "apud Sulewath" which is mentioned. From him I quote, reversing his arrangement of dates: "A petition was presented to Edward II. by a person desirous to farm the toll between Soulwad and Arthuret (Bain's Cal., III., 51)." In accounts of the campaign of Edward I. in the 1300 it is mentioned as the ford at Sulwath, "transitus apud Sulwath" (Liber Quotidianus Garderobac, 129). The March Laws (Acta Parl. Scot. I., 416) refer to the driving of cattle across the Esk as an incident of the trial in certain cases of disputed ownership. In legal proceedings of date 1292 there is descriptive mention as the peculiar West March place of justice "of a certain place called Sulwat at the Marches of the realms."

The Statute of Marches (Acta Parl. Scot. I., 414, Sulwat) in A.D. 1249 enacts that the proper tribunal for the trial of offences against the Border Laws was "at Sulwath." And Reginald, King of the Isles, was to be met at Sulewad in A.D. 1218 (Bain's Cal. I., 696).

All the documents quoted are those of an English-speaking race, but prior to A.D. 1218 we have no references, the reason being that it was a period of great unrest, when the national headship was utterly unsettled. From pre-Roman times till about A.D. 870-890 the population belonged to the Brythonic race of Celts,

and spoke, not Gaelic, but what is now known as Welsh. Now we find in the Ulster Annals that from A.D. 870 onwards the citadel of Alcluith was repeatedly assailed and taken by the Northmen until in A.D. 890 the British warriors determined to join their kindred on the Clywdd or Cluden in North Wales. They were forced to fight at Rouchal or Rockle or Rotchell now Rockhall on the hills above Lochmaben, where Constantine, the last Guledig or King of Strathclyde, was killed. One of the articles of the treaty made on the following day was that the Anglic tongue was to be the language of the district.

The Kingdom of Strathclyde was divided into several provinces, one of which, comprising the present Dumfriesshire, was known as "the district of Mabon." The old name passed away with the old tongue, and now survives in Lochmaben, the loch district of Mabon, and the Lochmabenstone, or, as it ought to be, the Clochmabon or Stone of Mabon. But what is Mabon?

The Welsh Dictionary tells us that Mab means a baby, whilst Mabon is a young man, a warrior, a mighty man, or hero. Thus we are left with the Loch of Mabon and the Cloch of Mabon, separated from one another by many miles. The question to be settled seems to me to be, was the Mabon spoken of here "an individual" or was it "the district?" I think the latter to be the more probable, although at first I was inclined to agree with Sir H. Maxwell in his theory (Dumfries and Galloway, pp. 132-135). He says:—"We may assume that there was at least one warrior of the name . . . towards the close of the 6th or beginning of the 7th century." He quotes Taliessin, poem 18, where the invasion of Strathclyde and the battle of Owen, the son of Urien, are described as follows:—

[&]quot;A battle, when Owen defends the cattle of his country,
Will meet Mabon from another country,
A battle at the ford of Alclud."

[&]quot;A battle on this side of Llachar,
The trembling camp saw Mabon.
A shield in hand, on the fair portion of Reidol
Against the kine of Reged they engaged,
If they had wings they would have flown,
Against Mabon without corpses they would not go.
Meeting, they descend and commence a battle.
The country of Mabon is pierced with destructive slaughter."

Now we have here a foray by Mabon on the territory of Alclud, and an attack in return on the country of Mabon by the kine or people of Reged from Dumbarton up to Lochlomondside. It certainly seems as if Reged and Mabon were not the leaders but the opposing warrior tribes, called from their different districts. Line 43 carries on the story:—

"About the ford of the boundary, about the alders his battleplaces,

When was caused the battle of the King, Sovereign, Prince, Very wild will the kine be before Mabon."

Here we seem to have "the ford of the boundary" on the Esk as often used in later days.

The pursuit carried so far, and, perhaps, Mabon killed as he "kept the ford" for his flying followers and the stone and circle was erected in his honour.

The idea is a pretty one, but I submit that the Clochmabon was there long before and known by that name, and that his sorrowing tribes-men buried their hero there, as in a hallowed shrine, just as our heroes are laid to rest in Westminister. At anyrate the period from A.D. 800 to A.D. 890 was too short and too disturbed to allow of the name becoming so identified with Clochmabon and Lochmabon as to hold on while all else was changed. Dr Skene ("Celtic Scotland") suggests, if he does not state authoritatively, that Mabon was the ager publicus of the Romans stationed at the wall, and was so called because the time-expired legionaries were settled there and the young men drafted in to supply their places. If so, the Cloch marked the passage into Mabon, as the Cloch at Gourock marks the passage from the deep sea into the Clyde. And the piety of an early age erected the circle and stone as a sanctuary where men might offer up their vows or return their thanksgivings as they left their homes in Mabon, for life as soldiers at the wall, or came to settle down after their labours at the legion. Perhaps the warriors of the Brythons were confronted by the stone and circle when they forced their way across the ford for the first time, and when they saw its size, exclaimed "Clochmabon, the stone of the mighty!" It may be, as suggested by Dr Neilson, that it was dedicated to Maponus, a heathen deity equated with Apollo, who was worshipped in Cumberland and Northumberland during Roman times. But we must remember that these circles are not confined to Cymric districts, but are found also at Mull and Arran, at Callernish near Stornoway, and at Stennis in Orkney. As to their period we know nothing, but one peculiarity is that those I have examined have all been of granitic stone. And I may mention as a suggestive fact that in examining an interesting private collection of antiquities at Kirkwall my attention was directed to a piece of granite taken from the hole left by the fall of one of the Stones of Stennis. This piece of granite bore clearly the marks of polishing as if it had been used as a polishing stone upon the upright stones.

GOLD MINES AND GOLD MINING. By Professor J. W. GREGORY, D.Sc., P.R.S., F.R.S.E., F.G.S., M.I.M.M., etc., Glasgow University.

In this lecture, which was illustrated by a number of lantern slides, Professor Gregory gave a full description of the geology, etc., of gold-bearing strata in Australia, etc., together with the characteristics of the same; how the mines were operated; and the processes employed.

20th December, 1907.

Chairman—The President.

THE WOODCOCK. By Mr Hugh Steuart-Gladstone, M.A., F.Z.S., Etc.

The following paper being a précis of the notes on woodcock I have from time 'to time made in my notebooks, I should perhaps first draw your attention to a frequent error as regards the distinguishing Latin name this bird bears. Linæus spells Rusticola r-u-s-t-i-c-o-l-a; deriving this cognomen from "Rus" and "incola," that is an inhabitant of the country. Mr H. T. Wharton, in the Ibis, 1879, p. 453, writes of this mistake, and modern authorities agree in writing R-u-s-t-i-c-u-l-a. The word "rusticula" by Pliny is translated "a little heathcock:" and in Cicero "rusticulus" means "a little country-man." As such—a little fellow-countryman of Dumfriesshire—I propose that we should consider the woodcock to-night.

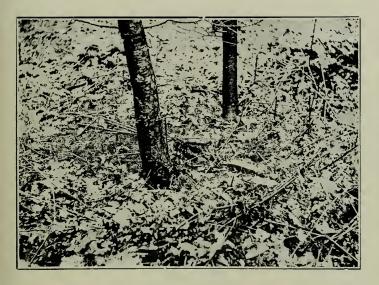
The woodcock is found in Eastern Russia and Siberia, up to 60 degrees N. latitude, in Western Russia to 65 degrees N. latitude, and in Norway and Sweden up to the Arctic Circle. The highlands of Southern Europe, the Caucasus, Himalayas, Japan, and Eastern Siberia know it as a nesting bird, and in winter it visits China, Burma and India and the countries of the Mediterranean. Though never recorded from Iceland or South Greenland, occasional stragglers have reached North America.

It has been stated that nine-tenths of the total number of woodcock killed annually in Great Britain are probably migrants from Northern and Western Europe.

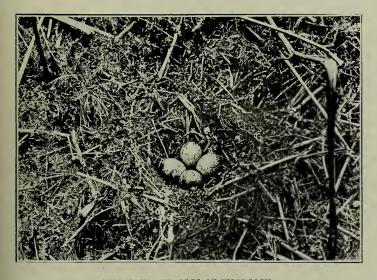
Migration takes place by night, the birds flying preferably upwind, and, it is believed, at a great height and speed. They travel singly or in pairs, but, of course, in large companies. Migratory birds of less nocturnal habits than the woodcock have been timed when performing this seasonal movement; and as the grey crow has been computed to travel at the rate of one hundred miles an hour, the suggestion does not seem unreasonable that the woodcock should get up a pace of one hundred and fifty miles an hour when migrating similarly. The observations by Herr Gätke concerning migratory woodcock alighting on Heligoland are interesting. He states that they are more numerous in the autumn migration, particularly after a stiff north-eastern breeze. On October 28th, 1823, upwards of 1100 were killed; and one old gunner, Hans Prohl, killed 99 with a gun made from an old Dutch infantry musket. As many as four at one shot have been killed there, but that, of course, was not at flying birds. The local Heligoland gunners are much attracted by the arrival of these birds, and use weighted nets for their capture. These nets are from 36 to 72 feet long, about 24 feet high, and of a 21-inch mesh. An old custom prevailed that the "eerst snaap" was handed over to the Governor of the island, who paid a dollar to the sportsman who had been lucky enough to obtain the first 'cock. The killing of so many as 1100 woodcock in one day would seem almost incredible, but we must remember that migratory birds pitch on the island of Helligoland in actual masses. Thus, we read in Rudolph Rosenstock's translation (p. 58) of Herr Gätke's work, that no less than 1500 larks were caught in the space of but

three hours on the misty night of November 6th, 1868. But to return nearer home. Woodcock usually alight on our eastern shores before dawn, and if they have suffered a more than severe buffetting, may be found tamely taking advantage of any hidingplace the shore may present, and have even been found squatting below an overturned boat. But all being well, they arrive plump and in sleek condition, little the worse for their journey, to rest but a few hours before again winging their way west. Their immigration to our islands takes place more or less regularly in October and November, and folklore as regards the date of their arrival varies locally. The first full moon in October is supposed by some to be the time to keep a good look out. An old saying, "When Daniel gets out of the lion's den, the 'cock will come in here again," refers to the reading in church of the lesson from Daniel, ch. vi., which under the old lectionary rules of the Church of England was read earlier than it is now, and coincided somewhat aptly with the usual appearance of our autumn visitors. In years gone by our forefathers kept a very much more keen look out than we do now for the first woodcock that came to our eastern shores. Coverts were not in those days artificially stocked with hand-reared pheasants, but could without jeopardising the "total" now demanded by our present "covert-shoot" be beaten time and again, so long as there was a chance of flushing the long-billed visitor. To illustrate the keenness with which these birds were awaited we need only tell the story of a parson preaching one Sunday in an East Yorkshire village some hundred years ago. When in the middle of his sermon an excited figure was seen to enter the church, who, approaching the pulpit, said—"Passon, 'cock is coomed,'' upon which the parson speedily concluded the service, and he and his congregation lost no time in going down to the beach to take toll from among the newly-arrived 'cock. It believed that the numbers of these our visiting migrants are greatly decreasing. The continental practice of shooting birds when they are "tamed by love" is extended to these birds also; and our flow of migrants consequently suffers. It is, therefore, satisfactory to be able to record that the woodcock as a nesting bird in the British Isles is consistently increasing. This undoubted increase in the number of woodcock which nest within our British Isles is difficult to account for.

The interest now taken in ornithology is greater than it has been hitherto, and it is certain that many cases which formerly would have escaped attention are now duly recorded. Of late years a marked tendency for the more northerly-breeding ducks to come further south to nest has been noticed, and the cause for this change of habit is as inexplicable as the increasing numbers of woodcock that now annually remain with us to nest. Experiments have been, and are being, tried on the Duke of Northumberland's estates at Alnwick, by marking young nestling woodcock to see how far these young birds are migratory; but the result of these experiments have as yet led to no definite con-That some woodcock nest and remain throughout the year within the British Isles is certain, and it is possible that the great migratory flow of these birds, on which sportsmen mainly depend for their sport, may in the course of ages be rendered trivial by the increased numbers of British-bred birds. Willughby as long ago as 1678, in his "Ornithology," p. 290, states "some stragglers by some accident left behind when their fellows depart remain also in England all summer and breed here." He also states "this bird is infamous for its simplicity or folly, so that a woodcock is proverbially used for a simple. foolish person." On estates where twenty years ago the finding of a nest with eggs was regarded as a curiosity, it is now common to find a nest in every covert which affords sufficient quietude and undergrowth. We read in 1905 of a keeper in Ireland, whilst searching for pheasants' nests, finding more woodcock nests than those of pheasants. In 1903 we found a woodcock's nest in Dumfriesshire which, besides containing the four rightful eggs, contained one of a pheasant; and this intrusion was probably the cause of the nest's desertion. The nest is but a mere depression in the ground, usually at the base of some tree, and scantily lined with dead leaves. As the old bird sits on her nest she affords one of the most striking examples of Nature's protective colouration. Her mottled back harmonises perfectly with her surroundings of dead fern and leaves, and some observers say she is only to be detected by her large round eye. Others again assert that recognising that "her eves betray her secret "she keeps them closed; but on this point, surely, it is hard to lay a hard and fast rule. I have noticed, however, that the woodcock I have seen on their nests in every case partially



THE WOODCOCK ON THE NEST.



THE NEST AND EGGS OF WOODCOCK.



hid their long bills below the leaves or bracken. The eggs, four in number, are not so pyriform as would be expected, and are of a buffish cream colour, about 1.7 by 1.35 inches in measurement, blotched and spotted mostly at the larger end with reddish brown, with faint undermarkings of lilac-grey. Clutches of pure white eggs have been found, but are extremely rare. Four such eggs were found in Kincardineshire in May of this year: so late a date as May may shew that previous clutches had been destroyed; that this was the third or fourth laying, and so were colourless owing to the exhausted condition of the bird that had laid them. The eggs are usually laid in April or even March, and require upwards of three weeks to hatch. Two broods may occasionally be reared in one season. The nestlings are able to run within twenty-four hours of their being hatched. They are covered with velvety down of a rufous shade, with a broad band of chestnut-brown down their back, and on the top of their head, and with chestnut patches on their throat. In the months of April, May, and June the male woodcock may be seen at dusk or at early dawn, flying in the open backwards and forwards between two coverts. At this season of the year one might almost think that he was some different bird. He looks more like an owl, his flight is slow and laboured, and from time to time he utters a croak or a dissyllabic cry resembling the word "chissick." Evening after evening the woodcock will keep as it were to his aerial pathways, which are called "cock roads," while this style of flighting is termed "roading." Often these "cock roads" will be down some ride or glade in a wood; but as often alongside the covert itself. It is to be regretted that on the continent (as we have stated) so-called sportsmen (?) still profit by this peculiarity of "roading," by lying in wait for and shooting these birds at a season when one might justly expect they should be left unmolested. Sometimes one may see two or three birds met together in the air, tilting at one another and enjoying a sort of playful warfare: very different to the pugnacious contests they have been seen to fight on the ground during the mating season. The female woodcock is a devoted mother, sitting so close on her eggs as often to allow her back to be touched with the hand. She will fly anxiously round and round any person approaching her young; and has more than once been seen to carry them away. How she accom-

plishes this has been a matter of much comment; but the latest authorities would seem to agree that she carries them in her feet. By this habit the difficulty of feeding her young is overcome, for she nightly carries her brood to the feeding-grounds, returning with them again to her quiet nesting-site at dawn. It must be a relief when the young one can fly and visit the feeding-grounds without assistance. In their first plumage they are darker than their parents, and the outer web of the outside primaries of the wings are as it were serrated with brown coloured notches. When adult these notches disappear, leaving the outer webs of a uniform whitish colour. This difference in colouration of the outer primaries was long thought to denote the two sexes, but dissection has proved that this is not the case; and there are at present no means of distinguishing the male from the female woodcock by the plumage. As a general rule the larger and heavier birds may be reckoned as females, but from experiment we have found heavy males to equal light females in weight, though these were exceptions: the weight test cannot therefore be implicitly relied on. The variation in size is often very great, but there is but one species of woodcock; and the species is subject to extraordinary dissimilarities, both as regards plumage and weight. Pure white examples of woodcock have been met with, and partial albinoism is not uncommon. Several years ago a table published in "The Field" gave the average weight of a male as 9 to 10 ozs., and of a female 12 to 14 ozs. Taking ten birds of either sex in the winter of 1902, we found the males averaged 11 ozs. 10 drs., and the females 12 ozs. 5 drs. The heaviest on record is mentioned by Yarrell; it weighed 27 ozs., and was shot in 1801. Another of 24 ozs. was recorded about the same time, and some authorities are of opinion that these birds belong to a larger and different species now extinct. The names "double," "muff," or "muffled" cock still exist, but no further evidence is forthcoming, and now-a-days such abnormally heavy birds are not met with. The weight of the birds, of course, is greatly influenced by the abundance or lack of food; and it is the search for this that causes a constant migration of these birds within our islands. How often has some covert been noticed on Monday apparently full of 'cock, which when beaten on Tuesday contained none! The birds which had been noticed found the ground unsuitable

for the production of their sustenance, and have therefore moved on. For many years it was popularly supposed that woodcock lived by suction, and Byron wrote:—

"For man is a carnivorous production,
And must have meals, at least one meal a day;
He cannot live like woodcock upon suction."

This erstwhile belief is erroneous. The woodcock's food consists mainly of worms, or failing these small mollusca. It feeds usually during the night, repairing to its sheltered covert, often a mile or more from its feeding grounds, at earliest dawn. The tip of the woodcock's bill is one mass of nerves, and is therefore sensitive in the highest degree. By burying it into the soft ground, often right up to the nostrils, the woodcock is able to detect the movement of any worm that may be concealed in the oozy mud below. The tip of the upper mandible being broad and raised and longer than the lower, enables the bird to seize his prey with satisfactory certainty by very slightly opening the further end of his bill and without withdrawing it from the ground. The "borings" made by the woodcock while so feeding are often noticed, and are always near water. This latter is imperative so that the bird may be able to keep his bill free from mud. A woodcock kept in captivity, and given fresh sods and bread and milk in which to probe, was noticed to constantly make use of a dish of water placed in his aviary, so as to keep his bill clean. This year there has been considerable discussion in the press as regards the position of the woodcock's ear. To Mr Whymper is due the discovery that the aperture is below the level of and in front of the eye. Woodcock have been seen to perch on trees, and also when on migration on the rigging of ships. They have also been recorded as alighting on water, from which after a few moments' rest they rose again, apparently with ease. From a "gourmet's" point of view this bird shares with the partridge the highest place in his estimation. Willughby, writing in 1678, quotes the couplet:-

> "If the partridge had the woodcock's thigh, "Twould be the best bird that ever did fly."

In 1903 Alexander Innes Shand, the cookery expert, waxes almost poetical when writing of "The wedding of the truffle with the woodcock." The best woodcock shooting in

our British Isles is probably obtained at Ashford, Lord Ardilaun's seat, on the shores of Lough Corrib, Co. Galway, Ireland. Over 100 couple in the day have been killed there in 1891, 1895, 1904. In 1895, when H.R.H. the Prince of Wales. with six other guns were shooting, 181 'cock were got, which was 30 less than the "record bag" established in 1904. As we have already said, the woodcock is a "chancey" bird to gethe is here to-day yet gone to-morrow; but the Emerald Islealways gets more than its share of these visitors as compared with the rest of Great Britain. Lord Claremont, shooting in Co. Cavan a century ago, killed to his own gun (a flintlock) in oneday 102 woodcock, for a wager of 300 guineas. The west coast of Scotland at times holds plenty of 'cock, and Norfolk is probably the best county for 'cock in England. At Melton Constable (in that county) fifty couples have been killed in oneday. As regards Europe, I am told that in Albania a sportsman might reasonably expect to get fifty couple in a day to his own gun if (and on that if rests the whole question) he were lucky enough to be out when the 'cock were in.

The "Irish Times," publishing a few notes on "Woodcock," apropos of the Prince of Wales' shoot at Ashford in 1905, said:—"Owing to its erratic flight, the woodcock is regarded as being one of the most difficult birds to kill on the wing, and rarely does the sportsman succeed in bringing down more than two at a time." To get a right and left at 'cock is a sufficiently rare occurrence; and it is probable that two at a shot flying has not been got more than five or six times. Sir Francis Chantrey (the sculptor), shooting at Holkham in 1829, had the luck to shoot two woodcock with one shot, and Mr Coke (his host) thought the affair so wonderful that he arranged all the guns and beaters in line and ordered them to take off their caps as Chantrey marched past. At Holkham, at the south end of the long library, now stands a sculpture of these two woodcock by Chantrey's own hand. Numerous epigrams have been written on this event, and one of the neatest runs:-

[&]quot;Two woodcock fall at his one shot,
The joyous Chantrey smiled to see;
Then pitying their untimely lot,
He gave them immortality."

In the "Field" of January 16th, 1905, Mr Gilbert I. White wrote from East Devon to say that a few days previously he had killed two woodcock at one shot, and the editor of the "Field" in his remarks says:—"Since Chantrey's feat in 1829 the feat probably has not often been repeated." Mr L. M. de Visme Shaw, in the Fur and Feather Series, "Snipe and Woodcock," states, as far as he knows, the only other occurrence of this feat since Chantrey's performance is "that of Colonel Sands, who killed his two 'cock with one shot on November 4th, 1853;" and it is quite possible that these are the only three occasions when two woodcock flying have been killed with one shot. The woodcock is always supposed to be a difficult bird to shoot, and certainly in a thick plantation the way he zig-zags behind the tree trunks is almost snipe-like. It has been suggested that his powers of vision by day are not good, and that this tortuous flight is due to his not seeing any obstacle till he is close to it, when he suddenly sheers off, and so continues on his way. In the open, his flight is very different and he flies far more directly. But, as in the case of all other game-birds, the reason why he is so often missed, probably lies in the fact that not enough allowance is made for his speed; for, though he may rise sluggishly, he is a very fast flyer when fairly on the wing. The long shots one sees fired at woodcock are to be regretted. Some sportsmen would seem to consider that a woodcock is never out of range, and that one stray pellet may bring it down at anything up to a hundred yards; and because the bird happens to be somewhat of a rarity, have no feelings at all about wounding it. A woodcock is as hard and wiry as any bird of its size, and it deserves as much fair play in the field as we should give to any other sporting bird. A hundred or more years ago, when the science of trapping and snaring was at is height, the woodcock came in for his fair share of attention; and we read in Shakespeare, Henry VI., part 3, act 1, scene 4, "So strives the wood-cock with the gin." The method here referred to was first to ascertain where woodcock were feeding, then round this feeding ground to build a small hedge or turf wall, with several gaps in it. In these gaps were set snares, and the woodcock running round the wall till he found an entrance to his dining-room, paid the penalty. This mode of capture has not so very many years ago fallen out of usage, and it would be interesting to

know if it is still made use of in any of the more remote parts of Great Britain. Another method employed by our forefathers was to place nets between trees across the open glades or rides in a wood, down which the woodcock would pass in their crepuscular flight. In George Owen's "Description of Pembrokeshire," written in 1602, we read there was marvellous "plentie" of woodcock in that country from Michaelmas to Christmas: where they were taken "in cock shoote tyme (as yt ys tearmed) which is the twylight," when "yt ys no strange thinge to take a hundred or six score "in one wood in 'XXiiij or houres." He speaks of a wood having thirteen "cock-shots," and further on states these birds "are not our countryeman borne;" so that then as now the British sportsman depended greatly for his sport on the influx of the foreigner. Woodcock can and do run very swiftly along the ground, their mode of progression being in quick little "bursts," like that of plovers. I know of a wire-netting rabbit-proof fence, where on more than one occasion a woodcock running precipitately forward, has got his bill and head through the meshes of the netting, and has thus been caught. In July, 1905, I found a woodcock caught firmly round the neck in a snare set for rabbits, in which case it is difficult to conjecture why it could not make good its escape from so large a noose. Lighthouses (particularly on a misty night) prove no less a death-trap to these birds, than to so many other of our migrants; and one often finds the bodies of woodcock lying dead below telegraph wires against which they have flown and been killed. Perhaps the most curious and least known trait of the woodcock is its supposed capacity for surgically treating its wounds. Professor Victor Fatio, in a lecture delivered to the Geneva Physiological Society on April 19th, 1888, gave five instances where he had shot woodcock which had applied plasters, made of feathers and blood, to wounds in the back and breast, and had in similar fashion in three other cases made ligatures of feathers round broken legs. From a colonial paper I quote the account of a similar operation, performed by the North American woodcock (Scolopax Philohela Minor), a first cousin of the woodcock we meet with in our British Isles. The account runs:—"One day, while sitting quietly by a brook, a woodcock fluttered out into the open, and made his way to a spot on a bank of light, sticky mud and clay. The bird was

acting strangely in broad daylight, and our author could see him plainly. At first he took soft clay in his bill from the edge of the water, and seemed to be smearing it on one leg near the knee. Then he fluttered away on one foot for a short distance, and seemed to be pulling tiny roots and fibres of grass, which he worked into the clay that he had already smeared on the leg. Again he took more clay and plastered it over the fibres, putting on more and more till the enlargement could be plainly seen, thus working away for fully fifteen minutes. Then he stood perfectly still for a full hour under an overhanging sod, his only motion being an occasional rubbing and smoothing of the clay bandage with his bill, until it hardened enough to suit him, and then he disappeared in the thick woods. The woodcock had a broken leg, and had deliberately put it into a clay cast to hold the broken bones in place until they should knit together again. This at all events was our author's full belief, confirmed by the opinion of many gunners who had frequently shot birds whose legs had at some time been broken and had healed again perfectly straight, and he was fully confirmed a long time afterwards as to the truthfulness of his opinion. A friend shot a woodcock, which, on being brought in by the dog, was found to have a lump of hard clay on one of its legs. He chipped the clay off with his pen-knife and found a broken bone, which was then almost healed and as straight as ever." Personally, I have never seen a woodcock with clay adhering to its leg, but the above account is interesting, and Professor Fatio is an authority whose statements deserve attention. There is something very touching in the thought of an unhappy little bird acting as his own surgeon, and if this story has the effect of restraining those who are in the habit of trying "marvellously long shots" at woodcock, and by so doing often cruelly wounding them, it will have served some purpose.

We have already commented on the increasing tendency the woodcock shows to nest in the British Isles, and certainly during the past spring (1907) the number of woodcock nesting throughout Dumfriesshire has been more than ever. The following observations of what we noticed at Capenoch this year may perhaps be interesting. In the months of April, May, and June, the birds apparently kept as their headquarters the coverts where they were hatched. But in the months of July and August, as

the woods became more dense and the powers of flight of the nestlings more ambitious, they were to be found in the stretches of bracken contiguous to the woods where they were hatched. At this season of the year, the old birds being in moult and the young ones not fully feathered, they offered a very easy victim for the sportsmen who came across them. By September they were well able to look after themselves, and had developed that deceptive tortuous art of flying which so often proves their salvation. In October we saw no woodcock, and it was not until the second week of November that we began to see them again. These birds would be migrants coming in from the east, and the majority will stay with us more or less (all depending on the weather) till February, in which month there seem to be more woodcock at Capenoch than at any other time in the year. By the end of March most of them have gone eastward again, but annually leaving a greater number to nest in our coverts. It seems a great pity that under our existing legislation the shooting of woodcock in February should be permissible, and a clause in the "Wild Birds Protection Act," extending the close time for woodcock to March 2nd instead of February 2nd (as at present) is to be hoped for. There are some who claim that a further extension should be granted by extending the close time to September 30th instead of only to July 31st, but before acquiescing in this desire we should like to ascertain to what extent homebred birds stay at home after October 1st.

DISCUSSION ON THE PAPER.

Mr J. Bryce Duncan of Newlands proposed a cordial vote of thanks to Mr Gladstone for his interesting and valuable communication, and this was seconded by Mr Matthews.

Mr Robert Service, in supporting the motion, said as yet even among the best informed sportsmen and still better informed naturalists the migrations of the woodcock were extremely obscure. The dates had not been tabulated in anything like precise order. It seemed extremely mysterious how some morning woods would hold any number of woodcocks where the previous day not one was to be found. It was often said that certain moonlight nights favoured these long journeys; but he fancied that had not been clearly established yet. He had on certain very rare occasions seen the woodcock coming in long

after daylight had become full in the earliest weeks of November. And these were invariably flying at a great height and at a tremendous pace. But when migration took place in windy weather they flew low down, and would be seen flying along the hedgerows, evidently seeking for cover on which to alight. At such times they could be picked up in very unexpected places, in gardens, fields, and merse, away altogether from their usual haunts. Another vexed question in connection with the woodcock's history was that now it bred in this district annually in very large numbers. Many thought this was a new thing; but it had taken place ever since he remembered. In his earliest days of bird-nesting and bird watching he had always found many woodcock nests in suitable places. What was a suitable place was not well defined. He had often thought that young plantations, from fifteen to eighteen years of age, were their favourite places. When the woods had attained a certain height the woodcocks left them entirely. Not long ago he had the pleasure of handling an egg of a woodcock that was taken close to the foot of Criffel so long ago as 1828, so that even at that time they had been known to breed here. But no doubt, as Mr Gladstone had pointed out, the woodcocks were extending their range, and probably were breeding here in greater numbers than used to be the case a number of years ago. Many of the northern ducks, particularly those coming from the great northeastern territory, extending westwards, had been found here in greater numbers, and no doubt they were extending their range because of some obscure climatic or other change. The curious habits of the woodcock in the evening had been explained in a very interesting manner indeed by Mr Gladstone. It was a fascinating sight to see the woodcocks take these long, mysterious evening flights. But one year these roading lines might be very numerously occupied, and another season the birds were somewhere else; not a woodcock might be seen there. What that depended upon was another obscure point. Mr Gladstone referred to the almost unique habit that the woodcocks had of carrying their young when danger threatened. He had only seen that on one occasion, and it was about thirty years ago. About the same period Wolff, the celebrated painter of animal subjects, painted a curious picture showing the old bird holding the young in its feet, just as a falcon or sparrow hawk or any

other bird of prey carried its victim. Now, so far as he saw that was altogether wrong. They did not hang down dependent upon their feet in any way. They were tucked up under the abdomen and held under the thighs. It was one of the most interesting traits in bird life that he had seen.

The President (Professor Scott-Elliot) congratulated Mr Gladstone on his most valuable paper. He added that he should like to know a little more about that curious question of the woodcock curing its own wound. He confessed that since he began to study nature he had seen so many wonderful and almost incredible things happen around him that he was prepared to believe it; he would only like more proof.

ADDITIONAL NOTES BY AUTHOR.

Since I delivered this lecture I have come across one or two interesting local records concerning the woodcock which it may not be out of place to add. As regards the excessive rarity of killing two woodcocks with one shot, to which I have referred above, I was surprised to find two occurrences recorded in the columns of the Dumfries "Courier." In the issue of October 26th, 1852, we read: - "Mr John M'Quie, gamekeeper to Wellwood Maxwell, Esq. of Munches, while afield on Wednesday last (20th Oct.) brought down at one dexterous shot a brace of woodcock.". . . And on 25th November, 1851:- "On Tuesday last (18th November) Mr Garlies C. Maitland, Kells Manse, when shooting on the Kenmure estate flushed a brace of woodcock which he brought down with one shot. An unfortunate blackbird which had flown within range at the time also fell a victim to the same discharge." Which feat eclipses that of Chantrey's already quoted.

The pious wish expressed above for the extension of the close-time for woodcock has been realised.

I am informed by Lord Henry Scott that 52 woodcocks and other game were shot by six guns at Langholm on 15th December, 1908. A record bag for Dumfriesshire.

The usual complement of eggs laid is four, but Mr S. Copland writes me from Canonbie that in 1908 he found five in one nest.

The only local records of partial albinism in this species I have come across, are two woodcocks each of which had six

white feathers in each wing, shot by the gamekeeper to C. G. S. Menteath of Closeburn in 1824.

The ornithologists of our Society have been so good ingiving me all the assistance in their power as regards my forthcoming Book on the "Birds of Dumfriesshire," that I should like to take this opportunity of thanking them collectively, and at the same time add how gladly I shall acknowledge any further communications they may be able to favour me with on the subject. The Book, it is hoped, will be published in October, 1909.

Some Ancient Chapels of Knapdale. By Mr W. A. Mackinnel.

The fervent missionary enterprise of the early Keltic Church is still borne witness to by the large number of ancient ecclesiastical ruins scattered all over the West Highlands and Islands. Hardly an island, even the smallest and most remote, many of which are now tenantless, save for the sea-birds, but has its ruined chapel, and probably half obliterated burial ground. St. Kilda, far out on the western sea, the solitary and now deserted North Rona in the far north, the desolate Sula Sgeir, the lonely Shiants, and the Flannens—blessed islands of old Gaelic legend—not to mention the more important and less remote islands, all have their chapel ruins, more or less rude certainly, but not the less interesting.

The absence of "modern improvements," and, what is less-satisfactory, the gradual depopulation of the Highlands, have combined to preserve to us many of these memorials of the past intact, save for the ravages of time and weather, and this to a greater degree in the islands than on the mainland.

Argyllshire is naturally the western county richest in ancient eccleciastical remains, and of its districts Knapdale contains at least four, the chapels at Cove on Loch Caolisport, Kilmory on the Sound of Jura, Keills at the end of the long peninsula which separates Loch Sween from the Sound; and the most interesting one of all, the tiny chapel of St. Carmaig on Eilean Mor, lying a few miles S.S.W. of the mouth of Loch Sween.

In the Statistical Account of the Parish of South Knapdale, 1797, it is stated:—"Monuments of primitive Christianity are

numerous in Argyllshire, but nowhere more frequent than in Knapdale. Of these the chapels of Cove and Islandmore seem to bear marks of greatest antiquity."

Of the chapel at Cove there is now very little remaining, and all window and door details have disappeared. Adjoining it there is, however, a curious little cave chapel with stone altar, a scratched cross, and a small font scooped out in the floor, and it is possible that in this we have the first church founded by St. Columba in Scotland.

Whether Columba's mission to Scotland was purely a religious one, or was connected with the disastrous defeat of the Scots of Dalriada by the Picts two years before, he at all events went first to the seat of the Daldriadic King, which at that period seems to have been on the west coast of Knapdale. As Skene remarks in his chapter on "The Monastic Church in Iona":—"The curious cave chapel at Cove on Loch Caolisport, which tradition says was Columba's first church in Scotland, before he sailed to Iona, is probably connected with his residence with King Conall."

That the ruins of the built chapel date from Columba's time is, of course, quite improbable. The first monastic buildings on Iona were of wood, and it was not until the ninth century that they were replaced by stone structures, so it is most unlikely that, with the exception of such rude uncemented stone buildings as the remains on the Isle of Saints (one of the Garvelloch Isles) and on North Rona, the early outlying Keltic churches were constructed of stone. Stone chapels would, however, likely replace the decaying wooden ones on the same sites, so it is probable that the present ruined Knapdale chapels mark the sites of still earlier erections. From the character of what little detail they possess these existing chapels probably date from the twelfth century.

Of the three remaining chapels at Kilmory, Keills, and on Eilean Mor, that on Eilean Mor is unique, and is in much better preservation than the others. Owing to its great strength of construction, the most interesting portion of it has not been materially injured by the storms that during the eight centuries which have elapsed since its erection have swept over its site on the lonely little island in the Sound of Jura.

Though, in the course of several small boat cruises in the

Sound of Jura, I had passed within a few miles of Eilean Mor, it was not until this year (1907), when I undertook a cruise to the Sound with Eilean Mor as a definite objective, that I succeeded in realising a long-standing desire to land on the island and examine the curious little chapel.

On a fine July forenoon a fellow-member of this society and I reached the western end of the Crinan Canal in a little motor and sailing cruiser, and moored in the basin at Crinan. Crinan to the ordinary tourist is merely the end of the canal, and is associated chiefly with speculations as to whether luggage has been properly transhipped, but to the antiquary it is specially interesting as the centre of a district full of early historical associations. Within a mile or two is the ancient capital of the Dalriadic Kingdom—"Dun Add'—and hardly a mile can be travelled in any direction without coming on a stone circle, fort, or cairn.

In the afternoon, with the ebb tide in our favour for the long run down the sound, we passed through the sea loch into Loch Crinan, and hoisted canvas to a pleasant off shore breeze. Passing the pretty Crinan Bay and Harbour, we rounded the bluff Ardnoe Point and entered the Sound of Jura.

The Sound of Jura, may, I think, lay claim to being not only the largest but the grandest in respect of scenery of the sounds of the West Highlands. It is also the least advertised and tourist overrun, and is to-day one of the most solitary stretches of water in the Hebrides. As the West Highland steamers, on both their outward and inward passages, pass through the sound in the middle of the night, a steamer is but an occasional sight on its wide expanse.

Our intention being to anchor over night in the little bav in Eilean Mor, we were in no hurry to reach the island much before sunset, and, though the breeze did not do more at times than give us steerage way, we had no desire to shorten the pleasure of the run down the sound by resorting to the engine. Through the long hot, afternoon we drew slowly southward, along the coast of the long and narrow peninsula, on the other side of which lies Loch Sween. Probably no part of Knapdale, which, as a district owes its name to the striking ruggedness of its surface, shows such a wonderful diversity of scenery as this. For some distance south of Crinan the coast to the Sound of

Jura is steep and rocky, with fantastically outlined hills rising to a considerable height, separated by deep and narrow glens, with here and there a picturesque white sheiling on the hillside. South of Carsaig Bay, which runs inland to within half-a-mile of Tayvallich on Loch Sween, the hills gradually become lower, till the peninsula ends in the long, low, and very narrow promontary of bare rock—Rudha na Cille.

About six o'clock in the evening we sighted the low irregular outline of Eilean Mor lying dim in the haze to the southward.

We were now close to Keills Bay, into which we turned to pay a visit to the chapel of Keills, which stands a quarter of a mile or so away, on the shore of Loch na Kille.

Landing on the rocky shore, a short walk over the intervening hillocks brought us to the ruins.

Keills chapel, which at a short distance away might easily be mistaken for a ruined sheiling, is a rude oblong building, externally 42 feet long and 21 feet wide. The walls and gables, though cracked here and there, are practically entire; the side walls being about 12 feet high, and the gables fairly steep in pitch.

There are four windows, one in the north and two in the south wall, all flat topped, and one, which is circle-headed, in the middle of the east elevation. The doorway is in the north wall, and, as is common in these small Keltic churches, the west wall is entirely blank.

The floor of the chapel is covered with carved slabs, all comparatively modern, and surrounding the building is a small burial ground.

The chapel at Keills is usually considered to have been dedicated to St. Carmaig, and in the New Statistical Account it is stated that "the whole district of Knapdale formed originally one parish called Cil mhic O'Charmaig, the burying ground of the son of O'Carmaig. This O'Carmaig is said to have been an Irish saint, who founded the first church in Knapdale.

T. S. Muir, however, in his book, "Ecclesiological Notes on some of the Islands of Scotland," considers it to have been more probably dictated to St. Columba.

A few paces away from the chapel stands on the hillside what is evidently a very ancient cross. I quote from T. S.

Muir's sketch, "The Ferryhouse," the following description of it:-

"This cross, though not a showy specimen, is interesting from being in its form a singular variety of the few departures from the ordinary conventional type, which is a narrow pillar terminating in a solid girdle or disk into or through which, as it were, the arms of the cross are stuck. It is a simple Latin cross with the re-entering angles of the intersections rudely notched into semi-circles. The pillar stands in the middle of a slightly raised causeway of circular form, and measures 7 feet 4 inches in height. Overspreading its eastern face is a series of curious sculptures, the greater part in high relief. In the uppermost or vertical limb of the cross is St. Michael, winged, and trampling on the 'Apostate Angel' in the disguise in which he talked over Mother Eve. Under this, and occupying the intersection, is a central boss charged, or seeded, as it would be termed in heraldic speech, with three minute pellets-betokening, very probably, the Trinity in Unity. On each side of the boss is a serpent; under each serpent is a dog; and under the dogs, and filling the uppermost portion of the shaft, is a priest or some other ecclesiastic, whose ears the dogs are worrying, while at the same time their chaps are being torn by the serpents. In the division next below the priest is a kind of reticulated work in moderate relief; under that are two animals resembling leopards, face to face; and, finally, a quantity of scrollings of purely ornamental character."

Curiously the west face of the cross is entirely plain.

Returning to the shore at Keills Bay, we found that the breeze had completely died away, leaving the sound a wide glassy expanse of water shimmering in the evening light. Away to the south-west the striking conical outlines of the three great Paps of Jura, so poetically named the "Mountain of Gold," the "Mountain of Sounds," and the "Sacred Mountain," stood out clear and distinct against the western sky.

It was an evening on which to realise the spell and glamour of the west, which seems to ever brood most deeply over that lonely silent sea, on which, as we drew away from the land, the throbbing of the noisy little motor seemed strangely out of place.

Before us, now coming more clearly into view, lay the "magic island" of the sound, round which and its ancient

hermi't have gathered many strange legends. Of St. Carmaig and his miraculous origin, the following tradition is given in the Statistical Account of the Parish of South Knapdale, 1797:—

"Near the west coast of Knap lie a group of small islands, the most considerable whereof is Ellanmore-Kilvicoharmaig. Carmaig was an ancient proprietor of this island. His whole family consisted of a grand-daughter, who used to amuse herself by angling on the shore, which is surrounded with currents, and frequented, to this day, by vast crowds of fish. It happened upon an occasion of this kind that a bone, in place of a fish, came out with her line; she unhooked, and threw it back into the sea. Again and again it came out in like manner. Chagrined with disappointment, she carried it home and put it into the fire. The whiteness of its ashes struck her fancy. She endeavoured to preserve them, but burning her finger in the attempt, instinctively clapt it into her mouth. By this means she became pregnant of the saint, whose supernatural gifts were so long to survive himself. He founded Kilvicoharmaig, the mother-church of Knapdale, and, after a life spent in acts of piety and devotion, was buried in his native island. His tomb, a little oblong building, elevated three feet above the ground, remains uninjured by time. The saint is said to resent, with the most summary vengeance, the least indignity offered to his monument. Near his tomb is a small chapel, built by himself. It is arched over and covered with flags. Within, in a recess of the wall, is a stone coffin, in which the priests are said to have been deposited. The coffin also, for ages back, has served the saint as a treasury; and this perhaps might be the purpose for which it was originally intended. Till of late, not a stranger set foot on the island who did not conciliate his favour by dropping a small coin into a chink between its cover and side.

Upon an eminence not far off is a pedestal with a cross; and near to the cross is a cave possessing the wonderful power of causing sterility in every person who dares to enter it. This magic island, if we may believe the legendary story of the saint, possessed many singular qualities. Nothing could be stolen from it that did not of itself return. The master of a vessel, conceiving a liking to the cross, carried it along with him, but, being overtaken by a storm at the Mull of Kintyre, was obliged to throw it overboard; it floated back to a creek of the island,

called from that circumstance Portnacroish, i.e., the Harbour of the Cross."

Just before sunset we reached the island, and running into the sheltered little "Harbour of the Cross," on the north side, we landed at what might well have been the ancient landing place of the saint. We found that we were not to be the only occupants that evening of the snug anchorage in the little bay, usually so solitary, some lobster fishers having also come to anchor there. On landing, we naturally turned first towards St. Carmaig's Chapel, which stands about the centre of the island, a short distance up from the head of the bay.

Eilean Mor itself is roughly about half-a-mile in diameter, indented on the north by the pretty little inlet called the-"Harbour of the Cross," which affords secure anchorage for a small craft in anything but due north winds, which are not at all frequent. Elsewhere the shores are steep and rocky, and off the coast, especially to the south, lie a number of islets and reefs. The highest point, 71 feet above sea level, is towards the south of the island, and on this, on a rough stone base, stands the mysterious cross which so miraculously floated back from the Mull of Kintyre. What is standing is merely the stem, about fivefeet high, the disk having been broken off. As if to give point to the legend of its miraculous return, the disk was discovered on the shore by T. S. Muir on his visit in 1864, and placed in the chapel, where it still remains. On the west face of the stem is carved an animal surrounded by foliage, and on the east a now almost obliterated inscription. On one side of the disk is a representation of the crucifixion.

Standing on this, the highest point of Eilean Mor, we had a wonderful view of the tide race round the island. The full' sweep of the flood tide up the sound had by this time set in, and being broken up by the island and the reefs and islets lying off it, cross currents and eddies were setting in all directions, their lines clearly marked on the calm sea, while the air was filled with a haunting subdued roar, weird and indescribable.

In the south-east of the island is a little roofless building about eleven feet square, with very thick dry-stone walls, and one small opening to the south, which tradition says was St. Carmaig's first cell. Near it is the magic pit.

Close to the chapel itself is the supposed tomb of the saint,

which is now so dilapidated as to be scarcely traceable, though, according to the writer of the Statistical Account of the parish of Knapdale, it was intact at the close of the seventeenth century. It is about 9 feet in length, and close to its west end is a broken cross, the disk of which has disappeared. This cross, as it stands, is about six feet high, with, on its east face, some lattice work, and a horseman. The carving on its west face is practically worn away.

The chapel itself is an oblong building, 37 feet 4 inches long, and 19 feet 11 inches wide, across the east gable. It is not strictly rectangular, there being a difference of about ten inches in the width of the two gables. Internally, it is divided into two divisions, the eastern one or chancel being a semicircularly vaulted cell 13 feet 3 inches long and 10 feet 9 inches wide. In the east gable, which is over three feet thick, are two round-headed and very deeply splayed windows. Excessively narrow to begin with, one has been contracted still further, evidently at a later date, with a slate slab, through which is pierced a very narrow lancet opening. The other window was probably similarly fitted, but the slab has disappeared, and the window has a somewhat torn appearance. The side walls, except where recessed, are about 4 feet 6 inches thick, and in the south one is a very deep semi-circularly arched recess, about 4 feet 6 inches high, in which is the stone coffin mentioned in the account I quoted. On the cover is carved the figure of a priest, of which the head is awanting. In the north wall are two recesses, not quite so deep as the one in the south wall, both 4 feet 3 inches wide and 6 feet 3 inches high, semi-circularly arched. The eastern one of these has on one side a very small window, which originally only 9 inches wide has been contracted with a pierced slate similar to the window in the gable, except that the opening is slightly cusped. Below this window is a curious little recess, extending to within a few inches of the outside face of the wall, and about fifteen inches high. The barrel arch covering the chapel springs at a height of about 9 feet 3 inches from the floor, and is about 14 feet 6 inches high to the crown. The entrance to the chancel was originally by a semi-circular arch in the west gable, which has been filled in at a later period by a wall about 2 feet thick, with a low and narrow flat-headed doorway in the centre. On one side of this doorway is a small

window, and on the other to the chancel side a recess of about the same size. Above are two other small recesses. Between the arch and the roof is a tiny chamber, entered by a small doorway in the west gable, which is supposed to have been a retreat for the anchorite when danger threatened. The roof of the chapel is formed of stone slabs, now overgrown with moss.

The western division of the building shows signs of later alterations, probably carried out at the same time as the chancel arch was filled in. The original doorway seems to have been a fairly large round-headed opening on the north side. This has been built up, and a low flat-headed doorway formed in the south wall, which has again been further contracted, and the opening skewed. In the side walls are joist holes about 5 feet 6 inches up, and the putting in of this floor would explain the building up of the chancel arch and the north doorway, both of which would rise above the level of this floor. The west gable appears to have been almost completely taken down and rebuilt with a corbelled out fireplace, vent, and chimney head at the fevel of the upper floor, and two small widely splayed windows formed, one of which is lintelled with a part of what seems to have been a carved tombstone.

At what period these alterations were carried out it is impossible to say, but, as according to Mr Howson in "Ecclesiastical Antiquities of Argyllshire," the chief parochial minister seems to have lived always in the cell on this island, and to have made periodical excursions to his different 'preaching places,' it is probable that they were carried out to make the cell a more comfortable habitation."

We came out from the gloom of the cell and went down again to the harbour. After the anchor had been dropped, and the cabin erected, we sat for long in the bow watching the moon rise, and as it flooded with soft light the strange old ruin, while ever there came to our ears the low roar of the tide round the island, we felt that even in this century some of its old magic still lingers about Eilean Mor.

17th January, 1908.

Chairman-Dr J. W. MARTIN, Vice-President.

IRONGRAY IN THE EIGHTEENTH CENTURY. By the Rev. SAMUEL DUNLOP, B.D., Minister of Kirkpatrick-Irongray.

On a former occasion I had the honour of reading a paper before this Society on Irongray in the last ten years of the seventeenth century.* My information was drawn from the Session Records (June, 1691, to June, 1700). To-night I again turn mainly to the Session Records, though they are not so full or so interesting as the earlier ones. I have in my custody records from 1714 to 1716, and from 1743 to 1773. I shall stop, however, at the close of Mr Guthrie's ministry in June, 1756. He was minister of Irongray for sixty-two years, from September 14, 1694, to June 8, 1756.

AN ASSAULT ON TERREGLES.

In a very interesting little volume, "The Ancient Catholic Homes of Scotland," we find the first event of our story. On Christmas Eve, 1703, the ministers of Irongray and Torthorwald attacked Terregles House, searching for priests and Jesuits. The Earl of Nithsdale complained to the Privy Council that they invaded his dwelling under cover of night with guns and swords, forced open the outer and inner gate with horrid noise and battery, entered the house, and searched it while the Countess was indisposed. The ministers retorted by accusing the Earl of hearing mass and concealing thereof, resetting Jesuits and seminary priests, and trafficking with papists. The case was heard in Edinburgh on February 4, 1704, and a compromise was effected between the litigants.

THE REBELLIONS.

Though our records include both the years 1715 and 1745, they contain no reference to the two efforts of the Stuarts to recover their ancestral throne. Yet both attempts must have been felt in the parish. We know from the list of rebels re-

^{*} Transactions Dumfries and Galloway Natural History and Antiquarian Society.—Vol. xviii., p. 127.

turned by the supervisors of Excise (May 7, 1746) that at least one Irongray man was out in the '45, William Maxwell, son of Maxwell of Barncleugh, who is returned as a prisoner. In Sir Herbert Maxwell's "History of Galloway" (p. 325) there is a quotation from the journal of a neighbouring minister, Mr George Duncan, of Lochrutton, describing how he felt when the young chevalier entered Dumfries on his return from England. December 22, 1745:—"A melancholy day—the rebels in Dumfries about 4000, with the Pretender's son at their head, in great rage at the town for carrying off their baggage from Annandale, and for raising volunteers and calling out the Militia of the county in defence of the Government; demanded £2000 sterling of contributions. They were most rude in the town, pillaged some shops, pulled shoes off gentlemen's feet in the streets. In most of the churches for some miles round no sermon. thanked we had public worship. Much confusion in all the neighbouring parishes—rebels robbing people's tables—pillaging some houses. They came to the border of our parish, but God be thanked came no further." As the Barncleuch estate marches with Lochrutton, we may be pretty sure Irongray was visited by the Highland host.

JEANIE DEANS.

I am often asked if there is no reference to the tragedy of Effie Deans (Tibbie Walker) in the Irongray Records. I am sorry to say we have no records for the year of that tragedy, 1738, and even if we had, it is improbable that any reference to it would have been found, for it was a case for the criminal courts, not for the ecclesiastical. All that is likely ever to be known on the subject may be found in a very interesting article contributed to "Scotsman," May 5, 1906, by my friend, Dr King Hewison of Rothesay. That diligent antiquarian has unearthed most of the details, and corrected not a few errors of MacDiarmid's account, quoted in the notes to "The Heart of Midlothian." I need not refer further to this, as his article has been reprinted in the local papers.

Scenes at a Funeral.

The records from October 24, 1714, till February, 1716, are contained in a shabby little book, and are a somewhat mis-

cellaneous collection—accounts of the Sunday offering, proclamations of marriage, baptisms, deaths, and cases of discipline—a veritable skeleton of parish history, if one could but clothe it with flesh and breathe life into these dead bones. During the year 1715 there are two cases of discipline which are somewhat interesting. On the last day of February in that year the laird of Drumclyer was buried, and his funeral evidently was "a grand success," judging by the Session Records. It produced three cases of drunkenness. John Stot, Joseph Welsh, and Deborah Welsh all were cited to answer to the charge of drunkenness at Drumclyer's burial. All denied the charge, but in the case of John Stot there was too strong evidence against him; he wes seen to stagger to and fro, fall at the Brigghouses, walk in the red land, William Bremner supporting him, and he had not even taken the ordinary precaution of saying he was not well. On April 18 he was rebuked for drunkenness. Deborah Welsh, a sister-in-law of the late laird of Drumclver, boldly denied that she was drunk, and on the minister warning her to be more circumspect said "she was not sensible of it." Several witnesses testified to her being all right in the morning, but she was in bed sick in the afternoon. Her sickness was ascribed to a tass of brandy. The evidence against her was not conclusive, so "the Session considering the hail affair dismissed her with an admonition to be more cautious and watchful "-that is good Scots for "not guilty, but don't do it again." Joseph Welsh, her brother, had fortified himself with a witness to prove that he had said he was sick before the out-going of the corpse. Another witness was summoned, but Joseph challenged her on the ground that she was a liar and had slandered him. Unfortunately we do not know how Joseph Welsh got off. Both in his case and in that of John Stot drunkenness was not the only cause of offence. Both had absented themselves from sermon, and Welsh was accused also of despising ordinances and unduly delaying the baptism of his child. By January 13, 1716, he had made his peace with the session, for on that day his daughter Mary was baptised. She did not long survive being made a Christian; two days later is the following entry:—" January 15, 1716—Mary Welsh, a child, departed this life, aged one year and some months."

AN "UGLIE" PERSON.

The other case of 1715 is that of the Currows (Curries). James Currow called John a thief, a dog, and a liar, a remover of landmarks, and worse, and John's wife he described as a thief and a witch. John complained to the session, but not getting the satisfaction he hoped paid back James in his own coin—for he called James a murderer, on the ground that he took away his good name, and James's wife, "a gipsie and uglie person." The session records do not tell us how this case ended, but it is hard that Mrs Currie should go down to posterity "as a gipsie and uglie person."

Though the records from July, 1743, to June 25, 1756, are much better kept than those preceding they are rather uninteresting. There are few cases which can be quoted; most deal with the filthy vices of a rural parish. There are no witchcrafts, no Sabbath breakings, only one case of slander, and that a mild one, two cases of drunkenness, both in Shawhead in the year 1743

MONEY MATTERS.

The session's attention is mainly devoted to money matters during these years, and at the meeting held on 25th June, 1756, after Mr Guthrie's death, a very full statement of the church affairs is given. The session had no less than eight bonds on money lent to farmers and merchants. This was the only way they had of investing the poor's funds. Sometimes the investments were risky. A bond of Thomas M'George of Auchenreoch and John Kirk in Auchengate caused the session much anxiety. The interest was unpaid in 1748, and 1755 they had to put the matter into the hands of Mr Malcolm, writer in Dumfries, who sent to Edinburgh for a "charge of horning against the foresaid Auchenreoch," and at Mr Guthrie's death the session "charged Arch. Malcolm, writer in Dumfries, to diligence thereon to obtain payment lest the said money be lost."

BENEFACTIONS.

I have only been able to trace the source of two benefactions to the poor. Among Mr Guthrie's paper was a copy of the will of William Welsh, surgeon and apothecary in Chelsea, in the county of Middlesex, who left £20 to his brother, Robert Welsh,

Mr Guthrie, and Robert Ferguson of Hallhill for the relief of the poor of Irongray. This will is dated May 15, 1748. I strongly suspect this William Welsh was a son of old John Welsh, the Covenanting minister of Irongray, for it was at Chelsea the heroic field preacher ended his days in peace.

THE POOR'S HOLM.

One benefaction still brings in £5 a year for the relief of the poor. Behind the church of Irongray is a meadow known as the Poor's Holm—formerly the Kirk Holm. This was purchased in 1712 by Mr Guthrie from Alex. Alves, W.S., of Baltersan, in Holywood. The money that bought it was 500 merks left by Jean Biggar in Barbuie to Mr Guthrie and Mr John Hepburne, minister in Urr, for behoof of the poor of Irongray. The annual rents of this sum were to be disposed by the said ministers, and the longest liver of the two during their lives. Guthrie long out-lived Hepburn, and in 1751 transferred the Poor's Holm to the session. It is no longer managed by the session, but has passed into the custody of the Parish Council.

COLLECTIONS—BAD BRASS.

From time to time there is bitter wail over the quantity of bad money in the poor's box. In November, 1743, there is "a considerable bulk of unpassable brass which will do little service." At one collection no less than one shilling and a penny stg. bad brass was found. At Mr Guthrie's death the boxmaster found "ten shillings of brass which the elders thought might pass, and two English pounds save one ounce of bad brass, which was laid by in the box." The money taken thus, fines for irregular marriages, etc., and the interest on the bonds, were mainly devoted to the relief of the poor. It was distributed twice or thrice a year, apparently at no fixed date. The sums given vary from five to one shilling. The beadle was paid at the distribution of the poor's funds; his pay varied from 1s 6d to 2s 6d. But he had other perquisites; for instance, a fee for the use of the mortcloth. In May, 1747, the session ceased to reckon their distribution of poor's funds in £ Scots, and adopted £ sterling. It certainly takes somewhat from the appearance of the accounts, but I trust the poor had none the less money for that reason.

CHANGE FROM OLD STYLE TO NEW.

It was in September, 1752, that the Act of Parliament decreed that September 2nd should be followed not by September 3rd but September 14th. The country took the change with very bad grace, and certainly it was hard lines losing eleven days with nothing to show for them. The last entry in O.S. in our records was October 22, 1752; the next entry December 15, 1752, is marked N.S. The entry of May 19th N.S. has the alternative 8th O.S. The change in Irongray was ominous. James Guthrie was the last of the Old Style ministers. He had seen "the killing times," if tradition is true, he was the nephew and namesake of James Guthrie, the proto-martyr of the Covenant. He had seen as a young man prelacy deposed and Presbyterianism established. He had in the early days of his ministry been called upon to deal with those who had fallen away in the times of persecution. He had seen Nithsdale and disturbed the heroic Countess Winifred's Christmas Eve. He had heard the Highland host retreat from England. The old romantic Scotland of legend and song passed away in his life-time. The new Scotland of Edinburgh "literati" and "moderate" divines, the Scotland of "Jupiter," Carlyle, Hume, Robertson, and Adam Smith, had come in its stead. I wonder what thoughts passed through the old man's mind when he thought of all the changes he had witnessed. Did he say "the former days are better than these?" or did he console himself with King Arthur's philosophy?-

> "Old order changeth, yielding place to new, And God fulfils Himself in many ways, Lest one good custom should corrupt the earth?"

Mr Dunlop, in acknowledging a vote of thanks, said the records of the parish had been fairly well kept, and certainly very much better than those of many others in the district. He also read Dr Hewison's account of the trial of Isobell Walker—the sister of "Jeanie Deans''—which appeared in the "Scotsman' on 5th May, 1906. He had often intended, he said, to write a history of the parish, and would be obliged to any person who could supply him with well-authenticated facts.

The Weather of 1907. By Rev. Wm. Andson.

I have to report in the outset that the Dumfries station of the Scottish Meteorological Society was visited in September last by Mr Watt, the secretary of that society, in succession to the late Dr Buchan; and that having compared the instruments used with his own standard ones, he found that they retained their usual accuracy. The weather of the past year has been peculiar in some respects, certainly not very favourable, as will appear when we deal with the different elements which combine to distinguish its meteorological character.

I begin first with the barometrical pressure, the variations of which largely constitute the foundation of the changes which fall to be recorded. The highest reading occurred in January, when it rose to a height which has very rarely, if ever, been reached during my 21 years of observation. On the 23rd of that month the abnormal reading of 30.989 in., almost 31 inches, was recorded. In contrast with this, the lowest reading occurred in December, on the 4th of which it was found to have fallen to 28.581 in.—giving an annual range of no less than 2.408 in. The mean pressure of the year (reduced to 32 deg. and sea-level) was 29.805 in., which is about one-tenth of an inch below ave-There were four months in which the monthly mean was 30 inches and above it, viz., January, March, July, and Septem-These were on the whole very favourable months. months in which the lowest means occurred were June, October, and December, which ranged from 29.561 in. in June to 29.648 in December. These months had an almost constant series of cyclones, with no less than 75 days out of the 92 in which rain fell. The months which had readings below 29 inches were January, February, March, May, October, November, and December; and these depressures were usually accompanied by more or less severe storms of wind and rain.

I now proceed to give the facts regarding the temperature of the year; it being premised that the observations which follow are of temperature in the shade, secured by means of the Stevenson screen and 4 feet above the grass. The highest temperature of the year occurred on the 17th of July, and amounted to 84.8 deg. The lowest was in February, when it fell to 18

deg. twice over, on the 1st and 16th—giving an annual range of 66.8 deg. July was the only month in which temperatures in excess of 80 deg. were recorded, and there were four of them in succession, from the 16th to the 19th, and ranging from 81 deg. to 84.8 deg. The next highest temperature was 78.5 deg. on the 28th September, and the next 76 deg. on the 9th of June. The warmest month of the year was July, which had a mean of 59.7 deg., which is slightly above the average for that month. The next warmest was August, with a mean of 56.4 deg., two degrees below average; but September was very little short of it at 55.3 deg., which was a fraction of a degree above average. Both May and June were cloudy and rainy months, with a notable deficiency of sunshine and consequent heat, especially June, with a temperature no less than 4 degrees below the mean, viz., 53.7 deg., as compared with an average of 57.7 deg. coldest months were February, April, and November, which were slightly below average, but not much. The mean temperature of the year was 47.4 deg., which is only slightly below the average of the last 21 years. During these years it has ranged from 46 deg in 1892 to 49.5 deg. in 1898; the mean of all these years being 47.6 deg. There was a good deal of frost in the winter months, and especially in February, which was the coldest month of the year. January had only 9 nights on which the thermometer fell below the freezing point, with an aggregate of 42 deg . of frost. But February had 17 with an aggregate of 116 deg. November had 8 nights with an aggregate of 33.7 deg., and December had also 8 nights with an aggregate of only 23 deg. There was thus a total of 42 nights, with an aggregate of 214 deg., besides a very few in the spring months of March and April. This shows on the whole a moderate winter with the single exception of February, which, as previously stated, was 2 degrees below the average. Hence we find that the mean temperature of the year, 47.4 deg., was very little short of the mean, only two-tenths of a degree, although we may have been ready to suppose from the prevalence of cloudy skies and redundant rainfall that the temperature would have been considerably below the usual figure. But it is to be remembered that the winds from the Atlantic which brings abundant rain are also characterised by mildness of temperature, and that is the explanation of the annual temperature not being lower than it is. While I am on this part of the subject, I may mention that since the beginning of August I have been taking observations of the minimum temperature on the grass, and with the following results:

			Mean of month.	Mean in screen.	Lowest in month.		
August				44°	 46.6°	•••	31°
September				$39\cdot4^{\circ}$	 56·3°		26°
October				37·2°	 48.7°		26°
November				31°	 42°		17°
December				31·1°	 39.5°		20°

I now proceed to give some account of the rainfall, the abundance of which was the special characteristic of the year. The amount of precipitation during the year, including rain, snow, sleet, and hail, was 43.11 inches, which fell on 218 days -rain on 210 days and snow or sleet on 8. As the average rainfall at Dumfries is about 37 inches, this is fully six inches more than the mean, and is expressive of a wet year. It is not, however, the rainiest during my period of observation. This distinction, if I may call it so, belongs to 1903, when the amount recorded was 50.45 inches; and there was one other year which had an amount in excess of 1907, viz., 1900, which had 47 inches, and 1891 and 1897 were only a fraction of an inch short of the last year's record. But all the rest were under that record, ranging from 30 to 50 inches. The winter months had quite moderate amounts, and so also had the early spring months, March and April, but May was a very wet month, with 21 days on which it fell, and June had nearly three times its average, with 27 days on which it fell and a temperature fully 4 degs. below the mean. This could not but be very injurious to the growth and progress of vegetation, coming at a time when sunshine and genial weather are so important to the productions of the farm and garden. July was a good month, both in respect of temperature and rainfall, but, unfortunately, it was followed by a wet August, before almost anything could be done in the harvest field; and September was also a good month, the driest of the year, with a rainfall of little more than half-an-inch, and only five days on which it fell. It had also more sunshine than any September for years past. But this advantage was largely

neutralised by the prevalence of haze and mist, and the absence of drying winds, so that little in-gathering could be done, and it was followed by the deluges of October, which proved to be the wettest month of the year, with a rainfall of 7.53 inches—more than double the average—and 25 days on which it fell. The result was that much of the grain was destroyed, especially in late places, and not a little so seriously damaged as to be of little value.

The facts regarding the dry and wet bulbs are as follows:—Mean dry bulb for the year, 47.2 degs.; mean wet bulb, 44.9 degs.; temperature of the dew-point, 41.7 degs.; relative humidity (saturation 100), 83. It will be observed that the mean temperature of the dry bulb for the year, ascertained from the observations taken at 9 a.m. and 9 p.m., differs by only two-tenths of a degree from the mean temperature of the year, ascertained in a different method—by the addition of the mean maximum and the mean minimum, the highest and lowest of the 24 hours, divided by 2. The one is 47.2 degs., and the other 47.4 degs.

With regard to thunderstorms, I find that I have noted 10 days on which thunder and lightning, or, in one or two cases, thunder only, were observed. One in February, three in April, one in May, three in June, one in July, and one in September—that is 10 days in all, which is rather in excess of the usual number. Of course, there may have been others which I have failed to notice or record, and I have noted eleven instances on which hail showers occurred, mostly in the same months. There was a very brilliant display of aurora borealis on the 9th of February, and it may be worth while to observe that this was followed on the next day by hail showers, and on the day following that by a pretty severe thunderstorm during the night. Whether there was any connection between these phenomena I am not prepared to say.

As to the wind directions, the south-west, as usual, showed the greatest number of days, viz., 78; the next was north-west, with 61; the west, with 54; the south-east, with 50; the northeast, with 46; the east, with 28; the north, with 22; the south, with 17; besides a few more on which it was calm or variable.

Report of Meteorological Observations taken at Dumfries during the year 1907.

		Relative Hu Sat. = 1		90	87	83	91	82.	74	77	83	₹8	68	56 56	87	88
ntes.	Temperature of Dew Point.		Deg.	36.	34.6	37.1	38.5	40-	45.	2.09	-09	50-2	45.3	39.	35.	41.7
vel, 60 feet; Distance from the sea, 9 miles; Height of Rim above Ground, 10 inches; ER. RAINFALL. METER, of grass. In Shade.	Mean Wet Bulb.	Deg.	37.6	37.1	39.8	41.8	9.95	49.5	7. F2	2.79	9.79	47.	41.7	38.6	6.55	
n the s round,	HYGRO- METER, In Shade.	Mean Dry Bulb.	Deg.	38.8	38.7	45.	45.	49.8	53.5	58.3	9.99	55.1	9.84	42.7	40.2	47-2
e froi	LL.	Days on Which it fell.		16	13	10	16	21	27	13	233	S.	25	17	23	218
istanc in abo	RAINFALL.	Amount for Minorit.	ln.	1.79	5.80	3.38	2.35	4.48	6.11	1.83	f0.f	0.61	7.53	3.05	2.02	43.11
et; D	RA]	Heaviest in 24 Hours,	In.	95.0	1.13	06.0	04.0	64.0	1 02	0.30	88.0	85.0	0.88	92.0	1.01	1.13
60 feet eight c		Mean temper. of Month,	Deg.	8.88	36 5	43.6	45.	50.	53.7	2.69	£.99	55.3	48.7	43.	39.2	F. 2.F
level,	STER ve gra	Mesn Minimum	Deg.	9.78	30.	35.6	36.7	43.	46.4	52.1	9.84	45.8	42.8	36.3	35.	.05
S. R. THERMOMETER. In Shade, 4 feet above grass. RAINFALL. In Shade, 4 feet above grass. In Shade, 4 feet above grass.	Mean Maximum.	Deg.	42.6	43.1	2.19	53.3	57.	61.	67.3	64.1	8.49	54.4	f-2F	44.1	54.5	
	Монtыу Вапge.	Deg.	2.87	37.5	39.5	36.	32.	37.	41.8	33 5	47.	33.	32.5	.97	8.99	
	Lowest in	Deg.	8.12	18.	25.5	.88	35.	30.	+3:	35.8	29.5	31.	23.5	25.	18:	
	Highest in Month.	Deg.	50.	55.5	. ç9	.#9	.49	.92	84.8	.69	2.82	.49	.99	51.	8.4.8	
.: Long., 3° 36' W. 70 feet; Diameter METER.	Month at 32° and Sea Level.	E.	30.530	29-930	30.036	29.753	59.854	29.561	30.011	29.821	30.092	29.578	29.883.	29.648	29.802	
	Monthly Range.	Į.	2.133	1.900	1.500	1.174	1.554	0.200	0.920	0.230	1.116	1.075	1.550	1.749	804.5	
	Lowest in Month.	In.	28.82	28.637	28.045	29.137	28.803	29.431	29.600	29.207	20.417	28.990	28.950	28.581	28.281	
Lat., 55° 4' N Rain Guage, BARC	Highest in Month.	li.	30.989	30.537	30.445	30.311	30.327	30-131	30.220	30.237	30.533	30.065	30.200	30.330	30.989	
	1907.	Months.		Jan.	Feb.	Mar.	April	May	June	July	Ang.	Sept.	Oct.	Nov.	Dec.	Year
N. 221 2	N.E. 46½		5. E.		VII S. 17		S. V	V. 8		W. 54		N:	W. 31		Va 7	r. 1 2

I give below a note of the rainfall at several stations in this neighbourhood, in addition to that of Dumfries:—

						Amount for year.	No. of days on which it fell.
Dumfries					,	43.11 in.	218
Lochmaben						47·78 in.	228
Cargen					•••	49·29 in.	164
Drumlanrig						48.14 in.	232
St. Mary's Is	le, K	irkeud	bright			50·49 in.	
Glenlair, firs	t 10	month	s only	y; Ca	stle-		
Douglas	(10 m	iles off), 2 m	onths		55.93 in.	

The following is only for a part of the year:—Arbigland, from 22nd July to 31st Dec. ... 24.68 in.

Rainfall at Glengower, Castle-Douglas, recorded by Rev. W. Aitchison, M.A.—First 10 months at Glenlair, Dalbeattie, 10 miles from Castle-Douglas, last two months at Castle-Douglas:—January, 2.72; February, 3.89; March, 5.03; April, 3.45; May, 4.96; June, 6.45; July, 3.04; August, 5.61; September, 1.08; October, 9.12; November, 4.86; December, 5.72. Total, 55.93.

Rainfall Record at the Waterworks, Lochrutton, Kirkcudbrightshire, contributed by Mr Nigel B. Wilson, Engineer. Height above sea level, 272.68 feet; diameter of guage, 5 in.; height of rim above ground, I foot.—January 18th to 31st, 1907, .87; February, 3.47; March, 4.45; April, 2.94; May, 4.92; June, 6.71; July, 2.23; August, 5.29; September, 1.09; October, 8.48; November, 4.09; December, 5.96. Total for year to date, 49.63. Heaviest rainfall, March 16th, 1.19.

17th January, 1908.

Weather Notes at Jardington in 1907. By Mr J. Rutherford.

January.—Rainfall, 2.45 inches. Rain fell less or more on 21 days. Barometer—The lowest reading was on the 1st, 28.9 in., the highest on the 22d, when the very remarkable height of 31.02 in. was reached. The new year was ushered in with a nice mild winter day. The general weather during the month

was very mild; there was no very hard frost. About an inch of snow covered the ground during the last five days. The water ousel was sitting on a stone singing cheerily on the 16th.

February.—Rainfall, 3.1 inches. Rain fell on 15 days. Barometer—The lowest reading was 29.25 inches; the highest 30.6 in. Snow covered the ground for the first eight days—about 3 inches deep. This went away with a gentle thaw on the 8th and 9th. On one or two occasions a little more snow fell, but to amounts of no consequence. There was very hard frost during the first week, the exposed thermometer registering 20 degrees on the night of the 4th. The weather during the remainder of the month was comparatively mild for February. I heard the mavis first on the 16th. The last 5 days were like April; the birds were singing merrily all round about. On the evening of the 9th there was a remarkably brilliant and beautiful aurora.

March.—Rainfall, 3.65 inches. Rain fell on 21 days. Barometer—The highest reading was 30.5, the lowest 29.30. Tussilago came into bloom on the 29th, and anemone on the 30th. In the middle of the month there was a fortnight of stormy, wet weather, which hindered ploughing and other outdoor work. The last week was fine and dry. There was no east wind.

April.—Rainfall, 2.42 inches. Barometer—The highest reading was 30.4 in., and the lowest 29.25 in. There was a little frost on several nights, but not much. The first ten days were nice and genial, and the grass was looking quite fresh and green. A cold east wind came on the 10th, and just about withered it all up again. From the 20th to the end there was fairly good seasonable weather. Sowing corn began on the 1st; primroses came into bloom on the 12th, flowering currant 13th, blackthorn (sloe) 23d, and jargonelle pear 14th. Sandmartins were first seen on the 25th. The first swallow I saw was sitting singing on the house-rigging at 5 p.m. on the 26th. White butterfly first seen on the 26th, which was a fortnight later than 1906. The sloe was ten days later, and the swallow thirteen days.

May.—Rainfall, 3.57 inches. Rain fell on 17 days. Barometer—Highest, 30.4; lowest, 29.2. There was cold, stormy wet weather during the first fortnight, which kept farm work back. There was no frost during the month. A thunderstorm

was experienced on the 12th. Blenheim orange apple came into bloom on the 2nd. I first heard the cuckoo myself on the 5th, but it was reported to have been heard before that time. Our own swallows took possession of their old homes in the byre on the 5th. The wasp was first seen on the 14th, and spotted flycatcher on 15th. Chestnut bloomed on the 22d. I heard the corncrake on the 29th. Hawthorn blossom was first seen on the 31st. The chestnut blossomed eight days earlier than 1906.

June.—Rainfall, 6 inches. It rained less or more every day. This is the heaviest rainfall for June recorded here during the last fourteen years, 2.26 in. being the average. Barometer— Highest, 30.2; lowest, 29.6. I began the month with a new 5-inch rain gauge, placed about one yard from the old one, which was a 3-inch one with a float. The new one registered 5.91 inches, and the old 6.12 inches. The difficulty is now to know which to believe, so I put it between the two, and said 6 inches. I also got a new thermo. screen, $4\frac{1}{2}$ feet from the ground, with new maximum and minimum thermometers. The highest temperature recorded was 71 degrees on the 13th, and the lowest during the night of the 25th, viz., 37 degrees. The ox-eye daisy was first seen in bloom on the 6th, and wild rose on the 30th. There was a thunderstorm on the 12th and 30th. Turnipsowing was kept back with the wet weather, and there was a lot to put in after the 15th. This month was abnormally cold and wet.

July.—Rainfall, 2.22 inches. Rain fell on 15 days. Barometer—Highest, 30.6; lowest, 29.6. Highest temperature (shaded thermo.), 86 degrees on the 17th (the warmest day of the year); lowest, 40 degrees, on the 2nd and 11th. Corn began to rag on the 13th, and cutting ryegrass hay on the 11th. The first cleg was seen on the 16th; meadow brown butterfly on the 26th. The first ripe strawberries were pulled on the 11th. Bluebell was in bloom on the 22nd; knapweed, 29th. Commenced cutting meadow on the 26th (a heavy crop). The weather during the later half of the month was very good for haymaking, and most of the ryegrass in this neighbourhood was secured in nice condition. July flowers were nearly three weeks later in coming into bloom than in 1906. The meadow brown butterfly was three weeks later in being seen.

August.-Rainfall, 4.59 inches. Rain fell on 27 days (that

was the number of days on which 1-100th of an inch and over fell). The maximum temperature was 67 degrees on two days; minimum, 32 degrees on the 30th. Barometer—Highest, 30.3 inches; lowest, 29.65 inches. Grass was very abundant. Apples and pears were a light crop, and small in size. Wasps were very scarce, owing to the cold and wet summer. Almost no meadow hay was secured during the month, and almost none in good condition. Hay-making is quite a pleasure in fine weather, but with such persistent showers and sunless weather as prevailed in this month, it became trying and annoying, and occasioned a great deal of extra labour.

September.—Rainfall, 0.65 inches—fell on 7 days. Barometer—Highest, 30.5 degrees; lowest, 26 degrees. Highest temperature, 76 degrees on the 11th and 12th; the lowest on the night of the 4th. The thermometer in the screen registered 27 degrees; the exposed thermometer 24 degrees. Potatoes were frozen black, and all other plants of that class were frozen. On the 5th and 6th, after the frost, the swallows gathered into flocks, and numbers came into the out-houses at night. On the afternoon of the 13th I saw a very large flock. All the telegraph wires on the Glasgow roadside above Newbridge were covered with them for a considerable distance. No doubt they would take their flight that evening to a summer clime. I did not see one at Jardington from that date till the 23rd. After that, we had them again until the 1st of October. Began to cut corn on the 9th, which was 58 days from the date of ragging, the average being about 59. Corn that was cut in the beginning of the month was secured in fairly good condition. This was the driest month of the year. There was a lot of sunshine, but no good drving winds. There was a lot of mist and fog, and corn dried very slowly.

October.—Rainfall, 7.13 inches—fell on 29 days. The average fall for this month for the last 14 years was 3.76 inches. This was the wettest month of the year. Temperature—Highest, 64 degrees; lowest, 30 degrees; lowest on the grass, 26 degrees. The last swallow was seen on the 1st. This was a cold, wet month. Almost no corn was got in, and it was much spoiled by standing in the stook so long, being quite black, and in some cases growing green (sprouting). When the weather would allow, farmers lifted potatoes, which (in late varieties) were small, owing

to their growth having been stopped by the frost on the 4th of September. I see a shortage of 30 per cent. is calculated.

November.—Rainfall, 3.24 inches—fell on 21 days. Barometer—Highest, 30.5 in. on the 30th; lowest, 29.2 in. on the 27th. Temperature—Highest, 58 degrees on the 7th; lowest, 21 degrees on the 19th; lowest on the grass, 16 degrees on the 19th. The first eight days were more favourable for harvest work, and the most of the corn was got in about that time. Sunday, the 3rd, was a capital day, and a great deal of corn was carted. A great proportion of corn and straw will be of very poor quality.

December.—Rainfall, 5.10 inches—fell on 23 days. Temperature—Highest reading 53 degrees on the 20th; lowest, 23 degrees on the 1st; lowest on the grass, 180 degrees on 1st. Barometer—Highest reading on the 1st, viz., 30.3 inches; lowest on the evening of the 13th, 28.6 inches, with a south wind. Although the glass fell so low, there was little storm here during the night. We seem to have been in the centre of a cyclone. The morning papers informed us of the very severe and disastrous storm which had been all round the British Isles during the night. Several shipwrecks round the coast, heavy floods in the south of England, and a lot of damage by the wind in France. The weather during the month was very mild for December. There was no severe frost, and no snow. A cold east wind continued during the last week.

Considering the weather as a whole during the year, it has been quite abnormal, cold and wet prevailing, and a great want of sunshine.

Total rainfall for the year 1907, 44.24 inches, being 5.86 inches above the average of the last 14 years.

7th February, 1908.

Chairman—Rev. H. A. WHITELAW.

The Corresponding Members whose names appear in the list of members of the Society were nominated by the Council in terms of the rules and elected. A GALLOWAY STONE-AGE VILLAGE. By Mr LUDOVIC M'LELLAN MANN, F.S.A.Scot., Glasgow.

The following notes are portions of a paper read to the Society of Antiquarians of Scotland:—

Perhaps one of the most startling and valuable discoveries ever made in Scotland with regard to the early inhabitants was the disclosure recently of a row of little dwelling-places, partly underground, in Stoneykirk Parish, Wigtownshire. Their chronological position seems to reach back beyond the Bronze Period, say before 1000 B.C.

The attention of Mr Beckett was attracted by a row of depressions on the surface of a wooded area, and I was quickly informed of the discovery, and undertook an examination of the place. If there had been one depression only, probably no notice would have been taken of the place. The depressions, however, are five in number. Some of them were dug into, and discovered to be the tops of silted pits containing relics of an early period and substructures of wood. Before excavation they were shallow, basin-shaped, slightly oval in outline, but not very clearly defined and scarcely noticeable. The greatest depth at the centre of any one was about 1 foot, and the greatest area about 10 feet by 8 feet.

The sites are situated on the edge of a plateau. The ground has apparently never been cultivated, and is covered by wild vegetation, consisting of a few small trees of different kinds and a growth of fern. The row of depressions almost coincides with the 50-feet contour line. The area enclosed by the contour line does not at any point rise more than 2 or 3 feet above the 50-feet elevation. The sea at its nearest point is just 1000 yards distant south-east from the sites, and the intervening stretch of country is flat and low-lying. While portions of the surrounding country were once marshy, the ancient settlement being on the higher portion of the plantation could not have been surrounded by water or swamp, nor could it have been on the edge of a water-covered area.

The substructures revealed by the excavations at Sites Nos. 3 and 5 were oval in plan. The ovals had obtusely rounded ends, somewhat like rectangles with rounded corners.

The compass showed that in Site No. 1 the longer axis of

the plan of the substructure bore 30 degrees west of north; in Site No. 3, 65 degrees west of north (or west-north-west); and in Site No. 5, 49 degrees west of north. The same trend—that is, north-west by south-east—seems to exist in the other and yet unexamined sites. For example, in No. 4 the longer axis appears to lie about 18 degrees west of north.

THE EXCAVATION OF SITE NO. 3.

Dealing first with the excavation of Site No. 3, which proved to be the most important station, evidence was soon obtained that the depression on the surface was the top of a silted-up pit. The digging work consisted at the first stages in the extraction of the filled-in material, which was of dark vegetable matter mixed with a little sand.

The walls of the pit were not well defined, but in penetrating into them the soil was found to be more dense and almost entirely composed of sand. The cutting revealed in the undisturbed soil round the pit a layer of superficial soil and leafmould which varied in thickness from about 1 to 2 feet; below this was about 11 feet of somewhat blackish, sandy, compact soil. Beneath this there was about 5 feet of hard sand, sometimes grevish and sometimes reddish-brown, which rested upon a deposit of about 6 inches of a wet mixture of blue clay and grey sand. The lowest bed was of wet tough blue clay of unascertained thickness. The reddish sand occurred in rather irregular patches, and its colour varied from a reddish-brown to a darkbrown. The deposit of superficial soil was found in various places which were tested throughout the plantation. It rests upon what seems to have been the surface of the ground at the time the sites were in use.

The material accumulated upon this pre-historic surface is not entirely of vegetable character, as it contains a very small quantity of sand. Probably a slight sprinkling of sand would be brought during gales from the sandy shore to the south, which would be caught by, and retained in, the coating of vegetation. A peculiarity in the stratification at the east side of the pit will be dealt with when discussing supposed entrance passages.

In the pit at a depth of 7 feet were encountered the tops of spongy, much-decayed logs of round timber more or less vertically placed. Down to this depth in the digging the soil taken

out was fairly dry and was largely vegetable mould. Water and sludge, however, began to ooze in at this depth, chiefly from the layer of mixed clay and sand. Well down in the silted material were got many chippings, cores, and implements of flint, and of other stones. Traces of a bed of charcoal containing fragments of pottery were also observed. After carefully working out the wet soil, which was still largely vegetable mould and was somewhat loosely deposited in the spaces between the logs—an arduous operation—the wooden substrucure revealed itself more clearly. It was a longish oval in plan, and measured about 7 feet by $4\frac{1}{2}$ feet. Traces of what was conjectured to be wattlework occurred round the edges of the oval. Taking into account this marginal wood-work, the dimensions were about 9 feet by 7 feet.

At the north-west end of the substructure piles were placed in two somewhat irregular concentric rings which were in contact with each other. The piles of the inner ring slanted inwards and downwards, forming a hollow inverted cone. At the opposite end the piles occupied a somewhat circular space, but were upright. Connecting these two sets of circularly disposed piles were somewhat irregular parallel rows of logs. These pieces of timber, except at the periphery of the structure where they were perpendicularly set, had a bias inwards and downwards and in several cases towards the north-west end. The number of piles used was 72. Traces of what was thought to have been an entrance passage on the east side were observed.

THE EXCAVATION OF SITE NO. 5.

The excavation of Site No. 5 revealed features practically identical with those of Site No. 3, and strata of the subsoils were similar, but the traces of supposed flooring and wattle-work were indistinct. Several implements of stone and pieces of wood charcoal were recovered, but no vestiges of pottery were seen. At a depth of 7 feet moisture began to accumulate, and there was revealed a longish oval wooden substructure about $7\frac{3}{4}$ feet by $4\frac{1}{2}$ feet. The piles comprising the structure were in all respects similar to those found at Site No. 3, but were less tightly set together. At the north-west end they were disposed in a roughly circular manner in two concentric rings, the outer ring consisting of 15 and the inner ring of 12 stakes. The piles of

the outer ring were almost all vertical, and were as a rule thicker than those of the inner ring. The members of the inner ring slanted inwards and downwards, forming an inverted hollow cone, the top inside diameter of which was 2 feet. The apex of the cone—that is, the point towards which the stakes of the ring converged—lay slightly to the south of the true centre of the circle.

One of the heaviest piles from this portion of the structure was 8 inches in thickness and 2 feet in length. Some of them, however, were 3 feet in length, but were of less diameter than 8 inches.

The other, or south-east, portion of the wood-work and the middle portion formed a structure somewhat platform-like in character, and about 4 feet in length by 4 feet in breadth. The angles at which the piles lay were noteworthy.

Close to the rings already described, and all round the edge of the structure, the piles were perpendicularly placed. Beyond the rings to the south-east, with these exceptions, the piles lay at various angles, their tops being towards the south-east end, and their feet or tips in the opposite direction.

This position was accentuated the further the piles were situated from the rings. Some pieces of the woodwork at the platform-like end of Site No. 3 may have been gradually pressed in the course of time from the original positions by the superincumbent material.

Several small twigs were found lying across the ring portion of the structure. These may have been remains of a collapsed roof or floor, or of wattle-work fallen from the walls of the pit.

The platform portion consisted of 28 piles. Adding to these the 27 comprising the rings, the total number of piles employed in this site was 55. Measuring from a point which was reckoned to be the present normal surface of the plantation, that is, from a point 1 foot higher than the centre of the surface of the depressed area, to the lowest point of the substructure was 9 feet 4 inches.

THE EXCAVATION OF SITE NO. 1.

This site differed materially only in one respect from its neighbours which have been described. The wooden substructure consisted of only 23 piles (fig. 4), and appeared to have been left half finished. The pit had been anciently excavated

in the same style as the others, and was a longish, rather squareended oval. The soil at the bottom of the half which contained no substructure was darker than the surrounding soil, and had evidently been disturbed at some time.

The piles were not so securely placed in the soil as at Site No. 3. They occupied the north-west end of the oval, and were bluntly cut at the lower ends. At the west side of the structure they were less substantial than those at the east or opposite side, and were placed at various angles, while those at the east side were perpendicular. This site was drier than its neighbours, and the relics were scarce. The subsoils were much of the same character as those disclosed at the other sites.

Section II.—Details of the Results of the Exploration, AND SUMMARIES.

Various kinds of timber were used, no doubt in an unseasoned condition, as the wood was probably placed in the structure not long after it had been cut. The fresh green appearance of the bark points to this conclusion. Moreover, old dried timber would not have given such a fine smooth uncracked surface as may be observed on the cut parts. The bark remained on the stems in many cases, and in the case of the birch wood it gave the timber a fresh and beautiful appearance.

The diameter of the piles was usually about 3 inches, but the diameters varied from 1 or 2 inches to 8 inches. Those of average diameter showed about 15 annual rings. The stems were usually straight and well grown. The wood had retained its shape, but was soft and spongy, and under pressure of the fingers gave way at once, exuding moisture.

It was not possible, owing to the decayed state of the timber, to ascertain at what time of the year the wood had been felled; in other words, whether it was Autumn or Spring felled—a piece of information which would have thrown light upon the question as to whether the structures were built at the beginning of the summer or of the winter season. Many of the logs in ancient pile-structures have a bias or lean, caused by long-continued pressure of the surrounding matter from above or from the side. Most of the Stoneykirk piles which were not perpendicular seemed, however, to have been originally set in a slanting position.

One of the most remarkable facts disclosed was that, in all the cases where the direction of the growth of the tree or branch was recognised, and this was detected in nearly every instance, the piles had been placed upside down, or contrary to the direction in which the timber had grown. In other words, the top end of the branch had been pointed and dressed, and had been placed downwards in the clay. Now it is well understood that stakes inserted in the ground against the line of growth or "cap down," to use the technical term, last longer than those placed in the direction in which the timber has grown.

A knowledge of the obvious fact that the thinner end of a stake was more easily pointed than the thicker end, would not in this case be acted upon, for the simple reason that the logs were short and so finely grown that one end was not appreciably of less diameter than the other. Moreover, the craftsman had presumably to dress both ends of the logs, though the nature of the dressing at the upper ends is unknown, as the wood at the higher level has vanished by decay.

Again, the twigs and branches of the supposed wattle-work (described later), which required little, if any, sharpening, were also as a rule inserted upside down. It seems a fair inference that the inhabitants of Galloway at this early period had recognised a fact known to most present-day foresters and farmers—that stakes last longer when inserted in the ground upside down.

The piles seem to have been forced into the clay for only a short distance, but a great deal of the subsoil immediately above the clay must have been either dug out or loosened before they were inserted, as disturbed soil was found only a few inches above their lower ends. No pile point was recognised as having had the surface scratched. Striæ would, of course, have been good evidence that the logs had been driven. The rarity of small pebbles and grit in the grey sand and clay may account for the absence of striation. Though the piles pierced the clay only a few inches, yet the substructure in each of the three explored stations was secure and immovable. This may be accounted for by the fact that each log was in contact with its immediate neighbour, and many were tightly jammed together. There was no packing of the piles by stones. The spaces between the rows had not been filled up, as the matter found there was quite loose, silted-in material largely of a vegetable character —black mud and wet vegetable mould with an abundance of short lengths of small twigs. The outer surfaces of the logsround the periphery of the structure were in contact with the stiff blue clay and the mixture of sand and clay, which gave a steady support. These outside piles were nearly always perpendicular, except in the case of the west side of Site No. 1. The inner piles, on the other hand, were as a rule lying at an angle. At some places the structures were strengthened by running from the edge inwards rows of closely jammed piles, as at the southeast corner of Site No. 3. The result of this mode of construction would be a basis for a dry, solid, secure, but somewhat hollow flooring.

All the wood was round timber, no piece having been split, squared, or mortised—the sites thus differing from most other places from which anciently cut timber has been recorded. It was not observed that any charring of the wood had taken place before or after the preparation of the logs. The expedient of carbonising the outside of logs to assist the work of dressing them was presumably not practised, the cutting tool alone having been relied upon.

The logs which were allowed to be exposed to the air warped and cracked in the course of a few hours. Ten of them from Sites 1 and 3 were placed in water immediately after they had been dug out, and will be kept in a solution of alum and water until sufficiently "filled" to be able to retain their original shape in a dry environment.

By the favour of Professor Bayley Balfour, Mr H. F. Tagg, Museum Assistant in the Royal Botanic Gardens, Edinburgh, has kindly examined some of the logs, and reports that—

"Portions of seventeen separate logs have been examined, and of these seven prove to be birch, five are alder, and three are hazel. One of the pieces of wood submitted is either poplar or willow, I am not able to say which, and one small piece is oak. One is led to conclude that birch and alder were the timbers chiefly used in the formation of the pile-structure.

"Fungi and other putrefactive organisms have caused the partial dissolution of the wood elements, and this disintegration unfortunately renders it impossible to make deductions as to the time of year in which the timbers were felled."

The smoothness of the cut surfaces of the piles shows that

the axe had a finely polished surface and a clean unbroken cutting edge. The impression on each facet of the cut areasbeing always similar in character, testifies that only one type of cutting tool has been used. The tool was probably fixed in a handle, as otherwise it could not have been wielded with sufficient force and swing to penetrate, as it has done, into the body of the wood. The facets are each of small area, and are all shallow concavities resembling the inner side of a flattish spoon. They are more numerous than would occur on surfaces of timber operated upon in modern times.

Three styles of cutting occur. There is the long acutely-pointed pile-end, cut away on all sides; and the obtusely ridged, the tool having been worked from two opposite sides until the portion of the log to be severed could be broken off at the ridge. The pile-end in this style has the outline of the roof of a house. The third kind of labouring was a cutting nearly straight across-the log. The cut surfaces in all three styles show a large number of small ridges and facets, but this feature is specially prominent in the third class.

It is apparent that this ancient carpentry work has been carried out by means of a tool which had not been able to traveI far at one stroke. When the tool was plied inwards and across the log, the length traversed at each blow was extremely small. Where knots have been encountered, there has been no slicing through the hard core, the tool having had to be worked round the knot. After this process the harder timber was wedged off, with the result that a good extent of the lower wood was splintered. There is occasionally a blunt "break off" at the place where the stroke has terminated, the tool when it ceased to penetrate having been used as a wedge, and pulled outwards or somanipulated that it left a splintered surface adjoining the cleanly cut area.

It would thus appear that there has been used an implement comparatively blunt, which possessed not one but two outwardly curving faces, the line of intersection of which formed a slightly curved edge. Now it is precisely this class of tool which is met with in the common polished stone axe.

It must not be overlooked, however, that the thick, socketed axe-head of bronze might leave somewhat similar markings. The bronze tool of this type would undoubtedly travel farther

than the thicker stone axe, if for no other reason than that the metal tool, having a socketed handle, would be assisted (certainly in no way impeded) by such attachment, while the stone axe might be hindered from any long sweeping action by the necessarily bulging hafting with which the middle of the axehead must have been covered.

Plaster casts of the 10 pile-ends before referred to have been made. A cast has also been taken of a bar of soap which has been sharpened at one end by a locally found stone axehead simply held in the hand.

The curved hollow adze (which occurs in iron) would give a much longer stroke than even the bulging bronze instrument, and would not leave such decidedly spoon-shaped impressions upon the wood as have been referred to. The bulging bronze axe has not, to my knowledge, been found in the neighbourhood, whereas many specimens of the type of stone axe described have been found there during the last twenty years.

As the same type of markings would have been left on the timber whether the axe were wielded radially or otherwise—that is, as an adze or as a hatchet—we have no clue as to the position of the handle relative to that of the blade.

An inspection of the axe-work on the set of pile-ends which have been preserved, from Sites 1 and 3, shows that the axe has always been made to strike along the line of the length of the log. The breadth of the facets at the widest, it is further seen, does not exceed 2 inches.

It may be mentioned that the stone axe-head used to cut the bar of soap imprints facets not more than 2 inches wide. In this axe-head the lengths across and round the cutting edge are respectively $2\frac{1}{2}$ and $2\frac{3}{4}$ inches.

These pile-ends embrace squarely cut ends and specimens of both the acutely pointed and the obtuse or roof-shaped end. The ridge in the last-mentioned type is seldom centrally placed.

In the case of a log of the roof-shaped type, $4\frac{1}{2}$ inches in diameter, but the ridge of which is centrally placed, there are traces of 15 facets in the cut surface. The ridge does not run horizontally, and measures $7\frac{1}{2}$ inches in length. In another pile-end, $3\frac{1}{2}$ inches thick, there are marks of 5 cuts in a length of $3\frac{3}{4}$ inches; and in another specimen, $4\frac{1}{2}$ inches in diameter, on an oval area, $4\frac{1}{2}$ inches by $3\frac{3}{4}$ inches, 8 facets may be seen.

Seven facets can be detected in a length of 4 inches on the cut surface of another pile 3 inches thick.

Some typical and instructive specimens of acutely pointed pile-ends have been secured. On one log, 3 facets, which touch each other like links in a chain, show that the blade has travelled against the wood during three successive blows at least 4, $2\frac{3}{4}$, and 4 inches at the first, second, and third strokes respectively. The length of each excision is comparatively great, but the cutting is shallow, the blade having been driven along just under the bark. On one of the acutely pointed logs there is an area 7 inches by 2 inches showing 10 cuts. The cut areas on some of these acutely pointed logs exhibit very clearly a succession of concavities and ridges resembling a "choppy," agitated sheet of water-a feature which characterises the carpentry work found on the sites. The sharpening extends in the cases of 2 piles a distance of 14 inches from the point, but the distance varies some inches on different sides of the same log. Indeed, the irregularity of the work and the lop-sidedness of the pointed ends are noteworthy.

It seems undeniable that the balance of the probabilities lies in favour of a smoothly ground and hafted stone axe with a convex edge having been used.

From the study of these and other specimens of pre-historic axe-work which have survived, it becomes clear that not only can the nature of the material of the instrument employed be discerned, but the kind of stone axe and the size of the tool may be determined with some exactness.

SECTION III.—INFERENCES AND CONCLUSIONS.

By considering all the purposes for which it might appear possible that these places have been constructed, the probabilities of the case may be arrived at. There is no trace of any interments having taken place in them; and it is not a feature of early graves that they are marked by a hollow on the surface. There is no evidence that these places have been graves. It is improbable that they have been refuse pits. They were apparently not holes such as were excavated during early times for the extraction of clay for pottery-making, or such as were mined in the chalk districts of England and France to obtain flint nodules and chalk. The under-structures of timber appear

to put all these suggestions out of court. Flint nodules, moreover, do not occur in this particular formation, but are to be found not far distant, and in various other parts of Western Wigtownshire, but only in the stratified gravels, at points from 30 to 200 feet above sea-level.

If the sites have been wells, why should there be more than one, and why hearths? If they have been pitfalls to entrap wild animals, or shelters for huntsmen, or if they have merely been stores or crematories, how account for the presence of workshop utensils?

More probably they have served as workshops of some kind, and certainly for some grinding and polishing operations and the manufacture of flint implements. They may have been cooking places also.

While probably stores, workshops, and cooking places, these curious sites, bearing traces of human activity and distinct domestic associations, may, nevertheless, have been dwellings, or cellars beneath dwellings.

The theory, then, of dwellings is by far the most plausible. From the dimensions of the places it may be that they were more in the nature of shelters or sleeping places than dwellings in the modern sense.

FLOORING.

At each end of Site No. 3 traces of what was supposed to be flooring were noticed. It was at these points only that the fragments of pottery were obtained. No doubt any pottery on other and central portions of the floor would be carried down to the lower and very much wetter layer on the collapse of the floor, and the ware, being soft and non-glazed, would soon resolve itself into its original clay and pounded pebbles. At the south end a portion of a layer of charcoal about 2 inches thick was associated with the fragments of pottery.

Mr Richard M'Kay has kindly examined some pieces of the charcoal microscopically, and reports that it is of coniferous wood, probably pine.

The heavier stone utensils were found at all the sites lying far down between the piles. They had perhaps once rested on the floor, and as the floor decayed they had fallen through it into the lower zone. The layer of charcoal and the pottery bed on the end margin of No. 3 gave a valuable clue as to the height of the flooring relative to the pre-historic surface and to the level at which the tops of the piles appeared during the examination of the site.

Assuming, as may quite safely be done, a floor 6 inches thick and a layer of charcoal 2 inches in depth, the floor level must have been between 1½ feet and 2 feet above the tops of the piles—that is, the tops as discovered in the diggings.

This indicates that, owing to the comparative dryness of the layer immediately underneath the flooring, the timber in that zone had so decayed as to be unrecognisable among the silted and other vegetable matter.

In other words, the logs as extracted had 18 to 24 inches of their top portions decayed.

The perishing of the timber of the flooring, and the wood immediately beneath the flooring, would set in, no doubt, rapidly after desertion of the settlement, owing to the comparative dryness and openness of the soil in that part. But this did not take place in the still lower zones, where the wetness, the presence of clay, and the depth from the surface would all tend practically to seal hermetically the contents, thus ensuring the preservation of the shape and contour of all the pieces of timber.

SUPPOSED WATTLE-WORK AT SITE No. 3.

Round the walls of the pit at No. 3 Site, on the margin of the area in which the piles occurred, and imbedded in the sand and clay, were found twigs and small branches, some set vertically and others at angles. Some modern tree-roots were encountered, but were not confused with the ancient wood. In no instance were the twigs seen to be horizontally placed, but they occasionally crossed each other. The thickness of the twigs varied from ½ inch to 2 inches. Some of them were placed immediately outside the wooden substructure, while others were found $1\frac{1}{2}$ feet from it. They were detected in different conditions of decay according to the stratum at all the levels, except in the layer of vegetable matter at the modern surface. Considering first their condition in the deepest zone—the stratum in which the piles were encountered—the twigs were in the same state of preservation as the piles, spongy but unaltered in shape. In the zone immediately above, the same pieces of wood were

traced; but the timber was dark-brown, moist, and stringy. The greater amount of air and the less amount of moisture in this zone account for the difference in the condition. At a still higher level the same twigs were visible, but the remains were in a different state of decomposition. The decayed matter resembled soft, moist, brownish-black soot mixed with sand, and was in contrast with the surrounding lighter coloured sandy soil. It would not have been recognised as the remains of much decayed timber unless the lines of the branches had been traced continuously from the lower levels. The rotundity of the twigs and their forking at some places were also useful clues in the identification. In the still higher stratum, and in channels which were observed rising upwards in the same lines as the remains just mentioned, faint traces of slightly dark-coloured sand were detected, and this was considered to be the vestiges of the branches which had thus been traced from point to point through the various levels. It was the detection of well-preserved wood in the lowest zone which led to the recognition of the identical branches, though in different conditions, at the higher levels. It is remarkable that these branches had been placed upside down, a position in which the logs forming the under structure were also found. It is conjectured that the branches were remains of basket or wattle-work, which may have lined the walls of the pit. As mentioned, horizontal twigs were not seen, but these may have fallen down, leaving the vertical standards only as survivors.

As the surviving twigs were not very numerous, nor set very closely together, it is probable that the exploration revealed a portion only of the wattle-work—probably the branches which were farthest removed from the pit and in the least disturbed soil. The lining facing the inside of the pit would, no doubt, be more exposed, and would more readily decay and fall into the pit after abandonment of the place.

It was only by the careful use of a penknife that the continuity of individual stakes was traced from one level to another, and the presence of the supposed wattle-work in the upper levels established. It seems indeed probable that the walls of the pit were strengthened and protected by a lining of this description which reached from the floor level to the pre-historic surface, if not higher. At the south end, but at the higher levels only, were

observed interesting vestiges of what appeared to have been unusually large branches. One piece had many of the branches forking upwards from it for a distance of 2 or 3 feet. They had been placed vertically and in the direction of the growth of the tree a direction, it will be remembered, contrary to that of the other wood-work of the walls and of the logs of the under structure. As none of these larger branches were found at the level of the piles, the nature of the wood was not determinable. At the higher levels the interior of the branches had vanished, leaving a vacancy which was surrounded and protected by a rather hard crust of black matter.

At this end of the site the sand has been discoloured red and brown and hardened by the presence of ferruginous matter, and in the vacant interiors of the branches there was a slight sprinkling of light coloured sand not so discoloured. Probably the white sand in the interiors gained admission through cracks at a time when the interior had become much decayed or had vanished, but before the *eremacausis* of the bark or crust, or the hardening and discoloration of the outside sand, had taken full effect.

SUPPOSED ENTRANCE PASSAGES.

In testing the ground at various points in the immediate vicinity of the pits, it was found that the superficial black layer was of almost uniform thickness. Beneath it was sand somewhat dark in colour. At some places, though not in all, near the foot of the black layer was observed a very thin layer—a mere sprinkling—of whitish sand.

From a careful inspection of this sprinkling it was conjectured that the sand composing it had been carried by a gale from the shore region, where great quantities of white sand occur, and, as can be proved, did also occur during the later pre-historic periods.

The drifting sand had been deposited in varying degrees of thickness, like a slight fall of snow which has drifted over somewhat uneven ground, and in some spots it was absent.

A section of the soil at the east wall of the pit at Site No. 3 revealed the presence of the same sprinkling of white sand. It occurred under the black layer and was several inches thick, thinning out on each side. It was not so white nor so readily

recognisable as the sprinkling disclosed by the test diggings in the vicinity, yet no one present failed to detect it. While the black layer appeared horizontal at its top, its base dipped considerably in the middle of the east wall, reaching to within 1½ feet of the floor level. At the lower part of the east wall, and in a curvature coinciding with the dip of the black layer, lay the white sand to a maximum depth of over 12 inches.

Slicing away the soil of the east wall, the dip of the strata became less until it disappeared, and the presence of the white sand became gradually less noticeable.

No similar feature was observed at the other side of the pit. It is conjectured that the vestiges of some kind of entrance passage or doorway had thus made themselves evident. Similar but less pronounced traces were also seen at the east wall of Site No. 1.

No matter what type of hut may have been in vogue at these places, the function of the wooden substructure is an interesting problem.

The reasons for primitive man having lived in a sunken or earth-hidden dwelling are obvious. Whether the under-surface habitation was of stone or wood, or whether half or wholly subterranean, it was warmer and less exposed to adverse weather conditions than the ordinary surface hut, and—an important consideration—it was not readily liable to detection by an enemy.

The sunken flooring might, however, be a serious drawback and act merely as a hollow in which rain and ground water would accumulate. If the subsoil were gravelly, chalky, or of pure sand, the dwelling would be dry and comfortable. Should the subsoil be moisture-retaining, or overlie a bed of clay, the great discomfort of a damp floor would arise. Now the excavations revealed the presence of a bed of moist blue clay, and, what in these circumstances might be expected, a wet stratum immediately above it. A likely hypothesis then is that the moisture in and above the layer of clay rendered the earthen floor uninhabitable, and, as a means to prevent a wet floor, the pre-historic architect hit upon the ingenious expedient of a structure of wooden piling, more or less unright, under and supporting a horizontal flooring. The flooring would thus be insulated against direct contact with the moisture-laden strata, and thus render the dwelling comparatively dry and comfortable.

The position selected for these pit-dwellings, if such they were, seems to have been chosen because of its comparative dryness, the place being not lower than any of the surrounding stretches of country, yet we find the constructors had to face the difficulty of under-surface moisture. It has been seen how desirable a half or wholly hidden under-surface dwelling would be in primitive times, and that where the climate and the subsoil are wet, a damp floor would result in this class of house unless special measures were taken to overcome the difficulty. What these measures were is now perhaps elucidated.

A common feature of pre-historic exploratory work is the disclosure of pits. A review of some of these discoveries shows that none are quite similar to the sites at Stoneykirk.

POTTERY.

As already mentioned, vestiges of pottery were observed at Site No. 3 only. The fragments are in a poor condition, and are portions of hand-made, non-glazed vessels of darkish coarse paste. The paste has been mixed with pounded-up fragments of some whitish sandy stone. When extracted, the pieces were scarcely recognisable as pottery, being coated with soil; but after slow natural drying the crust of soil was picked off, and by the application of a soft brush the particles of charcoal, loam, and sand which filled the interstices were got rid of, disclosing the original skin of the ware. The ornamentation upon the skin is quite distinct. The fragments consist of more than one set, representing more than one vessel. One set was found at the north end, and the other at the south end.

NORTH END. So far as can be guessed from the appearance of the few fragments, the feature of the vessel (or vessels) from the north end was that the pottery had rounded, plain, raised ridges of varying breadth which ran, more or less parallel, horizontally round the exterior of the ware. The walls were $\frac{1}{3}$ inch in thickness, and where mouldings occur the thickness was about $\frac{1}{3}$ inch greater. The average breadth of the mouldings was about $\frac{1}{3}$ inch. The intervening space between the ridges varied from 1 to 2 inches, and had (lying approximately parallel to the mouldings) rows of little closely-set, indented, squarish punctuations, impressed as with a comb-shaped implement before the clay was fired, and resembling the surface-work on some modern

granolithic pavements. It is probable that the number of these rows in a panel varied from one to four, and some of the intervening panels may have been quite plain. In one panel where the rows are absent plain lines have been incised diagonally and across each other. The curvature of one piece indicates an inside diameter at the rim of about 8 inches. Another small fragment (fig. 8), ornamented with parallel lines crossing each other diagonally, has a ridge on the exterior apparently running vertically.

Neither the style of the rim nor the shape of the base can be determined from the recovered fragments.

South End. The pieces from this end show the presence of similar lines of small, closely-set, squarish indentations as if made by the teeth of a comb-like implement, but the system of decorating by raised ridges has not been adopted. The lines have been set more or less parallel to each other, and diagonally to the horizontal lip of the vessel. Fortunately in this group of fragments some portions of the rim were recovered. The rim was about 3/4 inch broad with an inwardly slanting bevel, and was ornamented by the same kind of rows of small indentations. The rows on the rim were arranged almost parallel to each other, at right angles to the edge, and equidistantly about four rows in the space of an inch. The thickness of the sides decreased from 1 inch at the rim to $\frac{1}{2}$ inch at a point about 2 inches down. This and other rim portions betray an affinity in shape and ornamentation to the type of rim to be seen in some of the vessels of the Scottish Stone Age. The interior surface of the pieces is unadorned. The curvature shows an inside diameter at the rim of about 8 inches. The shape of the lower portion of the vessels is not determinable.

Some of the fragments are too much wasted for useful description.

The sites yielded a profusion of stone implements. Seven implements of flint and two dozen implements of other stone, fragmentary or whole, were recovered, mostly from Site No. 3. Two hundred and thirty-seven nodules, cores, and chippings of flint were also found. The number of logs in the substructures examined was 15.

The most interesting flint implement got is a massive horseshoe shaped tortoise-backed scraper. There were got also some fine hammer stones, anvil stones, rubbing stones, pounders, and pestles.

CHRONOLOGY.

Estimates of the age of the settlement may be based on the shape of the hut, and on the character of the relics recovered.

The long or oval hut would scarcely have been in extensive use in the same region and at the same period as the round hut. In any case, in the Scottish area one type probably originated before the other. Was then the oval hut anterior to the round hut? It is natural to consider the oval hut the more primitive, as it was more easily constructed. The round hut, when it reached a diameter of 20 or more feet, seems to have had the roof centrally supported, as in the Glastonbury examples. There are good grounds for believing two theories often propounded—that the construction of the early grave-chambers was in imitation of the architecture of dwellings, and that the long barrow of Britain belonged to the Age of Stone, and the round barrow to the Age of Bronze. It may be taken, therefore, as probable that the long or oval type of dwelling is the earlier.

The presence of pottery is, of course, of great value in any effort to fix the chronological horizon of the sites. It is, unfortunately, impossible to tell whether the bases of the vessels were rounded or flat. However, the colouring of the fragments, and the ornamentation on the ware, and the shape of the rims, are characteristic of the Stone Age in Scotland.

While the pottery and utensils are all archaic, yet the absence of relics characteristic of Mediæval times or of the early Iron Age, such as objects of glass and vitreous paste or of any of the metals, does not allow us positively to assign the remains to a time earlier than these periods, though at present the evidence is strongly in favour of the sites having been anterior to the brochs, earth-houses, and the usual type of crannogs in Scotland. The character of the axe-marks points to the same conclusion. No vestiges of horn or lignite were noticed. Early wrought objects in horn are extremely rare in Wigtownshire, but not so relics of lignite, which have very frequently been found in Wigtownshire on sites of the Bronze Age, and of later times. While the type of oval hut in Stoneykirk has yielded no relics definitely characteristic of the Bronze Period or of any later age,

the various pieces of evidence point to the Stone Age as the period during which the sites were in use.

The situation of the settlement was well chosen, as the inhabitants could see a long distance in all directions, while the houses could, only with difficulty, be detected from afar, more especially as they were partly sunk under the surface and doubtless mound-like above.

The direction of the row of huts was also selected intelligently. The row follows the crest of the plateau and is on its sunny side.

The position of the individual houses is also noteworthy. It would seem that the entrance passage was preferred not at the end but in the middle of one of the sides. As shown by the excavations, the east side seems to have been chosen. It is natural to expect the door to be placed there, as it would be protected from the prevailing rains and winds from the south and west.

.Guided apparently by some such requirements, the prehistoric architect laid down the plan of the oval foundation in each case, so that the longer axis bore approximately north-west and south-east, and, it would appear, arranged that the entrance passage ran at right angles to that direction and was situated on the east side.

The inhabitants of this group of sites were workers in the wood of the birch, hazel, and alder, and had well shaped domestic pottery ornamented with incised and impressed work and work in relief. They lighted fires of some coniferous wood, and had a variety of implements of stone—scrapers, polishers, rubbing-stones, pounders, hammers, and anvils. They had an effective form of axe, with a smooth surface and a finely made edge. They carried on the manufacture of large and small flint implements from the rough nodules. The fact that they spent considerable time and labour in the construction of their houses tells that the method of life was at least in some measure settled, and not purely nomadic, and the occurrence of a group of sites may signify that a system of village life was in vogue.

The individuals who lived there did not follow the architectural methods of the Terremare men of pre-historic North Italy, or the Terpen dwellers of ancient Holland. They do not appear to have been like the cranog-builders who built their

dwellings so as to have them more or less surrounded by water or marsh. They did not construct their houses of stone halfunderground or wholly subterranean like the earth-houses or weems, nor did they follow the methods of the hut-circle men who lived in circular wood and wattle huts built on the surface of the ground.

While the bottom of each pit was at some depth under the surface, it should not be forgotten that the supposed flooring was sufficiently near the pre-historic surface to make it necessary to have a good proportion of the cubical contents of the chamber above the level of the surface if the chamber were to be habitable. There is no reason to believe that the huts were open to the heavens, or that the excavated soil was removed from the spot. It then follows that the upper part of the dwellings was more or less mound-like in character, the heaped-up earth from the original excavation having assisted towards this appearance. It seems difficult to escape from such a conclusion.

The shape of the mound would naturally follow the plan, whether round or oval, of the structure covered by the mound. Again the structure would be in harmony necessarily with the plan of the foundations, the flooring, and the walls, all of which were apparently in the shape of a longish oval. It would appear then that the mounds were somewhat long in shape, though perhaps not so pronouncedly so as the plan of the wooden substructures.

In considering this peculiarity of the Stoneykirk remains, it is interesting to consider that most of the ancient British dwellings, built of wood and wattle, which have been examined and recorded, are round, and, further, that they belong to the Bronze, the Early Iron, and later periods. The buts which comprised the marsh village at Glastonbury, occupied a few years before the Romans arrived in that district, were roughly circular and about 20 feet in diameter. With the exception of the Isle of Wight specimens, the pit-dwellings found in England appear to have been circular, as were also the crannogs and hut-circles.

No stones were used in the Stoneykirk structures, and stones sufficiently large for building walls are rare in the locality. It seems safe to say that the walls were of turf and wood and wattle. If the places were roofed, it is safe to assume further that at least a small amount of some covering of vegetable fibre, or even of soil or turf, rested upon the roof. A stoneless structure, however, could not bear the weight of a large amount of superincumbent matter; and the fact that a depression, and not a mound, marked each site indicates that a light form of roofing was employed. This roofing, after desertion of the settlement, would fall in, and the hollow would gradually become silted up.

As has been seen, the flooring arrangements were ingeniously, laboriously, and substantially contrived, and admirably adapted to the end in view. It is natural to believe that the less difficult matter of walling and roofing should also have been successfully met by the same men. Doubtless the whole place of abode, while very small, would be well suited to protect the inhabitants against the discomfort of too much sun, rain, wind, or cold.

It would be hazardous, nevertheless, to conjecture what exactly was the nature and appearance of the structures when entire. They were probably single-chambered wooden dwellings partly sunk under the surface level, and wholly, or in part, hidden by a mound of turf and earth.

Dwellings presenting the external appearance of mounds survived in Scotland to recent times. This type of house seems to have existed at a very early period, and to have been copied, though perhaps on a smaller scale, but naturally in a more substantial style, in the architecture of graves. There are thus cairns with internal sepulchral chambers. Houses and graves of this type were usually of stone, but it is reasonable to believe that wood might take the place of stone in districts where stones of the size required for building purposes were not plentiful. Now, if it can be shown that grave-mounds with internal constructions of timber once existed, it is a fair inference that there may have been dwelling-mounds with timber-built chambers, the roof protected by turf or simply earth-covered. This link in the chain of evidence is fortunately forthcoming, for at least two cases in Britain have been carefully recorded of what appeared to be grave-mounds or barrows containing timber constructions in the interior—the Dalry mound, Ayrshire, which probably dated from the Bronze Age; and the Wor Barrow, Dorset, assigned to the Stone Age. In the Wor Barrow district building

stones are scarce, and in the vicinity of the Wigtownshire sites building stones are so difficult to procure that the fields are not bounded by stone walls, but are either fenced, hedged, or enclosed by earthen dykes.

As we have thus earth-hidden, stone-lined, sepulchral chambers constructed apparently in imitation of earth-hidden, stone-built dwellings, and also sepulchral constructions of timber within mounds, it is an easy deduction that wood-built chambers for the living once existed wholly or partly earth-hidden. Perhaps the evidence for such wood-built, earth-hidden dwellings is not only presumptive, but has become direct testimony, through the discoveries in Stoneykirk.

In the Scottish area many unique non-historic and protohistoric archæological phenomena have been observed, especially in the domains of art and architecture. May not the "piled pit" of Stoneykirk be another example of the ingenuity and perseverance in overcoming difficulties which seem to have characterised the pre-historic craftsman of North Britain?

THE LOCAL FUNGI. By Mr W. M'CUTCHEON, B.Sc.

The following is a list of eighty fungi found in and around Dumfries in the months of September and October. A number of them have been verified by Mr R. B. Johnstone, honorary secretary to the Andersonian Naturalists' Society, Glasgow. I hope to be able to add to the number on future occasions.

HYMENOMYCETES.

AGARICINEAE.

Amanita mappa. Goldicand Conhuith Woods.	elea	Tricholoma skairth.	nudum.	Dal-
Amanita muscaria. Th	nird	Tricholoma	cinerascens.	Moss
wood from town on Cas	stle-	Road, Da	alskairth.	
Douglas Road.		Marasmius	urens.	
Amanita rubescens.	Γer-	Marasmius	peronatus.	
raughtie Glen.		Marasmius	oreades. Go	ldielea.
Amanita vaginata.	Γer-	Collybia skairth.	maculata.	Dal-
Armillaria mellea.		Collybia bu	tyracea.	
Tricholoma murinaceum.	Dal-	Collybia ra	dicata. Car:	ruchan.
skairth.		Collybia ve		
Tricholoma personatum.	Dal-	Collybia dr	yophila.	

Russula nigricans. Kilnford Wood.
Russula vesca. Kilnford Wood.
Russula cynoxantha. Kilnford Wood.
Russula fellea. Kilnford Wood.
Russula foetans. Conhuith Wood.

Russula rubra. Russula fragilis.

Russula emetica.

Lactarius torminosus. Kilnford Wood.

Lactarius turpis. Lochar Moss. Lactarius blennius. Kilnford Wood.

Lactarius vellereus.

Lactarius deliciosus. Dalskairth.

Lactarius rufus. Lactarius mitissimus.

Lactarius subdulcis.

Boletus luridus. Lochar Moss. Boletus chrysenteron. Lochar

Moss.

Polyporus squamosus.

Polyporus picipes. Willows, near Lochanhead. Polyporus betulinus.

Polyporus betulinus Polyporus annosus.

Polyporus versicolor.

Lactarius camphoratus.

Lactarius emetica. Lactarius trivialis.

Mycena galericulata. Mycena polygramma.

Laccaria laccata.

Clitocybe maxima. Hygrophorus coccineus.

Nyctalis parasitica. Pholliota squarrosa.

Cortinarius cinnamomeus.

Paxillus involutus. Park Road.

Goldielea.

Agaricus campestris.

Stropharia aeruginosa. Hypholoma fascicularis.

Hypholoma sublateritium. Carruchan.

Panaeolus campanulatus.

Coprinus atramentarius.
Coprinus comatus. Terraughtie, Newabbey Road.

POLYPOREAE.

Polyporus adustus. First wood from town on Castle-Douglas Road.

Polyporus abietinus. Conhuith Wood.

Daedalia quercina. First wood from town on Castle-Douglas Road; Cargen.

HYDNEAE.

Hydrum repandum. Abundant in town, Castle-Douglas Road.

in October, first wood from

THELEPHOREAE.

Stereum hirsutum. Carruchan. Stereum purpureum. Carruchan.

CLAVAREAE.

Clavaria amethystina. Third wood from town on Castle-Douglas Road.

TREMELLINEAE.

Calocera cornea.

Calocera viscosa.

GASTROMYCETES.

Scleroderma vulgare.
Cyathus vernicosus.
Crucibulum vulgare.
Nidularia pisiformis. Railway
sleepers, Gatelawbridge
Quarry line.
Lycoperdon pyriforme.

Lycoperdon bovista.

Geaster rufescens. Near tree roots, Pearmount, Dalbeattie Road.

Ithyphallus impudieus. Conhuith Wood.

DISCOMYCETES.

Gyromitra esculenta. Railway, Thornhill to Gatelawbridge. Sent to Kew for identification. Only once before recorded for Scotland. Helvella crispa. Newabbey Road, under beech trees. Leotia lubrica. Terraughtie Glen.

Peziza (Cochlearia) aurantia. Dalskairth.

Notes on the late Transit of Mercury: On Jupiter and Saturn. By Mr J. Rutherford.

MERCURY.

In these notes Mr Rutherford detailed his observations of the Transit of Mercury on 14th November, 1907. In the early morning the sky was completely overcast with dense clouds. At 10 h. 23 m. 40 s., when the Transit was expected to begin, there was no appearance of the sun through the clouds, this continuing until a few minutes before noon, when a little break was noticed near the sun's position. On directing the telescope to the spot he was rewarded by seeing the sun through a thin cloud. Through this his first view of Mercury on the sun's disc was seen. In a few seconds the cloud was cleared off, and at noon this was seen for six or eight seconds. After this the sun was obscured until 1.35. Then glimpses of the planet were seen through thin cloud.

During the short time of clear vision he directed his attention to the border of the planet, which appeared to be quite sharp, and free from any luminous or penumbral appearance. The colour of the planet seemed a little grey.

Mr Rutherford said:—I am sure that no one has any conception of the joy I felt at being privileged to see this transit, even for such a short time. Impressions of such sights are engraven on the mind in such an indelible way that they are

never forgotten. Another thing that strikes one as being simply marvellous is the accuracy of the predicted time.

JUPITER.

As seen on the morning of November 30th, 1907, between 7 and 8 o'clock. On several mornings during this month I had some very fine views of it. In fact, I think the finest I have ever had. Previously, when looking at Jupiter in the evening, transits of its moons and their shadows have nearly always been seen with some doubt and difficulty, but on the morning of the 30th the moment I looked into the telescope a black spot was seen. I looked up the Ephemeris for that day, and found that it was the shadow of Moon I. I observed it for fully half-anhour. During that time it moved some distance across the disc. There was also plainly seen a dark elliptical spot on the north equatorial belt, nearly above the shadow of the moon.

VENUS.

I may add that the finest views of Venus I have had have been in the morning when it was almost daylight, the horns are then quite sharply defined, and there is not the same amount of flare about it, which is such a drawback to good seeing of this planet in the evening. When the morning is suitable the air seems steadier, and a brighter and sharper image is obtained.

SATURN.

In the month of November the rings of this planet were turned edge ways on to our line of sight; and according to the position of the earth and sun they should have been invisible. One evening, about the 11th or 12th, vision was fairly good. I could plainly see the shadow belt across the ball, and tried to trace the ring at each side on to the sky beyond. When attention was directed to the east side the eye saw at times a faint trace of light where the ring should be on the opposite side. This occurred several times, and when the eye was turned to that side the light was not seen. I have read of several other observers who have seen those flashes, and also have read of one or two astronomers of note who say that it is an optical illusion.

Since I wrote the foregoing notes I find that a number of other observers have seen the flashes of light on the Ansæ of

Saturn's Ring, in November last, when they should have been (theoretically) invisible. The question naturally follows what was the cause?

A NIGHT WITH A MICROSCOPE. By Mr T. T. OVENS.

In his preliminary remarks Mr Ovens observed that people were so accustomed to regard with admiration and wonder the mighty and impressive works of nature that they were apt to treat as insignificant her elaborations in minutiæ. Time would not permit him to deal with a very large variety of subjects, although every mote that danced in the sunbeam—every particle of trampled dust—contained inexhaustible treasure of knowledge and instruction. He would first centre their attention to a view of the Flea of Man, which, though not very elegant in the æsthetic sense, was beautifully and perfectly formed for the life it had to lead. They would notice the length and development of the hind legs which enabled the insect to take immense leaps. Indeed were man endowed with the corresponding muscular power he could without difficulty bound over Criffel in three strides. The next specimen dealt with was a female flea, and it was noticeable that while the female was much larger than the male, it was by no means prettier. After mentioning the flea of a mole which, he said, was different from other insects inasmuch as it lived mostly under ground and had no eyes, these not being necessary, Mr Ovens went on to deal with the proboscis of the Blow Fly. They had all observed the house fly on the edge of the sugar basin, and dipping its trunk which, to the naked eye, looked very much like a bent bit of wire with a pad at the end. But the organ was most complicated and beautiful. The most wonderful thing about the organ was the system of half rings forming a series of tubes in the substance of the lobes and acting as connected channels, up which the food of the fly was conveyed to the mouth. Not less interesting was the eye of the fly. Each one of the tiny spaces was a distinct eye in itself, but as it had only a limited range of vision it seemed that nature had compensated the want by providing such a number of eyes as occupied nearly all the surface of the head. The house fly had about 4000 eye facets, but the dragon fly had at least 24,000. Another most remarkable part

of the fly was the foot, the pad of which secreted the glutinous substance which they had observed after the insect had walked across polished glass. After dealing with the breathing tubes of insects, such as the spiral filament inside a caterpillar, Mr Ovens spoke on the wing of a butterfly, pointing out that the powdery substance which adhered to the hand that touched it was composed of beautiful scales, each so infinitesimal that on every square inch of wing surface the number of scales was reckoned at 100,000. The antannæ or horns of insects presented another series of organs of endless variety, and of all conceivable forms. In the case of ants, observation showed that by means of their antennæ communication and recognition were established. The lecturer likened the sting of a hornet unto a fishing hook or arrow head, but a curious point was that the possession of stings was only enjoyed by the female. The Ovipositers were all highly interesting objects, but perhaps none more so than those of the saw fly, where a pair of elaborate toothed saws slid backwards and forwards with great rapidity. The Ticks were characterised as wingless, degenerated parasites, which lived on all sorts of creatures, a good example of the species being the sheep tick, which lived on the sheep solely by suction. The far-off date of 1670 saw the advent of the Simex lectularius or what was commonly known as the bed bug. said that this troublesome and repulsive insect was imported in the timber brought from America for use in rebuilding the city of London after the great fire. At first its bites were mistaken for plague spots; but in the middle of last century the insect got the title of bug or goblin. Aphides or Plant Lice were next spoken of. By a surprising departure from the common law of nature, each female of the species of insects could alone produce many generations of offspring. Another peculiarity about the family was the fact that females were exclusively produced in the spring, no males being found until the autumn. Referring to the difficulty of defining the difference between animal and vegetable life, he said, for instance, the Volvox globator was a wonderfully endowed plant which moved about in a wonderful manner, and in that small part of the creation the 50th part of an inch. This plant was to be found near Dumfries, in Babington Loch, Maxwelltown, though not in great quantity. Ditoms were also dealt with.

21st February, 1908.

Chairman—The PRESIDENT.

STONE REMAINS OF BRITTANY. By Mr John Glover, W.S., Edinburgh.

The special feature of Brittany which distinguishes it from all other European countries is to be found in those remarkable antiquities of the stone age which abound in every district, and which are to this day held in superstitious veneration by the simple inhabitants. The Druidical remains of Stonehenge, though finer individually than anything to be seen elsewhere, are but isolated examples, whereas in Brittany Celtic monuments more or less important may be counted by thousands, especially in the region known as the Morbihan on the borders of that singular archipelago, which was evidently the chief centre of the Celtic population. The principal monuments are:—

Puelvens—pillars of stone. They are stones varying in height from 2 to 8 feet set upright in the ground at varying intervals.

Menhirs are a larger description of monolith (the name means long stone). The largest in Brittany is at Pennargal, near Brest—it is more than 42 feet high. Another about a mile and a half to the south-east of Dol is 30 feet high, and one at Logmariargner, now thrown down and broken in two, was formerly more than 60 feet high. How these huge masses of stone were brought to their standing place or how they were reared to their upright position is as great a mystery as the purpose they were intended to serve. Conjectures have been formed that they were in some way connected with the worship of the sun, but beyond conjecture nothing is known.

Dolmens—stone tables—are what in England are called Cromlechs. They consist of a horizontal slab of unhewn stone supported by two or more upright stones. In many cases they resemble a stone table, but in others their supports are placed side by side beneath a very large slab—often 60-80 feet high. Many examples of dolmens may be seen in the neighbourhood of Auray.

Kistvaens are a smaller kind of Dolmen, generally closed at one or both ends. The best example is on Goat Island, at the mouth of the archipelago of the Morbihan.

Galgals are equivalent to what are known as cairns. They generally contain a sepulchral chamber, the stone walls of which are inscribed with hieroglyphics which no one hitherto has been able to decipher.

The country round Carnac is solemn and impressive, full of strange Druidical monuments. Menhirs and Dolmens of fabulous antiquity, ancient stone crosses, calvaires and carvings. One finds intimate traces of the Middle Ages. The land is still half cultivated and divided into small holdings: the fields are strewn with ancient stones.

The lines of Carnac are impressive—lines of colossal stones planted point downward, some as high as 20 feet, and stretching away to the horizon on a space of several miles like a gigantic army of phantoms. Originally the lines were composed of 6000 stones, but to-day there remain only several hundreds. They have been destroyed bit by bit and used by the peasants.

Historians and archæologists have sought in vain to find a solution to the problem of the formation of the lines: some say that the stones planted in the fields are temples dedicated to the worship of the serpent: others maintain that this is a kind of cemetery where the dead were interred after a terrible battle. They are variously taken to be sacred monuments, symbols of divinity, funeral piles, trophies of victory, testimonies to the passing of a race, the remains of a Roman encampment. Innumerable are the surmises.

The country people have in their folk-lore their own versions of the origin of these stones.

The stones at Carnac embrace three groups of Menhirs, those of Menec comprising 874 Menhirs in 11 rows or alignments, Kermario 865 in 10 rows, and Kerlescant 262 in 10 rows.

The stones at Kerlescant run from east to west in three chief rows, being smaller and fewer to the westward and larger and more defined to the east, where the number of rows increases to 10, forming the boundary to an enclosure called Le Bal.

On leaving Le Bal in a south-westerly direction only scattered stones are seen, but near the windmill of Kermario the same order is repeated, the number of rows being again 10. This formation ends abruptly in a large dolmen, similar to those of Stonehenge.

This singular arrangement is continued again to the southwest, where the 10 rows again appear at Menec, terminating in front of a round enclosure. The stones of the third group are in some cases 18 feet in height.

Excavations at the bases of the remains have disclosed:-

- 1. Stone hammers, adzes, whetstones, sling stones, hand projectiles in granite quartz, and schist.
- 2. Flint arrow-heads and flint chips in abundance.
- 3. Dice or marbles in granite.
- Fragments of iron weapons and utensils—iron nails and adzes.
- 5. Horse bells in bronze and horse teeth.
- 6. Bricks.
- 7. Fragments of Celtic and Gallo Roman pottery.
- 8. Roofing tiles.
- 9. Mortars and whorls in stone.

All lying in the brown earth—in many cases above a scattered layer of charcoal or ashes.

From the majority of the remains being those of implements of war—mostly Celtic—it is obvious that between the lines there lay a long stretch of defensive works erected by the Celts at a period anterior to the Roman invasion, while the bronze and iron remains and the fragments of Roman pottery point to the Romans on their arrival having occupied some of these, and in the more advantageous positions had constructed other works of greater solidity.

Several of the Menhirs were used as buttresses to the Roman camps, and there would be little doubt that many of them were broken up to strengthen the outer wall.

The presence in the same place of Celtic and Roman remains points to the conclusion that the inhabitants of the country, when forced by some invasion in the troublous times succeeding the fall of the empire, had there found a refuge for themselves and their animals.

It had at one time been supposed that the Menhirs had been brought from a distance, but this contention is destroyed by the fact of the grain of the Menhirs being that of the granite of the district. Others, which are of a pear-like shape, are sometimes set up as if balanced on their pointed end, and would seem to be in some cases boulders, in others rolled stones from the sea coast, where similar ones may still be seen. In connection with this it is to be remembered that the centuries have seen a mighty advance by the Western Sea on the ancient coast line of Brittany.

The fact of Menhirs having been built into walls, which were obviously of early Roman origin, proves that the alignments are older than the walls, and consequently anterior to the Roman occupation. But the evidence of their being much older comes out more decisively from the deep groovings on the eleventh Menhir of the tenth alignment, which now lies on its side, but at one time stood erect. It is obvious that these deep groovings had been produced by an exposure for centuries to atmospheric action, and that these grooves which exist on the south end alone could not have been produced during the period of its position on its side lengthways and covered with earth. The conclusion, therefore, is inevitable that it must have stood erect for many centuries before the construction of the west wall of the Roman camp, and that period, if we could ascertain it, would indicate the date of the alignments. The grooved weather markings on the summit of many of the Menhirs standing erect in the alignments are more or less deep according to the grain of the stone. For, unfortunately, the granite of which they are composed is not all of the same nature. If it were so the depth of the markings would serve in some measure as a basis for calculating their age. It is, however, impossible by this procedure to arrive at any exact result.

The names of the three alignments of Carnac would in a measure indicate a sepulchral use. They are named Kerlescant, corrupted probably from Kerlosquet (burnt town or town of burning) by allusion to cremation, Kermario—village of the dead, and le Menec, place of the stones.

It is the same for analagous monuments in other parts of the country.

The orientation of the alignments varying from E. to E.S.E., that is in the line of the equinox and of the solstices, is held to indicate their having been places of assembly for sun worship. According to Combry, the celebrated La Tour d'Auvergne, states in his "Origines Altiques" that the constant



STONES AT CARNAC-KERLESCANT.



STONES AT CARNAC-DOLMEN OF KERIAVAL.



tradition of the Bretons was that the alignments were the principal temple of the Druids, and that Armorica was always regarded as their privileged land.

Ashes, charcoal, flint chips, pottery, and other objects are the invariable accompaniments in the dolmens of the rites of sepulture whether by burial or by cremation, and the numerous excavations have shewn that the dolmens, whether covered by a tumulus or otherwise, are sepulchral monuments. We have seen all of these objects at the base of the menhirs: we have seen that the names given to the menhirs and handed down from a remote period are suggestive of sepulture, and their orientation also is the same as that of the dolmens. We may thus conclude regarding the destination of the alignments that they may also have been erected as sepulchral monuments.

Turn now to examine the correlation existing between the alignments, cromlechs and dolmens. In the head of each of the alignments of Menec and Kerlescant the large menhirs form a cromlech. These cromlechs, from their forming an integral part of the alignment and from their stones being of the same composition and character, must necessarily be regarded as having the same destination.

Many of the dolmens are covered by tumuli or cairns, others are uncovered—everywhere they have been either explored or destroyed. The names given to many of the dolmens are significant of sepulture. Very few of them, as in the case of the dolmens, are sculptured, and then only in the rudest way, representing concentric figures, zig-zag lines, cup markings, and stone axes.

Researches have proved that in some of the dolmens of the Morbihan the sepulture had been by cremation, in others by burial, and in some few cases the evidences of both rites were found in the same dolmen. Cæsar speaks of cremation, of magnificent funerals, and of the most cherished objects being thrown on the funeral pyre. If it is not ascertained when the practice of cremation commenced, there can be no doubt about its having continued up to the introduction of Christianity, and that there had been great difficulty afterwards in weaning the people from this and from the worship of trees, stones, and fountains, is shewn by the edicts against these practices. There is another edict, so late as the eleventh century, against the

practice of burying at the roadsides-which may account for the extraordinary number of crosses which one everywhere sees along the roadsides in Brittany.

In considering the association of menhirs, alignments, cromlechs, and dolmens, we come to the conclusion that these are the mutilated remains of an immense necropolis, the construction of which had extended over a long period, and must necessarily have required a great amount of organised labour and skill, but nothing is known as to the appliances used in moving some of these huge monoliths. This must for ever remain a mystery.

In considering the immense number of Celtic funeral monuments which extend along the seaboard of the Morbihan the question naturally arises-Why are these monuments concentrated in this district? The abundance of blocks of granite in the district is at once suggested as a probable cause of this result, but we would rather look for the explanation in the Celts having chosen this region as a terra sacra or necropolis, destined to receive from generation to generation the ashes of their families.

6th March, 1908.

Chairman-Mr JAMES BARBOUR, Vice-President.

CLAVERHOUSE—SOLDIER, JUDGE, AND SHERIFF IN DUMFRIES AND GALLOWAY. By the Rev. Dr J. KING HEWISON, Rothesay.

John Graham of Claverhouse was one of the most notorious personages connected in any way with the south-western counties of Scotland, over which he passed like a blight, leaving a trail and memory which nothing can now efface. John Graham was the son of William, laird of Claverhouse, Ballargus, and Glenogilvie, who married Magdalene Carnegie, daughter of John, Earl of Ethie, and first Earl of Northesk. They had two sons, John and David, and two daughters, Magdalene and Anne. I have searched five-and-twenty likely registers for the announcement of John's birth and failed to find it. He is supposed to have been born in 1648. A similar doubt exists about the date

of his matriculation in St Leonard's College, St Andrews, one John Graham matriculating in 1658, another in 1665. Whatever our subject learned, he did not master the spelling of the English tongue, as his extant letters prove. In 1669 Claver house, his father being dead and leaving him rich, as compared with the universally bankrupt landowners of the day, with six hundred pounds a year, appears as a Commissioner of Excise and Justice of the Peace for Forfarshire, not long after he left college. Like others of his class, he sought excitement in foreign wars, and is credited with serving two years (1672-4) in a Scots regiment in France before, in 1674, he joined Prince William of Orange's company of Guards. At the battle of Seneffe he distinguished himself by extricating William from danger and death. Becoming captain in November, 1676, he retired from that service in December, 1677.

Probably Sir Walter Scott is correct in asserting that Archbishop Sharp was his early patron. Claverhouse may have accompanied William of Orange to England. William recommended him to James, Duke of York, who in turn recommended Claverhouse to his kinsman, Montrose—himself appointed to a troop in "His Royal Highness' Regiment of Horse," raised for service in Flanders in 1678. Montrose offered him a lieutenancy, which he declined.

At this time the Scots standing army was under the command of Lord Linlithgow, and consisted of 1 regiment of Horse Guards, 1 Foot Guards, 1 (Mar's) Infantry, 2 companies of Highlanders under Colonel James Menzies and the Earl of Caithness, and 3 companies of Dragoons under Viscount Kingston and Captains Strachan and Inglis. On 23d September, the Earl of Airlie, the Earl of Home, and Claverhouse got captaincies in three new troops of horse, each troop consisting of 69 men. In December, 1678, Claverhouse with his troop and Inglis's company of Highlanders patrolled Dumfriesshire. Lieutenant Andrew Bruce, an immoral and thievish fellow, was lieutenant to Claverhouse. On 27th December they were at Moffat, on 3d January at Castle Milk, and on 6th January at Dumfries. The Committee for Public Affairs, considering that the Magistrates in the south were remiss in putting down the rebellious Covenanters, recommended the appointment of sheriffdeputes and bailie-deputes, a course approved of by the King.

The Earl of Queensberry was then Sheriff of Dumfries and Annandale, and the Earl of Nithsdale of Galloway. Consequently, on 27th February, 1679, Claverhouse and Bruce were commissioned depute sheriffs for the three south-west counties, Robert Grierson of Lag, then a young man, being also appointed for Wigtown, and Captain John Paterson for Kirkcudbright.

Some of the letters of Claverhouse at this period are extant, and from them we learn that he had his headquarters in Dumfries in January and February, from which he was wont to sally out, in order to undertake even forty mile rides by night to arrest the suspects. The want of spies-rather a creditable aspect of the case—made his raids often unsuccessful. These deputes, by instruction of the Privy Council, met at least once a week to try conventiclers and withdrawers from worship. John Welsh, the ousted minister of Irongray, Claverhouse had one of those elusive preachers who were as intangible as the mists through which they escaped, leaving the troopers bogged in the mosses and hills where Claverhouse was active in March and April. He reported that Welsh was the ringleader of people about to break "into open rebellion." The Sheriff-Depute was in Dumfries on 21st April, and left on the 5th May to join headquarters. A terrible tragedy had occurred on 3d May when James Sharp, the Primate of Scotland, was slain in cold blood on Magus Moor. We next find Claverhouse at Falkirk on 29th May on the track of a great assembly of Covenanters, who were soon to gather in front of Loudoun Hill. He was at Mugdock Castle on the 30th, and at Glasgow on the 31st May. Passing through to Hamilton, he was in the saddle early on Sabbath morning, 1st June, and by 6 a.m. he reached Strathaven. A few hours later he was facing the foe at Drumclog-with the result all know—that that night he was in Glasgow again without many of his bold troopers, whom he ignominicusly left to their fate. It was no wonder that he wrote, "Bot I am swre thes was the warmest day I saw the yeare," by no means classical terminology for a 'Varsity man. He rode to Edinburgh and waited the arrival of the new Commander-in-Chief, the Duke of Buccleuch and Monmouth, with whose force he marched to Bothwell Bridge, where on 22nd June, another Sabbath, he slaked his thirsty and vindictive sword, obtaining that opportunity of fulfilling what he considered to be his heaven appointed function

—the slaying of Whigs in order to stay the infectious plague of Whiggery.

Doubtless with zest he followed the trail of the slayers of the Primate, and it was probably at this time he gave cause for the following epitaph in Galston Churchyard:—"Here lies Andrew Richmond, who was killed by Bloody Graham of Claverhouse, 1679."

In January, 1680, he was on the southern hunt again. In the spring and the summer he was in London on marriage business and looking after forfeitures, remaining in London till 1681, when he returned to Scotland with the Duke of York.

On 21st July, 1680, Claverhouse got a charter of Freuch (Stoneykirk) as a reward for his services, but he did not enter into possession of it for more than a year. We next find him on the jury that tried Argyll on 12th and 13th December, 1681. The Test wrought woeful changes in the country. Among those who refused to take it were Sir Andrew Agnew of Lochnaw and Viscount Kenmure, in consequence of which they forfeited their offices as Sheriff of Wigtown and Bailie of the Regality of Tongland. Claverhouse was lucky successor in both posts. So that with a new commission as Sheriff-Depute in Dumfriesshire and Kirkcudbright he was omnipotent.

The student is fortunate in having preserved in the Drumlanrig charter room those letters which Claverhouse wrote at this time to Queensberry. They are easily and cheaply accessible in the Historical MSS. Commissioners' Report XV., viii. Claverhouse is found writing in New-Galloway on 16th February, 1682, informing his chief that the people at his feet were "in great dreed." It is not the letter either of a soldier or of a respectable sheriff. It is the tally of a slaughter man, the report of a cunning exterminator, who writes:-"I will threaten much, but forbear sever exicution for a whyll, for fear people should grou desperat and increase to too much the number of our enimy." The peasantry fled his presence as if it were the plague. At Dumfries, on 22nd February, he wrote, "I can catch nobody, they are all so alarumed." He was not to be baffled. He invited them to meet him at church; and never had booted apostles such overflowing congregations, gathered from several parishes. For example, at Kirkcudbright he reported that "some that for seven years before had never been there were

present." On 1st March he was in New-Galloway. He, however, felt the counteracting influences of the Dalrymples, who sympathised with the persecuted; and although he could write "This contry nou is in parfait peace," referring to Kirkcudbright in April, and also report from Moffat on 17th April, "I have examined every man in the Shyr, and almost all in the Steuartry of Galouy, and fixt such a guilt upon them that they are absolutely in the King's reverence," still, he continued his activity in Galloway in August and September, and soon found himself in open conflict with John Dalrymple, son of James, first Viscount Stair, hereditary Bailie of the Regality of Glenluce. It appears that Claverhouse had apprehended several suspects whose cases had been already dealt with by the Bailie, who considered that Claverhouse was overstepping his powers. Dalrymple accordingly raised an action against the Sheriff by presenting a Bill of Suspension, to answer which Claverhouse was forced to appear before the Privy Council in December. Therein he had approvers and abettors, so that he was not only pronounced guiltless, but was praised for his wariness and legal procedure, while Dalrymple was fined and deprived of office.

It was during this case that the peppery little soldier, who declared that there were as many crocodiles in Galloway as there were peaceable persons, rose up in Council and boxed Dalrymple's ears. He himself got a more pleasant box at Christmas in a commission promoting him Colonel of "His Majesty's Regiment of Horse," four troops in all, and a paid captaincy as well. While fortune favoured the Sheriff, the shrievalty was to receive more drastic treatment. Claverhouse was in touch with York. He was promoted Privy Councillor on 11th May, and next day his brother David was appointed conjunct-Sheriff of Wigtown.

Claverhouse's connection with the Privy Council legislation is of the first importance, more especially since hitherto it has been the vogue of magnanimous literary men, magnanimous, however, in face of recorded fact, to view Claverhouse merely as the faithful soldier obedient to his superiors, and not responsible for the indefensible acts of his sanguineous masters. I have extreme satisfaction in laying bare the facts of the case. Claverhouse took his seat in the Council on 22d May, 1683, and attended its meetings three times that month. He attended

only once in June. On that occasion the "instructions" were given to the Commissioners of Justiciary, who were about to perambulate the country in June, and the Sheriff of Wigtown was instructed to attend them. Consequently he was in Dumfries on the 26th June with his troop guarding the judges. He was soon in the saddle scouring the Borders in search of the Rye House plotters, but soon again appearing in Council, 4 times in July, 6 in August, 4 in September, 1 in October, 11 in November, and 4 in December—in all 34 times since appointed. He was also placed on the Committee of Public Affairs on 4th October. From that time on we may say he was up to the elbows in the blood of his countrymen, attending the Council 53 times in 1684 and 40 times in 1685. On Tuesday, 10th June, he married the Hon. Jean Cochrane.

Claverhouse was present when the Council authorised a letter advising Charles that it was better to disable his enemies than to flatter them (15th July, 1684). On 5th September he watched Carstares, afterwards Principal, tortured in the thumb screws for an hour. Next day he was present when "instructions" regarding conventicles were given, and justices were empowered to use fire and sword. Meantime a gallant affair had occurred in Nithsdale. On 2d July General Dalyell was ordered to convey from the jail in Dumfries Alexander Gordon in Kinstuir, William Grierson of Lochurr, James Welsh of Little Cluden, and other prisoners who had been sentenced at the circuit court in June, and who, with all the idle and vicious wastrels of Edinburgh, were to be handed over to Robert Malloch and shipped to the Plantations. Claverhouse's troop got the string as far as the defile of Enterkin, where a successful ambuscade was laid, so that the prisoners were released on 29th July. Claverhouse, during his honeymoon in June, was absent from meetings of the Council, but he attended ten times in July, and was present on 29th and 31st July, and also on 1st August, 1684. He was soon in the saddle again. He rode by Douglas, Mauchline, and Thornhill. In Closeburn, on the 7th or 8th, he caught four men, whom he haled to Dumfries, where he was on 9th August. Three days later he was in Edinburgh with his prisoners.

On 6th September, Queensberry, Drumlanrig, and Claverhouse were commissioned to hold justiciary courts in Dumfries, Kirkcudbright, and Wigtown shires; and on 23rd November, Claverhouse was present in Council and signed the instructions given to the various judges, authorising the instant execution of all refusers of the test of allegiance. The court began its work in Dumfries on 2nd October, sitting in the Tolbooth. The first case was that of persons suspected of complicity in the Enterkin Rescue. Some were fined; absentees forfeited their bonds. In Dumfries these judges kept 23 men and women in custody, some of whom were sentenced to banishment. They sat in Kirkcudbright on 7th October, and called 170 suspects. Nearly all the parish curates compeared, bringing lists of the disorderlies in religious matters. Some were sent to the "Joggs;" others to the Repentance Stool; others to be scourged (two being women); others sent to prison; and a few ordered into banishment. It was on the 17th October they had before them a batch of 14 prisoners caught by Clavers' men a few days before, among them being Lady Gordon of Holm; Mr William M'Millan, a conventicle preacher; and James Graham, of Crossmichael, who was afterwards hanged in Edinburgh. The court sat in Kirkcudbright on 7th, 8th, 9th, 10th, 11th, 13th, 17th, 18th October, and at Wigtown on 14th, 16th, 17th October. They were back in Dumfries on the 23d, and again sat on the 23rd, 24th, 25th, and 27th October. The minute books of these courts, with many interesting papers relative to them, are preserved in the Register House, Edinburgh. Not the least interesting are the long lists of suspects carefully prepared by the curates, and the depositions of witnesses and attested "tests" of the persecuted for religion's sake.

He did not return to Council till the 15th November. A week later he voted on the question whether or not "any persons who ounes or does not disoune the late traiterous declarations on oath, whether they have armes or not, should be immediately killed before two witnesses." This was carried in the affirmative, and on 23rd November Claverhouse signed the instructions on the subject. This was the instruction that gave himself the authority to shoot John Brown of Priestshiel on Mayday, 1685. He was also present in the Council on 13th January, 1685, and signed the instructions which gave Lag and his brother David the authority to drown the Wigtown martyrs on the (2nd?) 11th May. The instruction was in these terms:—

"If any person oune these principles or doe not disoune them, they must be judged by at least three, and you must immediately give them a lybell and the names of the inqueist and witnesses; and they being found guilty are to be hanged immediately upon the place, according to law. But at this time you are not to examine any women, but such as has been active in those courses in a signall manner. And these are to be drouned."

The death of the King, in February, 1685, temporarily spoiled the fortunes of Claverhouse. He had quarrelled with Queensberry. He was not placed on the new Council till 11th May, and did not take his seat till 16th July. He attended, but seldom during the rest of the year 1685. He was leaving his indelible mark elsewhere. Although Professor Terry asserts that the commission of Claverhouse as Sheriff expired on the death of King Charles, yet the Council on 12th February announced that James "allowed all his judges and officers to act as formerly, until they receive new commissions." Viscount Kenmure was notified of this fact, and Claverhouse was at the meeting of Council on that date.

On the 13th December, 1684, Peter Peirson, Episcopal incumbent in Carsphairn, a man of doubtful reputation, was shot by night in his manse by "The Black Macmichael," the fowler of Maxwelton, and other fugitives. Claverhouse tracked them down, and in a skirmish on Auchencloy killed four or five of them, capturing two, who were tried and executed at Kirkcudbright, shortly after 18th December—the date of the fight. Macmichael and Stewart were buried in Dalry. Claverhouse ordered their bodies to be exhumed and exhibited on the gibbet there.

Claverhouse was in Dumfriesshire on 10th May, and shot Andrew Hislop at Craighaugh, in Eskdalemuir. It is his subaltern, Andrew Bruce, who is credited with shooting James Kirko on the White Sands of Dumfries, on 13th May, 1685. We do not know where the Colonel was that day. But there is a remarkable story which may link him to this very deed, although it refers to a double execution of which we have no trace yet. John Morrison, an engineer, and native of Terregles, recounted to Sir Walter Scott in 1803 a story which he heard from his father. Hitherto Claverhouse has always been reckoned the beau ideal of a cavalier—handsome as Apollo,

gallant as Bayard, faithful as Douglas. There is disillusionment in hearing that he was diminutive (wearing a cuirass only 151 inches deep), not shapely, red haired, squinting fiery tempered, fond of other people's moveables. So Joseph Robson, an old friend of Morrison's father, was wont to narrate. He saw "Claverhouse attending the murder of two martyrs on the sands of Dumfries. He rode his horse along the coping of a parapet wall, built to guard off the waters of the Nith in time of floods, and when the horse had arrived at one end, he wheeled round on one of his hind legs as on a pivot, repeating the same manœuvre. His arms were long, and reached to his knees; his hair red or frizzly, and his look altogether diabolical." That such really was the presentment of the persecutor I have other evidence to show, and such a picture is the true counterpart of the sleepless rider of the moorhags and mountains, and the merciless legislator of the Privy Council.

With James as his patron he was not long in vaulting into position again. On 20th of September he was promoted to be Major-General, with a substantial pension, and on 12th November, 1688, he had the royal reward for his devotion in his elevation to the peerage of Scotland, with the title of Viscount of Dundee and Lord Graham of Claverhouse. He fell leading the royal army at Killiecrankie on 27th July, 1689. His widow and only child were killed in Antwerp. The occasion of Dundee's visit for the last time to Dumfriesshire and Galloway I have not discovered.

20th March, 1908.

Chairman-The PRESIDENT.

Devorgilla Baliol and the Old Bridge of Dumfries. By Mr James Barbour, F.S.A.(Scot.).

The Old Bridge of Dumfries is, with the exception of certain earthworks at Castledykes, the only reputed mediæval monument in the town which has escaped entire destruction. It has, however, come down sadly diminished and marred of its fair proportions. Of nine large arches of which it consisted,

three with their piers and east abutment, except what remains of them under the street, have been razed and levelled, as was also an arched culvert which passed through the abutment in continuation of the lead or water-gang to the water wheel of the adjoining Sandbed mill. The bridge as it now exists, notwithstanding the repairs it has undergone and the rebuilding or partial rebuilding of two or three arches, is still in form and mainly in substance the original structure. Its strength is not greatly impaired by age, and the piers remaining, being founded on rock, if suitably cared for, may vet survive many generations of men.

It is a structure which for several reasons is most worthy of being guarded from further dilapidation. Its usefulness as a footway over the river is to be considered; the enhanced artistic display it lends to the town; its antiquity and association with historic events; and specially the keeping in remembrance of the great and good lady, its reputed founder-"A better lady," says an old poet, "than scho was nane, In all the vle of Mare Bretane."

Antiquaries and historians as Grose, Pennant, Chalmers, M'Dowall, Sir Herbert Maxwell (the eminent author of the "History of Dumfriesshire and Galloway"), and the latest historian of Scotland, Dr Andrew Lang, unanimously attribute the foundation to Devorgilla Baliol, Lady of Galloway, in the thirteenth century, and it seems desirable, in order to promote intelligent belief and induce interest in the preservation of the structure, to broaden the grounds on which this conclusion rests.

With this object in view, I have put together the following suggestive considerations, largely from an engineering point of view, which seem to me to have a bearing on the subject.

A brief notice of early bridge-building in this country will tend to make more clear the position of the bridge of Dumfries. I am indebted for information chiefly to Smiles's "Lives of Engineers" and Cosmo Innes's "Sketches of Early Scotch History,"

Fords and ferries, which originally served for crossing the rivers, were frequently impracticable during winter, and nearly always unsafe; from the inconvenience attending them much difficulty in travelling arose and many lives were lost; apprehension of danger was always present to the mind of the traveller; and it was customary to erect crosses at the fords, where prayers might be offered for safety before attempting the passage of the waters. One such cross remains in Dumfriesshire, although possibly not exactly in its original position. It stands at the old ford of the Nith, near the village of Thornhill.

As civilisation advanced and population and travelling increased, the building of bridges became a matter of urgency, and gradually led to their ercetion along the principal routes throughout the country; and so great were the advantages accruing in course of time felt to be, as to lead benevolent and pious persons, in those early days, to bequeath large sums of money for the purpose of building and maintaining bridges. The Church regarded bridge-building as pious work, and Churchmen were active promoters of the movement, and frequently themselves the architects of the structures.

The first known bridges in Britain cross the streams at Dartmoor. They exhibit peculiar construction; the piers are built of granite blocks, and the spaces between them are spanned with great slabs of similar material, some of them fifteen feet in length and six in breadth, which form the roadway. One of these bridges measures thirty-seven feet in length. It is said cyclopean bridges such as these exist nowhere else; not even in Brittany, noted for aboriginal monuments, and probably they are cœval with the building of Stonehenge.

The Romans were noted experts in the art, who built in England bridges both of wood and stone, and fragments of the latter yet exist.

The curious triangular bridge at Croyland is referred to, it is said, in an ancient charter of the year 943. The architecture of the existing structure, however, clearly proves it to belong to the thirteenth century.

The first mediæval bridges of which authentic accounts are preserved are a pair erected over the two branches of the river Lea at Stratford, built between 1100 and 1118 by Matilda, Queen-Consort of Henry I., who narrowly escaped drowning there, and where many others had perished; she bequeathed certain manors and a mill to the Abbess of Barking for their maintenance and repair.

London Bridge, although by no means the longest in Eng-

land, probably out-weighed all others in respect to the mass of masonry it contained. Its erection occupied thirty-three years, the work being commenced in 1176 and finished in 1209. A priest, Peter of Colchurch, was the architect. It consisted of twenty arches, proportionately narrow, the piers being nearly as wide. The roadway was nine hundred and twenty-six feet in length, and from end to end it was enclosed by lofty timber houses. On the centre pier was the chapel with its tower, and at the ends were the gate-houses, on which were stuck upon poles the heads of traitors and unfortunate partisans, it might be as many as thirty at one time. This old bridge carried safely across the river the traffic of London for six hundred years.

A famous bridge, and the longest in England, spanned the Trent at Burton, built in the thirteenth century by Abbot Bernard. Its length was fifteen hundred and forty-five feet, embracing no fewer than thirty-four arches. It was only recently removed.

Chester bridge and others in England were built about the same period, and Scotland was not without examples, as the following interesting and instructive passages from Cosmo Innes's "Sketches' show. Page 157:—"When we consider the long and united efforts required in the early state of the arts. for throwing a bridge over any considerable river, the early occurrence of bridges may be well admitted as one of the best tests of civilisation and national prosperity. The bridge over the North water (of stone) has already been mentioned. We find a bridge existing over the Esk at Brechin, and the land of Drumsleid appropriated for its support in the early part of the thirteenth century. In that age there was a bridge over the Tay at Perth; bridges over the Esk at Brechin and Marykirk; a bridge over the Dee at Kincardine O'Neil, probably another at Durris, one near Aberdeen, and one at the mouth of Glenmuick; even a bridge over the rapid Spey at Orkill. If we reflect how few of these survived the middle of the fourteenth century, and how long it was and by what painful efforts before they could be replaced in later times, we may form some idea of the great progress in civilisation which Scotland had made during the reign of William and the peaceful times of the two Alexanders." Page 194:—"We are not informed of what materials the bridge of Ettrick was constructed, for the support of which King

Alexander II. gave the monks (of Selkirk) a grant of land, and where the Abbot afterwards held his court of regality; but we have a very formal transaction recorded for leave to build a bridge across the rivulet of Blackburn, and to have passage for carts and waggons to and fro; and we find the bridge was designed to be of stone, in the middle of the thirteenth century."

It must be evident from the preceding particulars that the thirteenth century was a period of active bridge-building, probably the chief era both in England and Scotland.

Early bridges were, of course, subject to great vicissitudes. Generally they were well built, but their weak point was the foundation, which, unless on rock as at Dumfries, was liable to be undermined by the scour of the river; and improved modes of travelling, for which they were found altogether inadequate, necessitated in many cases their destruction, in order to be superseded by structures adapted to modern needs. An instance is mentioned in Smiles's "Lives of Engineers," where a post-chaise was obliged to retrace its route for fourteen miles on coming to an old bridge unfortunately too narrow by three or four inches to enable the vehicle to pass.

I should mention that as crosses were reared at the fords, so, wherever a bridge was built, a chapel appears to have been founded, to which a priest was attached to pray for the soul of the founder, to receive passage money, and sometimes to pray with the passenger for the safe termination of his journey; usually it was placed over the centre pier, which was carried up for its support.

Returning to the bridge of Dumfries, the structure, like all mediæval work, displays some evidence of architectural art. Even the small culvert through the abutment before mentioned is furnished along the side walls with a neatly splayed and hewn projecting base-course, and the top appears to have been originally closed by a pointed arch of early English form. The piers also show a similar base-course, and the outer angles of the soffits of the arches are neatly chamfered. Another point suggestive of early work is the thinness of the arch stones. Up to the parapets, which have evidently been rebuilt of rubble, the masonry of the bridge is squared ashlar in courses. The exposed parts are much weathered and patched by repairs, but the parts underground, which were exposed some years ago,

exhibit high-class workmanship, the ashlar being finely hewn and in regular courses eleven inches in height. One other characteristic of an early period is revealed in the proportionally narrow arches compared with the piers. This may be tested by comparison with the old bridge at Ayr, built two centuries later. In our bridge the average arch is only one and threequarter times the width of the pier, while the arch of the Ayr bridge is three and a half times the width of the pier. The following considerations likewise enforce acceptnce of the thirteenth century origin of the bridge:-

Of all periods the thirteenth century was the most propitious for the accomplishment of such a work. Civilisation was advanced, the country was prosperous and at peace, and no symptoms manifested themselves of the devastating War of Independence which shortly emerged and which impeded building

operations in Scotland for a hundred years.

It was pre-eminently the building age. Gothic architecture reached its full development, exhibiting the perfection of art, and of engineering feats in securing equibilibrium of the parts of light and airy buildings, such as had never before been seen.

Bridges had become a necessity along the main thoroughfares, and there was no more important route than the great road leading from England to Galloway, including all the westmost parts of Scotland and Ireland; and the water of Nith, on account of its width and volume and the frequency and force of its floods, specially demanded provision for a dry passage from bank to bank; and it is hardly conceivable that a task so vital should be left unaccomplished.

The bridge of Dumfries was closely associated with the Friars Minors, and it will be observed that the relative geographical situation of the Friary and the Bridge points to the fact that the structures were parts of the same building plan.

The foregoing circumstantial evidence establishes, I think, a highly probable case in favour of the reputed era of the founding of the bridge, and must weigh in giving support to other proofs which it may be possible to adduce.

I come now to Charter evidence, and as a layman am sensible of inability to give it adequate treatment. This, however, is of less consequence, as Mr Moir Bryce deals with this aspect of the case in his book on the Grev Friars of Scotland,

now in the publishers' hands. I will only outline the evidence under this head. Mr Moir Bryce's book will be of great interest here, containing as it does much new matter regarding the Dumfries establishment of the Friars.

Devorgilla Baliol in the thirteenth century possessed the superiority of Galloway, which she had heired from her father Alan. Among her other good works she founded the large and beautiful pile of Sweetheart Abbey, compared with which any person of ordinary skill must be satisfied that the building of the bridge of Dumfries was of easy execution. She died in 1289, and her family having become extinct, King David II. in the month of September, 1367, granted and confirmed to Archibald Douglas the Grim, for his diligent and acceptable service, all the royal lands of Galloway, with all feudal pertinents, etc., he (Douglas) rendering, in the name of blenche farme, a white rose at our castle of Dumfries.*

The connection of the Douglas family with the bridge is important. Two of their charters relative to the bridge customs are extant. The first is dated 16th January, 1425, and the second 27 years later, viz., the 4th January, 1452. I am indebted to the Town Clerks and their Council for liberty to use these charters, and the Curator of the Historical Department of the Register House kindly furnished me with translations, the text of which follows.

The charters were as follows:—

Grant by Margaret Duchess of Touraine, etc., of the toll exigible at the Bridge of Nith, to the Friars-Minors, Dumfries. Threave, 16th January, 1425-6.

To all who shall see or hear this charter, Margaret Duchess of Touraine, Countess of Douglas, Lady of Galloway and Annandale, greeting in the Lord everlasting. Know ye, that we in our pure and simple widowhood, have given, granted, and by this our present charter, confirmed—for the salvation of the soul of the most serene prince, James, by the grace of God, illustrious King of Scots, for the salvation of the soul of our late most revered lord and spouse, Archibald Duke of Touraine, Earl of Douglas, Lord of Galloway and Annandale, of our soul and the soul of our late dearest son, Sir James Douglas, and for the salvation

of the souls of our predecessors and ancestors, our sons and our daughters, and the souls of all the faithful dead-to God Almighty, the blessed Virgin Mary, St. Francis and the Warden and Friars-Minors of Dumfries, for ever serving God there, All and Whole that toll or custom which we and our predecessors were accustomed to receive at the bridge-end of Nith of Dumfries. To be held and had the said toll or custom, with the pertinents, to the said Warden and Friars, as freely, quietly, wholly, honourably, well, and in peace, in all and by all, without any contradiction or drawback, as fully, quietly, or honourably as it was held, received or in any manner possessed by us or our predecessors. Rendering therefor yearly, the said Warden and Friars, the offering of holy prayers, for every other secular service, exaction and demand, which can in any manner be asked or required from the said toll or custom. And we forsooth, the foresaid Margaret, Douchess of Touraine, shall warrant, acquit, and for ever defend, the above-mentioned custom or toll, to the said Warden and Friars, as said is. In Witness Whereof we have commanded our seal to be appended to this our present charter. Witnesses discreet men, Master Johne M'Ilhauch, rector of Kirkandris, our secretary, Sir William Jhonson, our chaplin, George Mur, and Patrick of Spens, with many others. At the "Treif," the 16th day of January, 1425.

Charter by James (ninth and last) Earl of Douglas to the Friars-Minors of Dumfries, of the Bridge toll, Dumfries, 4th January, 1452-3.

To all who shall see or hear this charter James Earl of Douglas and of Annandale, Lord of Galloway, etc., greeting in the Lord everlasting, know ye, that we have given, granted, and by this our present charter confirmed—for the salvation of the souls of noble and potent lords, James and William, formerly Earls of Douglas and Annandale and Lords of Galloway, and our dearest father (progenitoris) and brother, as also for the salvation of our soul, and the souls of our ancestors, and for the salvation of the souls of all the faithful dead—to God Almighty, the blessed Virgin Mary, St Francis and the Warden and Friars-Minors of Dumfries, for ever serving and to serve God there, All and Whole that toll or custom with the pertinents, which we and our predecessors were accustomed to receive at the bridge-end of Nith of Dumfries. To be held and had the said toll or

custom, with the pertinents, to the said Warden and Friars as freely, quietly, fully, honourably, well and in peace, in all and by all without any contradiction or drawback, as fully, quietly, or honourably as it was held, received, or in any manner possessed, by us or our predecessors. Rendering therefor yearly the foresaid Warden and Friars, the offering of holy prayers, for every other secular service, exaction and demand, which can in any manner be asked or required from the said toll or custom. And we forsooth the foresaid James, Earl of Douglas, shall warrant, acquit, and for ever defend the above-mentioned toll or custom, to the foresaid Warden and Friars, as said is. Witness Whereof we have commanded our seal to be appended to this our present charter. Witnesses:-Hugh, Earl of Ormonde, our dearest brother; Master William Croyster, protho-notary of the Apostolic See; Sirs William Stewart and Symore of Glendynewyn, of Dalswynton and Glendynewyn Knights; Master John Olyver, vicar of Kyrkleyn and Sir Thomas Gilbagy, vicar of Tralflate, with many others. At Dumfries, 4th day of January, 1452.

I am advised that these charters follow in form the usual mode of confirmation peculiar to the times, and they are not

original grants.

It is made abundantly clear by the terms of these charters that the bridge was in existence and a going concern before 1425, and that the customs had been in the possession of the Douglas family for an indefinitely earlier period. Obviously the bridge was a pertinent of the lordship of Galloway included in King David's charter, and we must search for the era of its origin prior to the infeftment in favour of Archibald the Grim, and in connection with the establishment of the Friars-Minors in Dumfries, for whose benefit the customs it bore were imposed.

The Friars were established at Dumfries prior to the year 1265, say the middle of the thirteenth century. This is proved by the Exchequer accounts of that year (1265), in which are noted items of payment in connection with an embassage by the Friars to the Isle of Man.* Devorgilla Baliol, as already stated, at that time possessed the lordship of Galloway, and as superior the duty and privilege lay with her and no one else to rear the fabric of the bridge and, with the King's consent, to impose the tolls or customs. There is no competing name claiming to be

its author, and if we reflect that at this period the country was more civilised, prosperous, and peaceful than it was at any after mediæval time; that building in Scotland had expanded to the utmost limit ever attained, not only as regards stately ecclesiastical edifices, but in the art of bridge-building also—a fact which has not been appreciated, thereby leading to the antiquity of the bridge being challenged; that a bridge over the Nith at Dumfries was at the time and for the convenience of the founder imperatively needful; and that the characteristics of the fabric itself chronologically harmonise with the reputed era of its foundation. "The vera wrinkles Gothic in his face," as Burns says, prove, we think, that the old bridge of Dumfries, which we still have, was reared six hundred and fifty years ago by a lady of great bounty and unbounded beneficence.

How many and varied are the burdens this old bridge has borne! It has rung under the hoofs of the First Edward's celebrated white charger, and the horsemen and footmen marching to and from his Galloway wars; Baliol, Comyn, and Bruce, and many high officers known to history trod its pavement. In later and evil times of the Civil War the heads of the guilty, and frequently of the innocent, were, as at London Bridge, here exposed. The heads and right arms of John Grier and William Welsh, fugitives from Pentland, in 1666, and in 1685 a quarter of Richard Rumbold, alleged to be concerned in the Ryehouse plot, of whom in Macaulay's History there is a vigorous defence.

It is pleasant to turn from such gruesome associations to speak a word of Robert Burns, in whose day the whole traffic of the town continued to be borne by the old bridge, the new one being opened only a year before his death. If Burns has not immortalised our bridge in song he has done so by frequent journeyings, sword-cane in hand, to and fro to the house of his trusty friend, John Syme of Ryedale, over, as the new bridge has it, "your poor, narrow footpath of a street, where twa wheelbarrows tremble when they meet."

Bailie Lennox, in proposing a vote of thanks to Mr Barbour, said it was of great value to have an interesting translation of the two old Douglas charters, which bore out the tradition that the Old Bridge was built by Devorgilla. They hoped that Mr Barbour would long be spared to give similar interesting papers.

Mr W. A. MacKinnell, in seconding, said this was an age in which some of the most cherished traditions were swept away, but he thought that after hearing the paper from Mr Barbour there could be very little doubt remaining that the association of Devorgilla with the building of the Old Bridge had been conclusively proved. They were also glad to hear that the bridge was likely to be a structure for a considerable time to come. He thought its artistic value could not well be over-estimated, and it would be difficult to imagine what Dumfries and the river would be without it.

In reply to some questions by the Chairman, Mr Barbour said whether there was a toll-house at the end of the bridge or not he could not tell. The central pier, however, was carried up, and in those days it was at this part where chapels were erected. At the present time there was only one bridge chapel in existence, but he did not recollect at the moment where that was. It was quite possible there might have been a chapel at the centre, and if there was a gate, it would be at the end, the same as in the case of London Bridge. Comparing the Old Bridge with Ayr Bridge, Mr Barbour pointed out that, while the latter had four arches, the former had originally nine. At a meeting of committee held earlier in the evening they had been discussing the excursion to Dundrennan, and one of the reasons for going there was to see a fine old bridge, which had scarcely been noticed. It had been widened, but he believed that onehalf of it was co-eval with the abbey and the other half was modern

Mr S. Arnott said he wished to express his own personal obligation to Mr Barbour for his most interesting and valuable paper. He was sure that all Dumfriesians regarded the Old Bridge with very special reverence. It was part of their lives, and they felt a special liking for the Old Bridge, with its picturesqueness and beauty. When they compared it with the Ayr Bridge, he thought they would feel specially proud of the architecture and the construction of the Old Bridge of Dumfries. On this occasion they owed Mr Barbour a special vote of thanks, because he was in a sense a guardian of this bridge. On a former occasion that society intervened with very satisfactory and happy results, in order that the character of the Old Bridge might not be destroyed. He believed that at that time Mr

Barbour was one of the moving spirits, if not the moving spirit, in preserving the Old Bridge to them. Mr M'Diarmid mentioned in the course of a discussion about the builder of the Old Bridge that Mr Cosmo Innes appeared to hold at that time the opinion that no bridge of this kind could have been built by builders of the period of Devorgilla. Mr M'Diarmid, however, preferred the old tradition, and although tradition did not count for everything it counted for a good deal in a matter like this, and he thought that the statement referred to that no builders could have erected buildings of that kind did not carry very much weight, in view of the character of Sweetheart Abbey and other buildings of that period. The ancient date of the bridge was largely borne out by various documents, which had been translated by Dr Chinnock, and which would appear in a future volume of the transactions. He hoped that at some future time Mr Barbour would deal with another very interesting subject, the old streets of Dumfries. They did not know very much of these. some alterations were being made at Mr Kelly's shop in Friars' Vennel, the workmen came on some pavements behind the shop, which was supposed by some to be the old Friars' Vennel. did know whether that was correct or not, but it would be very interesting to clear up questions as to which were the old streets of Dumfries. In his early days he knew many old houses in Friars' Vennel, and one of the oldest stood on the site of the building at the west corner of Irish Street and Friars' Vennel, with a projecting porch-way, and which was a butcher's shop in those days. There were a number of other very old buildings, which seemed to show that that was then the main street to the river, and the position of the old chimney of the monastery also pointed to that.

BIRD NOTES. By Mr R. SERVICE, M.B.O.U., Janefield, Dumfries.

Mr R. Service gave an address of considerable interest on some incidents in bird life during the past year. He said that the season of 1907 was a very peculiar one from the meteorological point of view. It was rare indeed that they experienced such a long-continued period of low temperatures with extremely humid air, and these circumstances were not without strong

influence upon the birds. The first thing that they caused was a general retardation of the vernal migration movement. Up till the middle of April the weather was fairly normal, and the birds shewed every indication of coming away with their usual activity. Both in our own neighbourhood and throughout Great Britain unusually early dates were recorded among the small birds. That, however, soon came to a termination, and a long succession of bad weather set in about the third week of April. One very prominent incident was the stay opposite Southerness and Carsethorn, and along the estuary of the Nith, of a very considerable flock of the bar-tailed godwits, a species which went to the Lapland fells, and not any nearer, for nesting purposes. They remained there through the brief summer of the northern regions, and were back here again by the beginning of August. That particular flock to which he referred remained on week after week throughout the whole of last summer, and was noticed by many of the local gunners at Carsethorn, although he did not see them till the end of July. About two-thirds of them were in full breeding plumage, probably a unique incident so far as this district was concerned. Another incident which was worthy of mention was the stay of two pairs of eider ducks on the Colvend coast during the whole of last summer; but whether they bred or not was doubtful. Many times during the twenty-four hours one or other of the sexes was absent, showing that nesting operations were attempted. Nests must have been prepared, and probably eggs were laid. The eider duck had gradually crept round the Wigtownshire and Ayrshire coasts, but so far it was not recorded that the nests had been made in the Stewartry, and the Dumfriesshire coasts were not at all suitable. There was, however, little doubt but that this year or next year someone would be lucky enough to find the first eider duck nest in the Stewartry. He also noted the stay at a certain place—not far from where they were, but it would not be proper to mention where-of five ruffs and reeves along the Nith margin during last season, though they might not have attempted to nest. The ruffs had on their beautiful and very characteristic nuptial plumage during that time, and they carried out their sham fights to perfection. They stayed in the neighbourhood during the summer, and were a matter of great interest to local faunists. No doubt their stay was caused by the unusual weather conditions which were ex-

perienced last season, and he for one would not care if he never saw a similar one. Autumn came on, and was characterised by extremely rapid movement of birds southwards. Birds did not linger as they usually did, but passed on with great rapidity, many of the species which were in the habit of staying for weeks passing by in a single day or night. Night was the usual time for travelling, and in many cases their identity could only be made out from a considerable experience of their notes. The notes of birds travelling at night during the autumn migration differed from these emitted during the migration northward in the spring, and both series of notes were widely different from any that they emitted while feeding or courting, or sitting at their usual daily occupation in the fields, woods, or hedges. That constituted one of the particular charms of migration, because at night, when the birds were passing, as they always did-and he had heard some of them as he came along to that meeting—they emitted notes which were of extreme interest and of considerable value to migration data. The great bulk of these birds made no attempt at song, but by means of their squeaking chirps or cheeps they were able, if he might so express it, to keep in touch with one another on their journey. An unusually large number of birds passed the winter with us, including any number of wild ducks, and at least four species of geese. These grand winter visitors, the wild swans, also put in considerable appearance, and the bird observer and others had ample employment during the last winter to watch the different species. One instance he might mention was rather rare, and he happened upon it by mere chance. On the 12th of last December he was on business along the Kirkcudbright coast, and at that time they had a long series of stormy winds. Birds were driven off their usual feeding grounds, and that particular day, during a calm between storms. he was astonished to see thousands of birds in a grass field near the Manxman's Lake, off the ordinary shore, and well up among the pasture lands, and not far from the hedge along the public road. A large proportion of the birds were bar-tailed godwits, which were extremely shy birds. He was privileged to get pretty close to them, but they were unconscious of any intruder about. He watched them indulging in their usual interesting habits, and picking up worms, grubs, caterpillars, and beetles in a way one could hardly think possible with such a long up-turned bill, all

feeding with the utmost unconcern within half-a-gunshot of the hcdge. Although he stood up without any attempt at concealment, they went on feeding, oblivious of his presence, which was rather an ususual thing, a similar incident having never occurred before in his experience. He came upon another movement in the same accidental way some weeks ago. He was on business on the Dalbeattie road between Whiteside of Kirkgunzeon and Lochanhead, and he passed several hours in that direction. That was the day before the great snowfall, and a long stretch of fields along the road was covered with birds of many different species, such as gulls, plovers, starlings, in thousands. Probably there would be twenty thousand of them, and they were in an extremely restless mood, fighting with each other as if they were strangers, as no doubt they were. He thought perhaps that an early migration movement was the explanation of their presence, but he found that he was quite mistaken in that; and that this was entirely one of these movements caused by the bad weather in front driving the birds back from their usual travels. He saw them in a long stretch of fields, where they were comparatively sheltered from the storm. They had strong gusts of westerly wind, driving showers of snow before it, and the birds appeared to be in a tired state and glad indeed to get the shelter. Such a movement as that, retarding migration, did not occur in this country to any extent, and this was the only one of any magnitude in the course of a long while he had seen. Ornithological literature was often taken up with descriptions of similar things elsewhere, and especially the countries around the Baltic Sea, where millions of birds were driven back in the same way by some unexpected snowstorm. He wished to refer to another subject for the purpose of voicing, he hoped, their as well as his own great reprobation of an act that was paragraphed recently which took place at Auchenskeoch in the shooting of a golden eagle. He considered it a most dastardly and uncalled for act. As a rule, he did not agree very much with the rather ignorant sentimentalism that was sometimes expressed at the killing of rare birds. The shooting of some of these birds was the means sometimes of finding out many of the problems attached to the study of bird life, and particularly the migration and distribution of birds. But the killing of a bird such as the golden eagle was, he thought, very reprehensible indeed, and all the more so

as during the last few years a very successful attempt had been made at protecting this bird-successful in respect that nesting was brought off and hatching took place. The Duchess of Bedford had taken a great interest in the golden eagle, and this species had returned to Cairnsmore as a breeding place after an absence of more than sixty years. The nest was protected day and night for six weeks, a man never being absent all that time. That of itself meant considerable expense, and they hoped that the results would be satisfactory. Yet when all this care was being taken, they had one of these eagles being shot by a misguided keeper on Criffel, and he hoped they would join him in expressing their disapprobation of such a thing taking place. A good deal of talk had taken place among agriculturists during the last ten or twelve years in reference to the killing of rooks, and what, he thought, he might call a rather artificial agitation had been carried on for the destruction of the birds in the supposed interest of agriculturists. For his part he had taken a life-long interest in rooks and their ways, and he never saw why agriculturists, of all people under the sun, should wish to destroy them. No doubt they did harm to farm crops, but that could be got over with the greatest of ease. For ten months of the year the rook was the only friend the farmer had in the bird direction, so that it was rather a queer thing to hear farmers being constantly asked to shoot down the rooks. This so-called demand—an artificial demand—for the destruction of rooks was really in the interests of the game preservers. He did not say a single word against game preserving; that was a different matter altogether; but the gamekeepers were a body who could look after these things quite well, and destroy such rooks as they wanted to, without asking the farmers to do it, and try to make them believe that it was in the farmers' interest it should be done. The whole thing had arisen from a curious change that took place in the habits of the rooks 28 or 30 years ago. Much time had been spent in investigating why the rooks should have developed the carnivorous habit of the carrion crow, but it was a fact that this change had taken place. This had led to rooks destroying game eggs, and even rabbits and hares in the young stage. The game preservers ought to look after that and allow farmers to preserve them for the purpose of looking after grubs and other insect pests which would, in the absence of rooks. destroy an untold amount of farm crop. An interesting discussion took place at a meeting of Dumfries Agricultural Society the other day, at which it was advocated at the same time as rooks were being destroyed that wood pigeons should also be shot down or killed in some way. It was advocated that some one should try to introduce pigeon diphtheria for the purpose of inoculating wood pigeons here, and so lead to the diminution of these birds. Those who talked about the destruction of pigeons seemed to overlook a great deal of the biology of the bird. They forgot that most of the pigeons with us during the winter season were nearly all imports. Almost all of them came over the North Sea in great numbers from North Germany, Sweden, Norway, and Western Russia. So that even if they killed the pigeons in this district of ours they would not destroy the stock to any appreciable extent. He maintained that the proper time and method of killing pigeons or lessening their numbers was during the nesting season. The diphtheria of pigeons, he was sorry to say, was to be seen in our own neighbourhood, although in small numbers as yet. Diphtheria was an exceedingly contagious disease, and there was no saying where it would go. Only the other day he came upon a couple of dead pigeons, but he found that they had had diphtheria, and he threw them down. They would probably have been of some interest for study if he had taken them home, but diphtheria was a very dangerous trouble indeed, and there was no doubt that it was communicable to human beings from the lower animals. Many people held different views as to the origin of the diphtheria among the wild pigeons. To him it seemed plain that the wild pigeon diphtheria came from the domestic pigeon. For a great many years past the sport of pigeon homing had developed in an extremely rapid manner. Nearly every Saturday during summer large special trains were run from various of the manufacturing centres of England with thousands upon thousands of the ordinary domestic homing pigeons. Many of these pigeons were taken a greater distance than they could find their way home, and they never returned. They strayed, and with no water and not much food, diphtheria set in among them. These stray pigeons went to the haunts of the wood pigeon, and that accounted for the spread of diphtheria to the wild ones. For a long period of years they had enjoyed the operation of that

beneficent Act, the Wild Birds Protection Act, originated and largely improved in various amendments by Sir Herbert Maxwell, and only the other day an important alteration was made. Woodcocks were protected from the first of March to the first of August, and by an extension recently adopted by the three County Councils of Dumfries, Kirkcudbright, and Wigtown, they were protected till the first of October. He noticed a communication to the "Times" a few days ago by Sir Herbert, in which he approves of the extension on the score that local sportsmen will now get a certain amount of woodcocks bred in our own neighbourhood. It was a question if the baronet was right; he doubted very much if he was. It was the case that our own local woodcocks went away from their breeding places as soon as the nesting season was over, and immediately they were strong enough to go on the wing; and he thought that the extension of the period would have the effect of allowing some foreigner to have a larger share of the woodcocks than he was entitled to.

GLEANINGS OF OLD DUMFRIES AND GALLOWAY. Translated in the British Museum from the Register of the Great Seal of Scotland. By Dr E. J. CHINNOCK.

THE LORDSHIP OF GALLOWAY.

1426. The 21st year of James I. At Edinburgh, 3rd May. The King has granted to his sister Margaret, Duchess of Tyrone, Countess of Douglas, Lady of Galloway and Ananddale, that she should hold and possess the lordship of Galloway, for the whole of her life, with all the liberties, statutes, and customs as Archibald, Duke of Tyrone, etc., the King's brother, or Archibald de Douglas, the said Duke's father, held in their times.

THE LORDSHIP OF ANNANDALE.

1427. 21st year of James I. At Edynburgh, 3rd Jan.

The King has confirmed a charter of the late Archibald, Earl of Douglas, etc. [by which he granted to Michael de Ramsay, for his service, the lands of Ramarskalis and Grenelandis in the lordship of Anand-dale, which belonged to William, the son of Henry: also he granted to the aforesaid M. de R. and his wife Christian and to the survivor and to the heirs of

their bodies begotten from legal and mutual concubitus, the lands of Harthwat in the forest of Daltoun, and in the lordship of Anand-dale, which belonged to Roger of Lochiemos: the said lands of Remarskalis and of Grenelandis to be held by the said Michael and his heirs whomsoever; and the said lands of Harthuat by the said Michael and Christian, and the heirs of their bodies mutually begotten, in fee; but the aforesaid Mich. holding the strigils for the said Arch. once every year during the lifetime of the said Arch., and after the death of the said Arch. wished that the land of Harthwal should return to himself and his heirs. To be paid annually to the heirs of the said A. at the castle of Lochmabane one penny of silver in name of white farm. At Edynburgh, 10th May, 1419].

THE BARONY OF SANQUHAR.

1440. The 4th year of James II. At Edinburgh, 27th April.

The King has confirmed to Robert de Crechtoun of Sanquhare, knight, the barony of Sanquhare in the sheriffdom of Drumfres, which the same Robert has personally resigned, to be held by the said Robert and his male heirs lawfully begotten of his body, failing whom, by William, Lord of Crechtoun, knight, and his heirs, etc., failing whom, by the lawful and nearer heirs of the said Robert whomsoever.

THE SHERIFFDOM AND BURGH OF DUMFRIES.

1450. 13th year of James II. 6th January.

The King has granted to Ninian de Murray for the whole of his life, 10 marks yearly, to be raised from the roads of the Justiciary and from the dues of the court of the sheriffdom of Drumfres and stewardship of Ananddale; if these be not sufficient from the King's treasury.

The King has granted to David de Murray, brother of Ninian de Murray, for the whole of the life of the said Ninian, 10 marks a year, to be raised from the royal farm of the burgh of Drumfres.

THE BARONY OF KIRKMICHAEL.

1440. 4th year of James II. At Edinburgh, 2nd March. The King has confirmed the charter of David de Lyndesay, Earl of Crawfurde, and lord of the barony of Kirkmichel [by which he granted to William, Lord de Crechtoun, Knight, and his heirs, the lands of Dalfubil-Garvald, the town of Dalfubil, with the mill of the same, Garvald, Mikkilholme, Achinkeash, the Knoppis, Molinne, Rahillis, Monygep, Cronyantoun, with the tenantries and services of the freeholders in the barony of Kirkmichel, in the sheriffdom of Drumfres, which Sir James de Douglas, Lord of Dalketh, has personally resigned. To be paid at Kirkmichel one pound of cinnamon on the feast of St. Michael the Archangel (29 Sept.), in the name of white farm. Witnesses-John, Bishop of Glasgow; John, Bishop of Murray; Alexander de Levingstoun, Lord of Calentare; Sir Alexander de Setoun, the Master of Gordon, Sir James de Edmonstoun, John de Cokburn, and William de Cranstoun, knights; Master Thomas de Lawedre, the master of Soltre; Master Richard Crag, Vicar of Dunde; and Thomas de Cranstoun, Provost of Edinburgh, At Edinburgh, Feb. 26, 1439].

THE STEWARDSHIP OF ANNANDALE.

1440. 4th year of James II. At Strevelyn, 6th August.

The King has confirmed the charter of Archibald, Earl of Douglas, Lord of Galloway and Anand-dale [by which he granted to Sir Herbert de Maxwell, knight, Lord of Carlaverock, for his homage and service, the office of steward of the whole lordship of Anand-dale, to be held by the said Herbert and his heirs for ever from the said Earl, with the power of holding courts, punishing of offenders, and levying dues of court, etc., and of doing all and singular the things which are known to pertain to the office of steward. Besides he has granted that the said Sir Herbert and his heirs may receive and levy to their hands 20 pounds from the dues of the steward's courts, which they will hold; and whatever remains shall be carried to the chamberlain of the said Earl. And also he has granted to the said Herbert all fines of 18 shillings and below, which are made in the said courts, to be levied and taken at his good pleasure. At Linlythkow, 8th Feb., 1409].

THE LORDSHIP OF GALLOWAY.

1450. 13th year of James II. At Edinburgh, 26th Jan.

The King, after mature deliberation, etc., has granted to William, Earl of Douglas, etc., for his service the lands of the

whole lordship and regality of Galloway, both above and below the water of Cre, in the sheriffdom of Drumfres, which the same William has resigned in the said Parliament, and which also Margaret, Duchess of Tyrone, the King's aunt, in her pure widowhood, has resigned through her agents: to be held by the said William and his male heirs; which failing, by the lawful and nearer heirs of the said William whosoever. To be paid annually at the bridge of Drumfres, one red rose, on the feast of the Nativity of the Blessed John the Baptist (24 June), in the name of white farm.

THE LORDSHIP OF ANNANDALE.

1450. 14th year of James II. At Edinburgh, 31st March.

The King has confirmed to Robert Creichtoun of Sanch-quhare, knight, and to his heirs and assigns, the lands of Houthwate, Stanyris, Knokkis, Twathtwatis, 5 merks of the lands of Wamfra, 1 merk of the lands in the village of Moffat, in the lordship of Anand-dale, in the sheriffdom of Drumfres, which the same Robert has personally resigned. Three cuttings to be paid annually to the court at Lochmabane.

THE BARONY OF TIBERS.

1451. 15th year of James II. At Edinburgh, 27th Feb.

The King for the singular favour, zeal, and affection which he has exhibited towards himself, has granted to George de Creichtoun of Carnis, knight, the King's Admiral, and to his assigns, the lands of the barony of Tybris, in the sheriffdom of Drumfres.

THE LORDSHIP OF GALLOWAY.

1451. 15th year of James II. At Edinburgh, 6th July.

The King, after mature deliberation and with the full assent of the three estates of the realm in open Parliament, has confirmed to William, Earl of Douglas, etc., for his faithful service, etc., the lands of the lordship and regality of Galloway, on the eastern side of the water of Cree, in the sheriffdom of Drumfres, which the same William has personally resigned. To be held by the said William and his male heirs; failing whom, by the lawful and nearer heirs of the same William whomsoever, in free regality, cum furea and fossa, etc., to-

gether with the presentations of churches belonging to the aforesaid lordship and regality, notwithstanding any statutes, etc. To be paid one red rose at the bridge of Drumfres on the feast of the birth of the Blessed John the Baptist in the name of white farm.

THE LORDSHIP OF GALLOWAY.

1451. 15th year of James II. At Edinburgh, 6th July.

The King, after mature deliberation, etc., of the three estates of the kingdom in open Parliament, has confirmed to William, Earl of Douglas, etc., for his continuous and faithful service, etc., the lands of the lordship and regality of Galloway on the east side of the water of Cree and the lands of Butill, in the sheriffdom of Drumfres; which the same William has personally resigned: the said lands of the lordship and regality of Galloway, together with the castle of the Trew, and the lands of Butill, to be held by the said Earl, and the male heirs of his body lawfully begotten; failing whom, by James de Douglas, knight, full brother of the said William, and the heirs, etc.; failing whom, by Archibald de Douglas, Earl of Moray and his heirs, etc.; failing whom, by Hugh de Douglas, Earl of Ormonde and his heirs, etc.; failing whom, by John de Douglas of Balvany and the heirs, etc.; failing whom, by the lawful and nearer heirs of the said William whomsoever, in free regality, cum furea et fossa, etc., notwithstanding any statutes, etc., made in any Parliament and general councils in the minority of the King or any other premisses or any premiss will be able in any way to be derogated in future. To be paid one red rose at the Bridge of Drumfres on the feast of the birth of St. John the Baptist (24 June), in name of white farm.

THE BARONY OF TIBERS.

1451. 15th year of James II. At Edinburgh, 10th June.

The King has confirmed the charter of William Matelande of Thrilstane [by which in zeal of brotherly love he granted to his full brother, James Matelande, and Egidia Skrymgeoure, his spouse, conjointly and separately the lands of Achinbrek, Dumbine, Quhithill, Clonga, Clongare, Ferdenalane, Clauchane, Auchinach, Braunchevil, Capilrig, and the Bagraw, in the barony of Tybris in the sheriffdom of Drumfres, to be held by the said James and Egidia and either of them surviving, and the

heirs lawfully begotten between the same; failing whom, again to return to the said William and his lawful and nearest heirs whomsoever in one free lordship. One penny of silver to be paid at the town of Tybris, in name of white farm. At Dunde, 3 Jany., 1450. The wards, etc., being saved to the King].

THE BARONY OF KIRKMICHAEL.

1450. 14th year of James II. At Striveline, 11th June.

The King has granted to William, Lord Creichtoune, Chancellor, his heirs and assigns, the lands of the barony of Kirkmichell, in the sheriffdom of Drumfres, which Alexander, Earl of Crawfurd, has resigned. One penny of silver to be paid in name of white farm.

THE LANDS OF TERRAUCHTIE.

1457. 21st year of James II. At Linlithqw, 25th July.

The King has confirmed to John Durant the lands of Traachty, in the lordship of Galloway, and in the Stewartry of Kirkcudbright, which the same John has resigned: to be held by the said John and Isabella, his wife, and either of them surviving, and after their death by John D., their son and heir, and by the male heirs of his body lawfully begotten; failing whom, by the male heirs lawfully begotten between the said John and Isabella; failing whom, by the lawful and nearer male heirs of the said John, the father, whomsoever; three cuttings to be paid annually at the three chief councils in the court of the Stewartry of Kirchcudbrycht, and the services due and customary.

THE LANDS OF KIRKPATRICK.

1463. 4th year of James III. At Edinburgh, 23rd August.

The King has confirmed the charter of Robert Crechtoun of Sanquhare, knight, and lord of the lands of Kirkpatrik [by which he granted to his son, Alexander de Crechtoune, for his good and faithful services, etc., the lands of Kirkpatrik, in the sheriffdom of Drumfres, excepted and reserved for himself and his heirs one acre of land of the said lands for his chief messuage of the same, to be held by the said Alexander and his male heirs begotten of his body lawfully; failing whom, by Laurence de Crechtoun, full brother of the said Alexander, and by his heirs, etc.; failing whom, by Thomas de C., also full brother

of the said Alex., and by the heirs, etc.; failing whom, by Patrick de C., full brother of the said Alex., and by the heirs, etc.; failing whom, to return to the aforesaid Robert and his heirs freely. Ward and relief to be paid when they occur. Witnesses: George de Crechtoun, son of the said Robert C.; Alexander Cathkart, Oswald Lockharte, Pat. Forman, Rob. Marschal, notary public. At Edinburgh, 20 Aug., 1463]. Wards, etc., being reserved for the King.

THE LANDS OF KIRKPATRICK IRONGRAY.

1463. 4th year of James III. At Edinburgh, 15th October.

The King has granted to Robert Heris and his heirs the lands of Kirkpatric-Grangray, within the Stewartry of Kirkcudbricht, in the sheriffdom of Drumfres, which Joneta, lady of Frendracht, has personally resigned.

JOHN HERRIES OF TERREGLES.

1459. 23rd year of James II. At Striveline, 24th January.

The King, because it was clearly evident to him that John Heris of Trareches, was incompos mentis, a fool, a natural idiot, and it is known that the royal majesty provides for such with timely remedy, lest their lands, moveable goods, and immoveable, be alienated, dissipated, etc., at the instance of the cousins and friends of the said John and for his advantage and profit, has appointed Herbert Heris, the brother of the said John, caretaker, administrator, and governor of the person of the said John and of the barony of Trareglis, Kirkgunzane, and half of the barony of Urr, and of all the other lands, etc., except 40 pounds of lands for the support of David Heris, son and heir apparent of the said John, at the ordering of the Queen; the present to last up to the legal age of the said David, namely 25 years.

THE LANDS OF KIRKMICHAEL.

1464. 4th year of James III. At Edinburgh, 28th January.

The King has granted to David, Earl of Craufurde, and Lord Lindesay, and his heirs, the lands of Kirkmichel, in the sheriffdom of Drumfres, which Margaret, Countess of Craufurde, mother of the said David, has personally resigned; free holding of the lands being reserved to the aforesaid Countess.

THE BARONY OF KIRKMICHAEL.

1464. 4th year of James III. At Edinburgh, 5th March.

The King has confirmed a charter of David, Earl of Craufurde, Lord Lindesay, and of the barony of Kirkmichel [by which he granted to Herbert de Johnstoune of Dalebank and his heirs. for his faithful service to the said Earl at the time when he was held a prisoner by James, the late Earl of Douglas, etc., and especially for the liberation and abduction of the person of the said Earl David from captivity and the hands of the said James, the lands of Nese and Gleneybank, namely, 3 merks; and also the lands of Dalerome and Cragschellis, namely other 3 merks; also the lands of the two Glenkillis, namely 6 merks; and also the lands of Holehous and Ledere, namely 3 other merks, lying in the barony of Kirkmichel, in the sheriffdom of Drumfres; and also the principal mill of the aforesaid barony of Kirkmichel, together with the office of baillie of the barony itself, as in another letter made for himself thence is more fully contained, to be done and answered annually from all the returns revenues, gains, and escheats of the said barony; but a fine only reserved from Wrangis to Herbert himself and his heirs, for his fees and services; one penny of silver to be paid at the chief messuage of the said barony on the feast of the birth of John the Baptist, in name of white farm. Witnesses: James, Bishop of St. Andrews; Andrew, Lord Avandale, Chancellor of Scotland; Master James Lindesay, Provost of Lincloudan and keeper of the King's private seal; Sir Walter Scot of Kirkurde; Alexander Forester of Corstorfyn, knights; Master George Abirnethy, Provost of the Collegiate Church of Dumbertan; and Nicholas Grahame, vicar of Kirkpatrik, notary public. At Edinburgh, 26th February, 1463.] Also another charter of the said Earl of Craufurde [by which, for his faithful service, etc. (as before), he granted to the said Herbert de Johnstoune and his heirs, the office of baillie of the whole barony and lordship of Kirkmichel, in the sheriffdom of Drumfres, to be done and paid from all returns, etc. (as before): he also granted to the said Herbert the power of holding courts, etc. At Edinburgh, 26 February, 1463].

THE LANDS OF ELEOCK.

1464. 5th year of James III. At Edinburgh, 21st October.

The King has confirmed the charter of Robert Charteris, Lord of Amysfield and Eleok [by which he granted to Sir Robert Creichtoune of Sanchare, knight, to his heirs and assigns, for his good services, etc., the lands of Eleok, in the barony of Sanchare, in the sheriffdom of Drumfres; to be held by the said Robert of the King; one penny of silver to be paid in name of white farm. Witnesses: Sir David Heris, son and heir apparent of John H., Lord of Trarikillis, knight; William de Douglas, Lord of Drumlanrig; James de Douglas, John Menzeis of Balveny, Luke Charteris, Master Thomas of M'Ylhauch, rector of Tynwald; and David Rede, notary public. At Edinburgh, 21st August, 1463].

THE BARONY OF SANQUHAR.

1464. 5th year of James III. At Edinburgh, 21st October.

The King has confirmed the charter of Robert de Creichtoune of Sanchare, knight [by which he granted to Robert Charteris of Amysfelde, his heirs and assigns, for his good service, etc., an annual return of 20 pounds from the lands of the barony of Sanchare, in the sheriffdom of Drumfres; one penny of silver to be paid in name of white farm. Witnesses: Sirs David Heris of Avandale, John Karlile of Torthorwald, knights; John Maxwell, steward of Anand, Arch. Stewart of Castelmylk; David Kirkpatrik, Thos. Unthank, notary public.

THE SHERIFF OF DUMFRIES.

1464. 4th year of James III. At Edinburgh, 23rd April.

The King has confirmed a charter of King James II. [by which he granted to Robert de Creichtoun of Sanchare, knight, the office of Sheriff of Drumfres, to be held by the said Robert and the male heirs of his body lawfully begotten; failing whom, any lawful and nearer heirs of the said Robert, with the fees and profits of the same; and with the power of holding courts, etc. Witnesses: William, Bishop of Glasgow; John, Bishop of Dunkeld; William, Lord Creichtoun, Chancellor; Thomas, Lord Erskin; Patrick, Lord le Graham; Alexander, Lord Montegomery; Andrew, Lord le Gray, Master of the King's Household. At Strivelin, 6th November, 1452].

THE LANDS OF DRYFESDALE.

1464. 4th year of James III. At Edinburgh, 23rd April.

The King has confirmed a charter of James II., King of Scots sin which he confirmed to William, Lord de Creichtoune, knight, the lands of the holdings of Drivisdale and of Turmore, in the lordship of Anand-dale, in the sheriffdom of Drumfres, which the same William personally resigned: to be held by the said William and his male heirs lawfully begotten of his body, by Robert de Creichtoune of Sanchquhare, knight, his heirs, etc.; failing whom, by any lawful and nearer heirs of the said William whomsoever. Witnesses: John, Bishop of Glasgow; David, Abbot of the Monastery of Cambuskuneth; Walter, Abbot of the Monasterv of the Island of St. Columba; Alexander de Levingstoune of Calentar; John de Cokburn, knights and masters William Trumbule, Keeper of the Privy Seal; John Scheves, Clerk of the Rolls and Register; Nicholas de Schoriswod, Clerk of the King. At Striveling, 19th August, 14417.

THE CORONATOR OF NITHSDALE.

1469. 9th year of James III. At Linlithqw, 8th January.

The King has granted to Robert de Crechtoun of Sanchare, knight, and to his heirs, the office of Coronator of Nythisdale, in the sheriffdom of Drumfres, which Alex. M'Math of Dalpedar has resigned.

THE LANDS OF KIRKENNAN.

1464. 4th year of James III. At Aberdeen, 17th July.

The King has granted to William, Lord Monepenny and his heirs, the lands of Kirkennane and the barony of Torstrachane, with its tenants and tenancies, in the lordship of Galloway and the Stewartry of Kirkeudbricht, which Lord Hammyltoune and Eufamia, Countess of Douglas, his wife, have resigned at the Monastery of Aberbrothok.

Lands of Mabie, &c.

1468. 8th year of James III. At Edinburgh, 18th June.

The King has confirmed the deed of William M'Coulloch of Kirkmabrik [by which he sold and alienated to Robert Heris of Kirkpatrick Yrnegray, his heirs and assigns, the lands of Doularg, Sanctbridesholme, the Crukis, half of the lands of Maby, Dalchene, and Cragvile, half of the lands of Machrewin, in the lordship of Galloway, the stewartry of Kirkcudbricht, for a certain sum of money paid by hand, to be held by the said William from the King, one red rose to be paid to the King in name of white farm, upon the Bridge of Drumfres. Witnesses: Gilbert M'Culloch of Cardennes, Rolland Elwald, George of Wardelaw, Donald of Law, John Bell, public notary. At Kirkcudbricht, 8th July, 1466].

THE BARONY OF CLOSEBURN.

1470. 11th year of James III. At Edinburgh, 15th October.

The King has confirmed to Thomas de Kilpatrik of Closeberne and Mary Maxwell, his spouse, the lands of the barony of Closeberne and of the barony of Birdburgh and the lands of Achinlek and Sundrum, in the sheriffdom of Drumfres, which the same Thomas has resigned, to be held by the said Thomas and Mary, or either of them surviving, and the heirs lawfully begotten between themselves; failing whom, by the lawful and nearer heirs of the said Thomas whomsoever.

LANDS OF MOFFATDALE.

1473. 14th year of James III. 3rd September.

The King has confirmed in greater form the charter of confirmation of James de Douglas, Lord of Dalkeith, made to Henry Douglas, son of the said late James, and to the late Mergarete de Douglas, wife of the said Henry, and to either of them surviving, and to the heirs legally begotten between them, of the lands of Moffatdale in the lordship of Ananddale in the sheriffdom of Drumfres, namely of the lands of Corehede, Grauntone, Moffet, with the mill and all their pertinencies.

THE LANDS OF MABIE, &C.

1473. 14th year of James III. At Edinburgh, 15th October.

The King has granted to George Heris, son and heir apparent of Rob. H. of Kirkpatrik Irnegray and Mariot de Murray, his wife, the lands called the Krukis, Saintbridisholme, Dowlarg, Dalchane, Cragwill, with half of the lands of Maby and Machroune in the Stewartry of Kirkcudbrycht in the sheriff-

dom of Drumfres, which the said Robert has resigned, to be held by the said Geo. and Mar. and either of them surviving, and by the heirs lawfully begotten between them; failing whom, by the lawful and nearer heirs of the said Robert whomsoever. The free holding being reserved to the said Robert.

THE LORDSHIP OF GALLOWAY.

1473. 14th year of James III. At Edinburgh, 11th October.

The King, after mature deliberation and with the advice and consent of the three Estates of the Realm in Parliament, has granted to the Lady Mergaret, Queen of Scotland, in substitution for a third part of the property of the Realm, and for the revenues of the property of the same kingdom, otherwise to his said wife promised and appointed, on account of the marriage contracted between his ambassadors on the one side and Christian, King of Denmark, Sweden, Norway, of the Goths and Sclavs, father of the said Mergaret, on the other side, the Lordship of Galloway, both on this side the water of Cree and beyond, with the customs and burgh farms of the burghs of Kirkcudbryght and Wigtoun, with the castle of Treif, in the same Lordship of Galloway, and the Lordship of the forest of Ettrick, with the tower and manor of Newerk in the said forest; the Lordship of Strivelingschir and Tulicultre, with the castle of Striveling and with the great customs and burgh farms of Striveling; and the Lordship of Strathern, with the great customs of the burgh of Perth; the Lordship of Menteith, Strogartnay, and Buchguhidder, with the castle of Doune in Menteith; the Lordship of Kincleven, the Lordship of Methyene, with the castle of Methvene; the Lordship of Linlithquischir, with the palace of Linlithqw, and with the great customs and burgh farms of the burgh of Linlithaw, to be held by the said Mergaret during the whole time of her life, if the King should happen to close the last day before the same dearest wife; and the King has granted the aforesaid lordship, etc., with tenants, tenancies, and services of freeholders, in testimony of which thing the Great Seal has been appended, with the seals of divers prelates, chiefmen, earls, barons, and commissaries of burghs assembled in the aforesaid Parliament, representing the three Estates Realm, in sign of their consent and assent.

THE LANDS OF TERRAUCHTIE.

1477. 18th year of James III. At Edinburgh, 29th October.

The King has confirmed the charter of John Durant of Trarachty [by which, for the payment of a certain sum of money, he sold and alienated to George Heris, son and heir apparent of Rob. H. of Kirkpatrik Irnegray and to his heirs, the lands of Trarachty within the Lordship of Galloway and the Stewartry of Kirkcudbrycht, to be held of the King in fee, three cuttings to be paid to the King at the three chief councils in the Stewartry of Kirkcudbrycht, and the other services due and customary. Witnesses: Herbert Ascloane of Garehauch; John Ascloane, his brother; Rob. Blak, David Blak, John Cammok, Gilbert Cammok, John Durant. At the Manor of Trarachty, 18th July, 1477]. The wards, etc., being preserved to the King.

THE BARONY OF CARLAVEROCK.

1478. 18th year of James III. At Edinburgh, 14th February.

The King has granted to John de Maxwell, son and heir apparent of Robert, Lord Maxwell, and to his heirs, the lands of the barony of Maxwell, in the sheriffdom of Roxburgh, the lands of the barony of Carlaverok in the sheriffdom of Drumfres, the lands of Mernys in the sheriffdom of Renfrew, which the said Robert has personally resigned, free tenement of the said lands of the barony of Carlaverok being reserved to the said Robert and a reasonable third of the same to his wife, Joneta, when it occurs.

JOHN HERRIES OF TERREGLES.

1478. 18th year of James III. At Edinburgh, 24th April.

The King, though at another time he appointed David Heris of Traregles, knight, the curator of his father John Heris of T., who was *incompos mentis*, a fool and natural idiot, and the administrator of the lands and property of the said John, nevertheless, because it has been discovered by the King's advisers that he has neglected the execution of the said office, and has been incompetent to enjoy the said office, he has relieved the said David from the said office, and has appointed John, Lord Carlile, and Herbert Heris, son and heir apparent of the said David, jointly and separately curators of the

said John and administrators of the lands and possessions, always and until the most high God disposes of the health of the said John or of the death of the same, with the power of ruling his person and managing his lands, etc.

THE BARONY OF AMISFIELD.

1480. 21st year of James III. At Edinburgh, 26th January.

The King has confirmed the charter of Robert Charteris of Amysfeld [by which he sold and alienated to Sir John, Lord Carlile, his heirs and assigns, an annual return of 10 pounds from his lands of the barony of Amysfeld in the sheriffdom of Drumfres for a certain sum of money paid before, to be held of the King in fee. At Edinburgh, 16th January, 1480].

3rd April, 1908.

Chairman-Mr James Barbour, Vice-President.

The British Butterflies. By Mr Bertram M'Gowan, Dumfries.

A most interesting description of British butterflies was given by Mr M'Gowan, who also exhibited a valuable collection of the 68 species to be found in Britain. Altogether, said Mr M'Gowan, there were probably over twelve thousand different species in the world. In Europe they were much more numerous than in Britain, and on the Continent there were probably over 300 different kinds. The specimens of British butterflies shown by Mr M'Gowan were extremely beautiful and varied, and altogether the lecture was very interesting. One of the specimens shown—the Melitaea didyma—had not been found in this country for forty years, and the only record of its having been captured was given by the late Mr Lennon, who had caught it at Dalscairth. He (Mr M'Gowan), however, thought that Mr Lennon must have made an error in regard to that specimen.

Mr M'Cutcheon moved a vote of thanks to Mr M'Gowan, and Mr Robert Service, in seconding, said that many of Mr M'Gowan's notes brought to him some old and pleasant recollections. He was particularly pleased to note that Mr M'Gowan

mentioned Mr Lennon's very interesting capture. He (Mr Service) still maintained that it was captured at Dalscairth, and he thought there could be no doubt of the bona fides of Mr Lennon. Continuing, Mr Service referred to the fact that Mr Lennon was a very careful collector, and to the fact that he never had any Continental butterflies, so that it must have been a bona fide capture.

THE STUDY OF BIRD LIFE. By Mr CHAS. H. MARRIOTT, M.A. Its Difficulties.

The first difficulty presents itself in the shape of time. I am supposing such an ornithologist as I am speaking of to have not only some knowledge of the birds more generally distributed throughout the country, but a desire to investigate further. And I am also supposing that he, like the great majority of people, has to find time as best he can outside of the time he is occupied with the various matters of life. With one whose time is all his own I am not concerned. If such a one cannot become at least a fairly competent authority, it is simply because he has no wish for more than the mere dilettante's knowledge; and that knowledge, of course, in ornithology as in any other science, only survives in its brilliant plumage till it meets with the eagle of solid knowledge, when it is apt to fly out of the way as quickly as possible—if it can.

In the first place, then, time must be practically no object. To say that half-an-hour or an hour in such-and-such a copse or lane in pursuit of the less common birds is all he can spare is in nine cases out of ten equivalent to saying he has no time to spare at all. And in nine cases out of ten it would be better to spend the time in doing something else. He must have practically unlimited time if he wishes to investigate the habits and history of any bird. (And by unlimited time, I mean unlimited only on the special occasions on which he can afford to indulge in some special ornithological pursuit.) If he has seen the bird, or thinks he has, hour after hour may pass away without his being able to get near enough to it to observe it, and in the end he may find that he is practically no further advanced. This means that he must return again and again with practically the same amount of unlimited time, and must continue till he

has noted all he can—flight, song, call-note, where feeding and on what, nest, eggs, and what not—and afterwards he must compare with some good standard work what he has found. If the standard work does not agree with his observations, he must begin again, and see whether he was mistaken, though if he finds the same results he need not conclude that he is necessarily wrong and the book right. Both may be right in generals, but in details no ornithological work can give all information, and his own laboriously-collected information may sooner or later be corroborated, and if not, he can keep it as special information to be certified or otherwise by frequent noticing of the same bird at odd times.

If the ornithologist knows when and where to find the bird he wants, he is far advanced, and these remarks about time do not apply so much to him. But it must be remembered that it took even him many weary days and hours before he arrived at such a state of perfection. He takes a friend with him and shows the bird he wants and thinks nothing of it, forgetting how long it was before he could locate it himself; but his eager and anxious friend is filled with wonder and admiration, and rightly too, for birds are not inanimate things, and are not accustomed to remain always in one place at one period of the day even to suit the pleasure of those who are most intimately acquainted with that time and place. At times they will do so—but it is to suit themselves.

But all this, someone may say, takes an unconscionably long time, and is very laborious. Quite true; but no real knowledge of birds will be gained that is not so gained. If I may give one personal experience, I may say that I went every day for over three months to one locality to find out the exact call and warning notes of the Marsh Tit. Around Dumfries the Marsh Tit is nowhere particularly common, and it took me some time to find the bird and to be sure of its regular habitat. When I had found it, it was not at home every day at the particular time I went, and when at last I did hear its note and wrote it down as best I could, the next day I wanted to be a little more certain, and the next quite certain, and the next to be able to describe it to others, and so more than three months passed away before I was perfectly satisfied. Whenever that note is heard again, and wherever, I can be absolutely certain that it is

a Marsh Tit, and have no need to spend time in waiting to see it. And so with other birds.

When the ornithologist knows something about the more ordinary birds, and is at least able to recognise them when he sees them, this unlimited time I speak of will only be necessary when he is looking for others, such as the Lesser Whitethroat in the Solway district, the Green Woodpecker in Cumberland, the Dartford Warbler on Ranmore, or the Woodlark on Sutton Common, and so on.

Before going on to the next difficulty, the opinion may be hazarded that it will save a vast amount of time if the ornithologist will make up his mind before he starts as to what bird he is going to look for and where, and find out from some good source the *natural* habitat of the bird, and also its habitat at different seasons and at different times of the day, and so save himself the trouble of looking for a Nightingale on the seashore or an Oystercatcher in a plantation; or a Willow Warbler in winter or a Fieldfare in summer; or a Tawny Owl in the middle of the day; or a Swallow in the middle of the night; and having done all this if he will adhere to both the bird and place and time, not allowing himself to be distracted by this bird or that which he fancies he has not seen before, or this spot or that which allures him by presenting fewer difficulties in exploring.

The next difficulty concerns itself with the question as to wether he should go alone or not. Of walking tours R. L. Stevenson says somewhere, "To be properly enjoyed a walking tour should be gone upon alone. If you go in a company, or even in pairs, it is no longer a walking tour in anything but name; it is something else and more in the nature of a picnic. A walking tour should be gone on alone, because freedom is of the essence; because you should be able to stop and go on, and follow this way or that, as the freak takes you; and because you must have your own pace, and neither trot alongside a champion walker or mince in time with a girl."

All this, I think, is equally applicable to the ornithologist. More than one, I think, is a hindrance. Many people object to being alone or going anywhere alone, but in this pursuit a man is never really alone and after a little time the most recalcitrant will find it so.

If "a poet could not but be gay in such a jocund company

as that of the daffodils "how much more gay ought he or any other man indeed to be in the company of the birds.

All the same this going alone is felt by many to be a fatal objection, and where it is so it is better for two or three to go than not to go at all, but they must not expect the same results.

It is quite useless for him to try and explain to critics the object of his daily seeming waste of time and eyesight. They seldom understand, unless he is prepared to draw the long bow and shoot at them the arrow of pecuniary profit. Then they do.

Those who have little idea of the absurd notions entertained by people in the country about field-ornithologists will do well to turn to the "Scottish Reminiscences of Sir Archibald Geikie," and read what he says about field-geologists, and apply it to ornithologists.

The really great objection to two or more is that it is seldom two people have the same temperament. If, therefore, one wants to keep still in one place for some time the other does not or cannot, and so on. And where difficulty in keeping quiet is unavoidable the chances are always greatly in favour of one.

But there is no need to dilate on the many advantages in being alone. "Two heads are better than one" does not apply in this case, as seldom can two heads be brought to bear on the same living and often moving object in the same position, and under similar circumstances. As the ornithologist will often have to wait comparatively idle he can pick up by the way some knowledge of botany, entomology, or whatever else is useful to his science, taking care that what he does pick up is merely for use as the servant of his own particular science and not as its master. To my great sorrow, I know of one case in which botany in this way became the master, and ornithology not even the servant.

Some years ago now, I filled a note-book with bird poetry taken from all the best authors, so that I was able to turn to it in enforced idleness. I believe such a book can now be bought, but it is not the same thing. Each man has his own favourite odes or sonnets or what not, and the book he buys is sure to leave these out.

The third difficulty consists in getting over the land and water he wants to explore. It is pretty certain that the very copse, field, or pool he cannot frequent is the very one the ornithologist is most anxious to explore, although it must be said that in many cases when he is able to explore either the one or the other, it turns out of little or no value in comparison with others which he has liberty to explore whenever he likes, and which for that very reason he leaves, for the most part, unexplored. But this peculiarity applies to other things besides ornithology.

As a general rule, it will save an immense amount of trouble and anxiety if permission is asked, and it will not be often refused. And here again the advantage of going alone comes in, as it is easier to get permission for one than for two or more. Common sense will guide anyone as to the possible damage he may do to game—the main obstacle to permission—and indeed it would be useless and almost an impertinence for an ornithologist to go over any preserved land if he were not at least fairly well acquainted with all that comes under the head "game," the living thing itself, its haunts and habits, and so on. Otherwise he might not only do much real damage, but what is almost as bad from another point of view he might bring his science into contempt.

It is pretty safe to say that when a man wants to go in pursuit of ornithology, he will find himself able to go, and it is also pretty safe to say that where he goes without permission he will do much less good for himself, as every rustle behind him, every bark of a distant dog, and every other sound which might denote the coming of the owner or of a keeper will so distract his attention that he will be looking round at the very time he ought to be looking forward, or listening for notes very different from those of birds, or thinking of anything rather than the business in hand.

If the ornithologist is accidentally on land where no notices are posted, civility and a certain amount of modesty will go far in turning away the wrath of the owner or keeper, and a little gentleness in pacifying even the dogs.

It may not be out of place in this connection to call to mind the advice of a late naturalist to those who find themselves in a part of the country new to them, and which they wish to explore. It is this:—

- 1. Get ordnance maps or sheets of the district to be visited.
- 2. Read all about the district to be visited, its features,

products, geological formation, animal, vegetable, and mineral products, the habits and personal appearance of the people cultivating the soil, state of cultivation, etc., before starting out.

- Trace out especially, where possible, the various watersheds which go to form the "catchment basins" of the rivers.
- Watch and observe the living animals, birds, etc., when you begin your investigations, and their ways, and do not destroy them or take eggs unnecessarily.

The fourth difficulty is that of getting assistance in the identification of his finds. This is a great difficulty, though not so great as it once was. I refer to the identification of both dead and living birds.

It may sound absurd to say that many very well-known ornithologists are very little known, but it is so.

Comparatively few know any expert to whom they can send in case of doubt, and if they do, they rightly or wrongly—for the most part rightly—believe he is too great a man to be bothered with their small matters (unless he knows something of their qualifications previously), and thus, though that expert may be well-known, the knowledge of him is purely academic.

In such a case the enquirer must proceed as best he can by stages—by men older than himself in experience though they may have no claim to be experts, by papers, and by books; but before being perfectly satisfied an expert's decision must be obtained, however long he has to wait.

For the ornithologist must remember that in his science there must be no "I think," "I'm almost sure," in the matter of saying what any particular bird is. Facts and facts only are wanted. There can be only "It is." The same applies to what he thinks he has heard. It will satisfy him very well, perhaps, but no one else. "I got a yellowish bird to-day," says one. "It must be a golden oriole;" in fact, after looking at the coloured plates, I'm quite sure it is." But I'll send it to so-and-so who's supposed to be an expert." By-and-by comes the reply, "A Yellow Hammer!" And so ad libitum.

All this comes from the wish to discover rarities or strangeoccurrencies, and, although it is the business of the expert to make a special point, among other things, of doing so, it will bea long time before the ordinary ornithologist has arrived at the requisite knowledge of the life-history of the birds around him to warrant him in going further afield. Perhaps this is, or appears to be, a greater failing in the earlier stages of the ornithologist's career than later on.

For variety there is ample room for "I think" in such speculations as to why an old rook's bill is bare of feathers at the base (if it always is) and such like. Several opinions he can find already expressed. Or why the middle claw of the Nightjar is serrated and so on. In all such "I think" is all that the greatest expert very often can say absolutely and definitely, though undoubtedly he can give good reasons or apparently good ones for the faith that is in him, whereas the other cannot.

I think it right to add the truism that no man ought to give an opinion about anything unless he can give some valid reason for holding that opinion. "It is so because it is so" is a method of argument which is the prerogative of the fair sex only.

The ornithologist then must not remain satisfied until by some means or other an expert has given his pronouncement. He must never mind risking everything by getting the opinion of an expert finally; risking the unkind remarks of his friends who have given him information which he has not accepted; the cold scorn of the pages of the well-marked book; the idle complaints of the self-styled ornithologist when he hears that expert's opinion and finds it totally contrary to all he has said.

In nearly every case the utmost he can hope for is the identification of that which is lifeless. Should he know an expert, however, to whom he can show his bird alive in its natural haunts, then, when it is identified, the identification is of far greater value (to him), as he has its flight, song, perhaps, call-notes, habits, and various other aids to help him in impressing it on his mind.

A "dead bird" expert is practically useless in this latter case, since he knows the bird when dead only and apart from their lives, ways, and habits, except in so far as he has read about them, and thus he is in much the same position with regard to them when alive as a man who has only read how to ride is with regard to the horse he would mount.

All this applies to the birds difficult of identification only. Many he will be able to identify from good drawings, not necessarily coloured, and so forth. There is no space here to refer to the identification of eggs, nests, and so on.

It is only right to add that ornithologists in the Solway district have an exceptionally kind and considerate authority always ready to give them the benefit of his wide experience and great knowledge, either in the actual haunts of the birds—where possible—or in the house. The one found righteous among so many not so, has done much, unwittingly it may be, to redeem the rest. I speak for myself personally in this matter of redemption, after a considerable experience in many counties. I miss more than I care to say the many pleasant hours I have spent in his company.

The fifth difficulty is connected with the local names of birds. This is undoubtedly a great difficulty to many.

As a general rule it will be best for the ornithologist to take no notice whatever of anything he is told about any bird, name, or anything else, until he has seen it himself. The local names may so mislead him and waste so much time that it is better to go his own way and ask no questions except from capable people. It is not at all that the people do not know the birds he wants when they see them. They do, and a great deal about them too, but they only know them by names useless to any but themselves and those of their particular locality.

This great frequency of local names is a much more serious matter to ornithologists than to botanists, as the former have to look for moving things. Of course all this applies mainly to those whose experience is not great in birds. A man with a certain amount of experience will take no notice of any name but the recognised one, or the scientific one.

As instances of the difficulties in which beginners find themselves—and even those further advanced—I give the following out of numerous others.

In one county a certain bird is termed a Yellow Hammer, in another the Goldfinch. In getting a countryman or ordinary individual to describe either he does so in a way that might apply to each bird, in ignorance, of course, for it is a difficult matter to give a good and even fairly accurate description of anything whatever. Now as the Yellow Hammer is very common and the Goldfinch is not (save in a few localities) the ornithologist may spend a whole day in some places looking for the

latter before he finds that the former is the bird as to which he has been misled.

And so with the Common Linnet, the male of which in some localities is termed a Red Linnet, while in others the term Red Linnet is applied to the Goldfinch.

Again, in many parts if you ask about the Flycatcher you will be told it is common enough. If you ask to be shown one you will have pointed out to you a few specimens, including a Willow Wren, a Whitethroat, anything that looks like a bird catching flies, and, perhaps, a genuine Flycatcher, though the latter will not be at all distinguishable from any of the others by your informant.

The Little Cole Tit with its black crown is often called a Blackcap, and this leads to much trouble by confusion with the Blackcap Warbler, the male of which has also a black crown. Asking for the latter and omitting the word warbler you will be told there are lots of them about. This would be enough as a rule to save you further trouble; the very fact that there were lots of them showing you they were not the birds you wanted.

Confusing the Marsh Tit with the Cole Tit is not likely to happen often, because as the one has a black head and the other almost a black head, the two birds are to most people one and the same bird, and no arguments will convince them otherwise unless you have a specimen of each in your hand to shew them.

Again, the Black-headed Bunting is a rare bird, but the socalled Black-headed Bunting, which is properly the Reed Bunting, is fairly common. The confusion is due to the black head, but in this case the confusion is not quite so bad, as both belong to the same sub-family.

To confuse the Cormorant with the Shag is natural enough, and to settle the matter, as regards inland waters at any rate, it needs only care in remembering that the Shag rarely frequents them, and so what is named to you as a Shag away from the sea is almost certainly a Cormorant.

But these few examples must suffice.

As to actual local names the number is so very great that there is no space here to allude to them even briefly. I may, perhaps, be allowed to give a few instances in a single sentence.

In certain districts in England, on enquiry as to the birds, a

man might possibly be told that the district contained Huckmucks (Long-Tailed Tits), Wynkernels (Waterhens), Yafflers (Green Woodpeckers), Yoldrings (Yellow Hammers), Shrites (Missel Thrushes), Shepsters (Starlings), Horniwinks (Lap Wings), Puckeridges (Nightjars), and Chauciders (Spotted Flycatchers), all common birds with names simple enough, no doubt, if one only took the trouble to find out their derivations and a few other details employed in their manufacture, but names which in themselves would leave the enquirer no wiser than before.

For the second time I venture to give a personal instance. In Surrey, not far from Boxhill, I wanted to find the nest of the Red-backed Shrike. No countryman knew of such a bird. I could not find the bird myself for some time, and when I did find it and happened to shew it to one of them saying it was a Red-backed Shrike—"Not it," said he, "it's a Jack-baker, there are lots about a mile from here." I could see he didn't think much of my knowledge as I could not tell a Red-backed Shrike (whatever that represented to him) from a Jack-baker, and I, for once, kept my thoughts to myself.

I have put down these few names at random out of a pretty complete list of local (English) names of British birds I have got together in one county and another and they are fairly typical examples. What the local names may be in some parts of Scotland I have never yet even dared to imagine.

The last difficulty but one is that of distinguishing the notes of birds. Nothing but constant practice can get over this. It is not the song that is so important. It is the call-notes and the warning-notes. No one who has heard the warning note of the nightingale will be likely to forget it, nor will he forget that of the Blackbird or the Sparrow or the Great Tit and many others, but it would be quite excusable for anyone to forget—unless he saw the bird—the warning note or the call-note of the Golden-crested Wren, or the Tree Creeper, or the Marsh Tit, or a host of others. The various call-notes used by birds to indicate to one another their whereabouts must not be confused with the notes of warning when enemies are supposed to be about. And neither must be confused with the song, so that in this alone there is plenty of room for observation.

And it must be remembered again that in many cases a bird

can be identified by these notes at a considerable distance, and thus much time is saved when all we want to know about it at the particular time is whether it is such and such a locality or not.

I may, perhaps, again be allowed to digress a little and to say that great attention also ought to be paid to the flight of birds—another difficult matter, and one requiring much time—for by a good knowledge of this the lolloping flight of the Green Woodpecker in the distance would serve to distinguish it for certain from any other bird, whilst the quick hurried flight of the Starling, the dipping flight of the Wagtails, the measured flapping of the Rook, the quicker one of the Jackdaw, the zig-zag flight of the Snipe, and so on, would tell you at once what each bird was.

I may mention also the difficulties connected with oology and caliology, but they are too many and too intricate, and too much beyond the scope of my personal knowledge in their higher details for me to do more than mention them.

In concluding this part I cannot help alluding also to another difficulty in ornithology which needs a great amount of attention, labour, and observation, and which is one that has, as it seems to me, been somewhat neglected. It is that of the pairing of birds. It will be sufficient to say here in this limited paper that all birds can be divided into three classes with respect to this. Those which pair for life, those which pair each year, and those which never pair, but are polygamous. It will be easily seen that there is plenty of room for close observation here. I have no intention of attempting to shew how the classes can be separated. There is certainly a broad general rule, but all I have to do to-night is to call attention to a very interesting difficulty with the purpose of giving some idea of another of the many difficulties of the ornithologist in his study of bird life, and to shew what an amount of delightful work the field ornithologist has which the cabinet ornithologist has not and never can have till he comes out into the open.

The final difficulty with which I have space to deal is that the ornithologist finds it very difficult to get anyone in his vicinity to appreciate his labours. Everyone, if he confesses the truth, likes to have his labours appreciated and likes to find that someone takes an interest in his work and its results. The discovery of anything interesting or strange or new loses half its charm for the discoverer if he has no one to whom he can impart it.

The ornithologist in reality has seldom much to show. He cannot talk to the uninitiated about strange things he has met with because he will be quietly put down as a "De Rougemont," however good his reputation may have been previously to his turning ornithologist. He will have to keep his notes and his observations and his successes and failures all to himself until he meets with some kindred spirit. It may be years before that happens, although it is more easy now than some years ago.

But he can practically have that kindred spirit always near him, if he keeps good notes, for as he passes from month to month and year to year and compares this one with that and so on his notes will serve him as a friend, and a friend too who will, without prejudice, criticise him, and who will, without complaint, submit to correction or emendation.

His notes, too, even if he finds by comparing them with the notes of other observers that they contain nothing whatever new, will give him many a summer day in winter and will call up old associations and pleasant places over which he can linger with often as great pleasure as he derived from the actual things themselves.

And, perhaps, I may add in reference to this, that it is very questionable to me at anyrate whether the majority of people ever delight in what they see in nature simply for itself and in itself so much as they delight in it on account of the associations connected with it.

"The sensation of pleasure we experience on seeing natural objects depends much upon association of ideas with their uses, their novelty, or their history," wrote a great naturalist. "What causes the sensations we feel on gazing upon a waving field of golden corn? Not the mere beauty of the sight, but the associations we connect with it," and so on. But this is too great a subject to do more than allude to here and so I pass on.

To make up then for this want of sympathy the ornithologist has his science ever before him, always showing something new, in small or great degree. He can pursue it in frost and snow, in heat or rain, always expecting, and more often than not, receiving something. He has no need to strain after rarities. The very commonest birds are really little understood, and some new habit of the sparrow or the starling or other common bird on the high road to becoming a permanent habit is often just as valuable knowledge as the discovery of some rare bird or of some bird in a place not frequented by it before.

And so the ornithologist can always appreciate his own work without too much self-satisfaction and without undue bias, and in time, if he altogether fails to meet with a spirit like his own, he will make the best of it.

"OLD MORTALITY" IN KIRKCUDBRIGHT. By Mr JOSEPH ROBISON, Kirkcudbright.

A short paper was then read by the Secretary from Mr J. Robison, Kirkcudbright, which detailed some incidents in the life of Robert Paterson, supposed to be "Old Mortality." The first incident was Paterson's petitioning the St. Cuthbert's Lodge of Freemasons for reception and admission into their Order, and the second referred to a decree granted against Paterson for 6s in favour of a Kirkcudbright shoemaker, for the hire of a mare for ten days five years previously.

25th April, 1908.

SPECIAL DISTRICT MEETING. TOWN HALL, ANNAN.

Chairman-Mr H. STEUART GLADSTONE, Yr. of Capenoch.

Kelhead Limestone.

Mr W. M'Pherson, F.G.S., submitted a paper on a section of the carboniferous limestone found at the quarry at Kelhead, and also showed numerous specimens of fossils. Mr M'Pherson stated that the quarry was situated about four miles from Annan, on the upper Dumfries road, opposite to Kinmount House. It had been worked for nearly one hundred years. The old works, nearly half-a-mile in length, were quite covered by fallen debris from the alluvial deposits above. He had been unable to find

any previous record of its geological strata, and he submitted it as follows:—

QUATERNARY ... 8. 2 to 15 feet Glacial Deposits.
Permian ... 7. 10 feet Purple Limestone.

6. 8 feet Grey Marl, unfossiliferous.

5. 10 feet Purple Limestone.

CARBONIFEROUS ... 4. 6 inches Brown Shale.

3. 2 feet Calcined Limestone.

2. 11 feet Brown Marl.

1. 30 feet compact Mountain Limestone.

After describing the conditions under which the various strata were deposited, and referring to Annan as situated at the bottom of the great and widely distributed carboniferous ocean, and gradually rising to the glacial deposits of the present alluvial surface, he drew attention to the great gap in the strata where No. 5, the Permian strata, rests on the lower carboniferous limestone, where the series of coal measures must have been denuded. Notice was also taken of frequent patches of the mountain limestone calcined by volcanic action, No. 3 being completely altered by heat, showing by analysis 16 per cent. more impurities than No. 1. The latter is almost pure carbonate of lime (96 per cent.). He placed Nos. 5, 6, and 7 as Permian marine limestone, a determination that may require further confirmation during the summer, when the deposits will be more accessible by further openings during excavation. The fossils, which are abundant and characteristic of the Scotch lower carboniferous limestone, were then described, particularly those selected for presentation and accepted by the British Museum.

An Annan Reference in the Diary of George Fox. By Rev. John Cairns, M.A.

The Journal of George Fox, shoemaker, apostle, and founder of the Society of Friends, is one of the great religious classics of the world—the extraordinary book of an extraordinary man. In it he gives an account of his spiritual experiences and of his wanderings, his preachings, his stripes and imprisonments. There is much that is confused in the narrative, and much that is provokingly indefinite; but it is a real man who speaks to us from its pages, with a view and a message of his own, and what he tells us is, therefore, always worth attending to. But it is not

with the Journal as a whole, or even with any considerable part of it, that we have now to deal. We shall confine ourselves to the elucidation of one comparatively small point.

In 1657, a year before the death of Oliver Cromwell, George Fox visited Scotland. He entered the country from Cumberland, accompanied by a number of friends, including Captain William Osborne, who had gone over the Border to meet him, and Robert Widders, "a thundering man against hypocrisy, deceit, and the rottenness of the priests" (i.e., of the Presbyterian ministers).

Then Fox goes on to say:—"The first night we came into Scotland we lodged at an inn. The innkeeper told us an Earl lived about a quarter of a mile off who had a desire to see me; and had left word at his house that if ever I came into Scotland I should send him word. He told us there were three drawbridges to his house, and that it would be nine o'clock before the third bridge was drawn. Finding we had time in the evening, we walked to his house. He received us very lovingly; and said he would have gone with us on our journey, but he was previously engaged to go to a funeral. After we had spent some time with him we parted very friendly and returned to our inn. Next morning we travelled on, and passing through Dumfries, came to Douglas, where we met with some friends; and then passed to the Heads, where we had a blessed meeting in the name of Jesus and left Him in the midst '' (Journal, Vol. I., pp. 393-4).

Who was this unnamed Earl, and where was his house? Supposing Fox to have come by the ordinary road from Carlisle to Dumfries, this inquiry is confined within manageable limits. Dr Hodgkin, the well-known Quaker historian and the author of an admirable biography of Fox, suggests that the Earl may have been the Earl of Nithsdale, and his residence Caerlaverock Castle. No doubt the mention of the three drawbridges does seem to indicate some such moated fortress as Caerlaverock was. But it was at that time quite a common thing for the residences of the nobility and gentry to be surrounded with moats. Thus Mr Barbour informs me that in carrying out the restoration of Comlongon Castle some years ago the remains of a fosse, 40 feet wide and 20 feet deep, had to be dealt with. And there are at least two reasons which compel us to reject the suggestion of Dr Hodgkin. In the first place, the Earl of Nithsdale of this period -Robert, second Earl, known as "the philosopher," from his

dabblings in astrology—was, like all the other members of his house, a Roman Catholic, and therefore not likely to interest himself in the wav here described in a Quaker sectary. Further, and more especially, Caerlaverock had been so seriously injured in the siege of 1640 that it had then ceased to be the residence of the Earls of Nithsdale, and was now, twenty-seven years later. . in a dismantled and ruinous condition. There were, however, at this time two other Scottish Earls whose mansions were in the neighbourhood of the Carlisle and Dumfries road. The first of these was James Murray, second Earl of Annandale, whose seat was at Comlongon Castle, already referred to. This nobleman, the head of the family of Murray of Cockpool, succeeded his father in 1641, and died without issue in 1658, when his Annandale title became extinct and his second title of Viscount Stormont passed to his kinsman, David, second Lord Balvaird, the ancestor of the Earl of Mansfield, the present owner of his estates in Dumfriesshire. The Earl of Annandale was thus alive when George Fox visited Scotland, but for twelve years—ever since the overthrow of Montrose, of whom he had been an adherenthe had lived privately in England, where he died a year later.

We are thus by a process of exclusion brought to the only remaining Scottish Earl connected with this district at the time with which we are dealing. This was James, second Earl of Hartfell, the chief of the house of Johnstone, whose principal residence was at Newbie, near Annan. His father, the first Earl, had been a Covenanter; but, like his neighbour, the Earl of Annandale, had gone over to the Royalist side under Montrose, after whose defeat he had endured several terms of imprisonment, and had even lain for a time under sentence of death. second Earl, then Lord Johnstone, had for a time been imprisoned along with his father, but had during the Protectorate acquiesced in the existing state of things, and was now in this very year, 1657, using his best endeavour to secure a favour from the Government. This was to have an alteration made in the destination of his titles. These had in the grant to his father been limited to heirs-male; but the Earl, having now been married for twelve years and having as yet no sons, and his only brother having recently died, there appeared to be a probability of the honours expiring with him. Accordingly, he had resigned all his titles in the hope of getting a grant of new ones, which

might pass on his decease to his daughters. This new grant was not made until after the Restoration, when Charles II., in acknowledgment of the Earl's lovalty to the royal house, not only gave him back all his old titles without the old limitations, but added to them, under similar conditions, the titles of Earl of Annandale and Viscount Annan, which had become extinct on the death of the last Earl of the Murray line, who had died in 1658. These titles were inherited on his death in 1673 by the eldest of four sons, who were ultimately born to him, and this nobleman at a later date became the first Marquis of Annandale. Let us now see how far the description given by Fox fits the character and circumstances of the Earl of Hartfell. No doubt Newbie is a good deal further than a quarter of a mile from Annan; but it will be remembered that Fox does not say that the inn in which he lodged was in a town. There were, indeed, in former times a great many inns on the main roads. On this very road between Annan and Dumfries I am informed that there were, so lately as fifty or sixty years ago, no fewer than twenty inns. That at which Fox put up was no doubt of a very humble kind. Further, he does not even say that the Earl's house was a quarter of a mile from the road, but about a quarter of a mile from the inn; so that there is nothing in his description, so far as this note of distance is concerned, to exclude Newbie. Whether there are still indications on the site of the old Newbie mansionhouse of the existence of a moat or moats, or whether any picture of the old house (which was burned down in 1682) is in existence to confirm or disagree with Fox's description of the three drawbridges, I have not been able to ascertain. But, as I have already said, the existence of such moats round the betterclass houses in Scotland at that 'period was quite common, and there is nothing unlikely in the supposition that Newbie may have been thus defended. As to Lord Hartfell himself, he was no doubt a royalist, and after the Restoration he took a pretty decided stand on the side of the persecutors of the Covenanters. But this need not lead us to suppose that he would be unfavourably disposed at this particular time to Fox and the Quakers. The Quakers experienced very little toleration at the hands of the still dominant Presbyterians, between whom and Lord Hartfell there was probably very little love lost, and he may have been interested in Fox on other grounds. Amongst the places in Scotland where Quakerism at that time had made considerable progress, Principal Robert Bailie, of Glasgow, in one of his letters specially mentions Douglas, and it will be remembered that Fox was on his way to Douglas when he had this very interview. Now, Lord Hartfell's wife was a daughter of the first Marquis of Douglas, and it may quite well have happened that on one of his visits to Douglas Castle he had heard of this strange new sect that had so many quaint usages, that took literally Christ's precept to "resist not evil," and that set forth such a high and beautiful standard of Christian living, and that, owing to his interest having thus been aroused, he was eager to see and talk with its founder.

Those considerations are, I admit, by no means conclusive, and they are only offered by way of suggestion. But until a better solution offers itself, I think we are entitled to say that there is a considerable degree of probability in the identification of the Earl with whom George Fox had this interview with James, second Earl of Hartfell, and of the house where it took place with the old Tower of Newbie.

NATURAL HISTORY NOTES.

Mr J. W. Payne submitted some notes on the natural history of the Annan district. One of the most important discoveries of recent years, he said, was the finding in the sand of the Solway of a handsome specimen of the antlers of the large red deer which existed in the country about a thousand years ago, and was now, of course, extinct. The specimen belonged to Mr Rutherford, Scott's Street, Annan. He also shewed another specimen, hardly so fine as the first, belonging to Mr Watson, Greencroft, Annan. The antlers, he said, showed what a handsome animal the red deer had been. He also gave a few notes on the birds of the locality. Last year he saw an interesting early nesting of the short-eared owl. This season a friend and he had found an early nest of the grey wagtail. He then showed various specimens of butterflies and moths, taken by Mr Douglas Watson, Included in the collection was a specimen of the convolvulus hawk moth, which had been caught in the neighbourhood of Annan during the year. He had received anonymously from Australia a box containing one of the famous stick

insects of Australia; and from America he received a specimen of the butterfly known as the monarch. Two rather interesting birds had been shot during the winter—the bernicle and the bean goose.

Annan in the Last Four Decades of the 18th Century. By Mr Frank Miller, Annan.

In August, 1764, Annan was visited by Thomas Gray, whose "Elegy in a Country Churchyard" was already universally popular. He does not appear to have been favourably impressed, for he declares that the inn where he dined was bad, and describes the dwellings of the people as "huts of mud with no chimneys." Probably if the poet had found more solid comfort at the hostelry he would have presented a more flattering picture of Annan. But it cannot be denied that in the seventh decade of the eighteenth century the town was unattractive in appearance. Every vestige of the old castle had disappeared, with the exception of the inscribed stone that attracted Pennant's notice in 1769. The Town Hall was destitute of architectural merit, though it possessed a steeple of which the untravelled burgesses were proud. The church was a barnlike erection at the west end of the town, where the dismal graveyard that was connected with it may still be seen. In the kirkyard, under the shadow of sepulchral yews, the schoolhouse had stood prior to 1739; but happily the children of the parish were now taught and whipped in a building that, if scarcely less humble than the one it superseded, was undoubtedly situated in a healthier locality. The principal inn was the homely King's Arms-afterwards known as the Buck Inn-where Bonnie Prince Charlie on a bleak December day in 1745 had found shelter. In the front wall of the inn was a sun dial, a public timekeeper which is preserved and exhibited in the new Buck Hotel. At the time of Grav's visit to Annan the High Street extended from Kilncloss to Bridge-end, a distance of about a quarter of a mile; and it was lined on each side with small houses, too many of which were of the type referred to by the poet. As yet "the high town street " was unpaved, but it had been cleared of "peat stacks" by the vigorous action of the Town Council. Butts Street, or "The Butts," as I have often heard it called, was

then the favourite residential part of the town. As evidence of its former dignity I might point to a beautiful eighteenth century iron gate within a stone-throw of the house where Edward Irving was born. Two or three families dwelt in Wilkin's Wynd, which ran parallel with Butts Street; and in Pott's Wynd or Greencroft Wynd the town had an extension southward. Bank Street was not yet in existence; and, standing on the spot now occupied by the Post Office, Gray may have watched a soaring lark, and repeated his own divine words:—

"But chief the sky-lark warbles high His trembling, thrilling ecstasy, And, lessening from the dazzled sight, Melts into air and liquid light,"

In the last forty years of the century the trade of Annan made substantial progress. About 1770 an extensive business in wine was carried on, as some old merchants' books which I have seen attest; and bushels of corn were exported annually. At the close of the century the town had a good and increasing shipping trade. West India produce and timber were imported; while the exports consisted chiefly of grain, malt, and bacon. In 1774 the Magistrates and Council, hoping to attract a new and important industry to Annan, made several attempts to obtain coal in the neighbourhood of the town. Their efforts were unsuccessful; but the failure which attended them was attributed by many to the fact that the Council did not bore to any great depth. A copy of the minute which authorised operations may be acceptable:—

"23rd April, 1774.—The which day the Magistrates and Council in council convened, having taken into their consideration a representation given in to them upon the 29th day of December last by George Bell, in Fleamby (in the county of Cumberland), setting forth that he had at the desire of Mr Currie Carlyle, of Bridekirk, the Magistrates and Council of Annan, and some other gentlemen, examined different places in the neighbourhood for coal, and particularly many places within the Burrow roods of Annan, where, in his opinion, there is the greatest probability of success, the Magistrates and Council, sensible of the great utility of coals for the country in general and this burgh in particular, are of opinion that a proper trial should be made within the Burrow roods, and for that purpose

hereby empower and authorise the Provost and Bailies to contract with the above designed George Bell on such terms as to them may seem meet for making such trials. And also empower and authorise the said Magistrates to draw upon the Treasurer from time to time for such sums of money as may be necessary for making the said trials, providing always the said sums drawn for do not exceed the sum of £80 sterling."

While the majority of the burgesses were engaged solely in legitimate trade, a not inconsiderable minority devoted their energies to smuggling. A large contraband trade was carried on with the Isle of Man, and Powfoot—well-known at the present time as a summer resort—was one of the places where goods were landed. Some of the Annan smugglers, or "free traders," as they preferred to be called, were respectable-looking men, who could quote Scripture like the revered elders of the Kirk, and "never broke the Sabbath but for gain." Depend upon it, old Tom Trumbull, the hypocritical Annan smuggler in "Redgauntlet," is no mere fancy sketch! During the last few years of his life Burns had frequently occasion to visit the town in the discharge of his duties as an officer of the Inland Revenue. No doubt the Trumbulls of the place found him sharp enough; but according to local tradition he always displayed leniency in his dealings with the less hardened offenders. The poet's tenderness of heart is well illustrated in "The Smuggler's Ruse," an interesting tale of the Solway by Mr Walter Hawkins, which appeared in the "Annandale Observer" a year or two ago.

When the town became fairly prosperous the burgesses boldly resolved to build a new church, the accommodation afforded by the old place of worship near the bridge having long been out-grown. A minute of Council relative to the building of our present parish church may have for you a certain interest:—

1st June, 1789.

"In a meeting of the Magistrates and Council held this day within the Council House, the Provost represented that, in consequence of the Act of Council of the second of October last, he and the other Magistrates had attended different meetings of the Presbytery and Heritors in order to fix upon a situation for building a new church, upon receiving plans and estimates from tradesmen, and finally settling with the Heritors what proportion of the new church should be sett off to the Burgh—when, after

examining the different situations proposed for building the church upon, with the plans and estimates given in, the Presbytery and Heritors fixed upon Kilncloss as the most proper situation; adopted the plans and estimates given in by James Beattie and John Oliver, joiners, and John Hannah, mason, all in Annan; and agreed that the town and community of Annan should have right to one-half of the said new church."

Though the church bears the date 1789, the well-proportioned steeple, which is the principal feature of the building, was added some years later. The finely-toned bell of the kirk is said to have been appropriated, not bought. Mr J. H. Wilkinson, Annan, writes:—"I have been informed by old residents that the bell was made for some steeple in England, but being sent by mistake to Annan was there annexed, its value being recognised by the burgesses. It appears to have been brought from London to Leith by sea, and then carted to this town."

The minister of Annan in 1789 was the Rev. William Hardie Moncrieff, whose father had held the living from 1754 to 1783. When the younger Moncrieff, after a long ministry, passed away, Susannah Hawkins, "the Annandale poetess," as she styled herself, paid a tribute to his memory:—

"By all he knew he was beloved—
He unto all was kind;
For virtues good, and charity
How few like him we find."

Towards the close of the eighteenth century Congregationalism made great progress in Scotland, owing to the missionary enterprise of the Haldanes. The distinctive principle of Congregational polity commended itself to many in Annan, and the Independents erected a chapel at Closehead. Hope of permanent success was soon abandoned by the devout men who honoured Haldane's name; and early in the nineteenth century their chapel was sold to the Secession Church. Few ecclesiastical buildings in the district have so strange a history as the old "meeting-house" at the head of the town. Built by the Independents, it was afterwards bought by Scottish Seceders, and eventually it became the property of the Roman Catholic Church. Excepting the Parish Church and St. Columba's, all the existing places of worship were built later than 1801.

In 1790, a year after the erection of the new Parish Church, there died in Edinburgh a distinguished man who had wielded the schoolmaster's rod in this town. At a meeting of Annan Town Council held as far back as 11th June, 1739, the Provost reported that he had "contracted and agreed with Robert Hendrie, schoolmaster, to teach the school of Annan for the year commencing upon the 9th day of April last, and in name of the said burgh had engaged to pay to the said Robert Hendrie the sum of ten pounds sterling in name of salary the said year, and that the inhabitants of the burgh and territories thereof who sent their children to the said school should pay to the said master the school wages following, viz.:-"For teaching English, one shilling sterling per quarter; for teaching English, writing, and arithmetic, one shilling and sixpence sterling per quarter; and for teaching Latin and writing, two shillings sterling per quarter." I have been able to identify the "Robert Hendrie" of the minute quoted with the Rev. Dr Henry, moderator of the General Assembly in 1774, and author of a "History of Great Britain" that excited the curiosity of Samuel Johnson and won generous praise from David Hume. It is strange to reflect that a historian whose monumental work cleared for him £3300 should at the outset of his career have been glad to accept £10 a year and some paltry fees for teaching a few dull children in a border town!

Dr Henry's death was followed by that of another well-known Edinburgh author connected with Annan—Dr Blacklock. As the productions of a poet who, to use his own words, "never saw light," the descriptive passages of Blacklock excited much attention in his own day. Dr Johnson declares that they are "but combinations of what he remembered of the works of other writers who could see." No doubt Dr Blacklock's familiarity with the English poets accounts for his command of poetical language; but as Henry Mackenzie, his biographer, points out, this does not completely solve the difficulty, for "it throws no light on his early passion for reading poetry, and poetry of a kind, too, which lies very much within the province of sight." Not having much intrinsic value, Blacklock's poetry is seldom read now; but as the friend of Burns he has a secure title to remembrance.

Probably the ablest man resident in Annan at the date of Blacklock's death was Dr Clapperton, father of Hugh Clapperton, the African explorer. He was an enthusiastic collector of "antient ballads;" but, as Kirkpatrick Sharpe says, he "sometimes cheated in his responses." By the kindness of a relative of his, I was enabled, many years ago, to exhibit to the society the doctor's ticket of admission as a burgess of the royal burgh.

Among Dr Clapperton's neighbours in Butts Street was Gavin Irving, tanner, father of the illustrious man whose statue is the chief ornament of our town. He held the office of bailie—a distinction the greatness of which may be inferred from the fact that an Annan bailie once found it necessary to remind his townsmen that after all he was "a mere man." Under the boughs of some stately elm trees that stood in the space called Gracie's Banking the future traveller and the future orator often played together.

At the close of the eighteenth century Annan was a prosperous little town, with many dignified associations. In twenty years the population had increased from about six hundred to sixteen or seventeen hundred. The census roll of 1801 does not state the population of the burgh separately, but if shews that at the opening of last century the parish contained 2570 inhabitants, who occupied 465 houses. Annan Public Library is fortunate enough to possess an old MS. copy of the roll, evidently written by the compiler, Richard Forrest, schoolmaster. Sir John Sinclair, in his "Old Statistical Account of Scotland," published in 1797, gives some curious information about the Annan of the last decade of the century:—

"Annan contains within the town and upon the burgh roods 1620 souls out of the whole population of the parish. It possesses very extensive burgh roods, which are in great part very imperfectly cultivated. There is a vast common, open to all the inhabitants for pasture, peats, and 'divots.' The revenue of the town is about £300 sterling a year, arising from tolls, fisheries, and feu duties. . . . The town has in it four writers, one surgeon, a schoolmaster. The fisheries are let at the annual rental of £210. Such farm houses as have been lately built are good and commodious, and of one or two storeys. Servants and master eat commonly at the same table. The farmers'

ANNAN IN 1824.



Sunday clothes are of English cloth. Epidemical fevers are unknown. Consumption and ague are rare. There is on the river a cotton work, about which 100 to 130 men, women, and children are commonly employed."

The common referred to by Sinclair consisted of 1800 acres of moorland, lying north of the Carlisle road. In 1801 it was divided among the burgesses and those landward heritors who enjoyed the right of servitude over it, the whole being burdened with the annual feu rent of £200. The poorer inhabitants of the town strongly disapproved of the action of the Council in disposing of land which could not fail to rise greatly in value; and expression was given to their indignation by a poetaster named James Fisher, who wrote:-

> "It made us welcome, ane an' a', Our horse an' kye on it to ca'-But now it seems they've made a law An' will the same fulfil, To tak' this commonty awa' In spite o' a' our will.

An' it divide amang the lairds By akers, ruids, an' fa's, an' yardes, In just proportion as regards Their houses, rents, an' lan's; Sae weel they ken to play their cards To ane anither's han's."

We must not forget that Annan Academy, famous as the Hinterschlag Gymnasium of "Sartor Resartus," came into existence through an endowment set apart when the great moor was If the burgh had retained its broad acres, Annan divided. would have had no Academy at the beginning of the nineteenth century, and some other town would have had the glory of educating Thomas Carlyle.

In illustration of the foregoing paper, Mr Miller exhibited an old painting of Annan, which had been lent by Mr Macdougall, banker, Annan. It bears the date 1824; but, as Mr Miller remarked, the town in its exterior semblance did not alter greatly during the first quarter of the nineteenth century. The photograph here inserted is given by permission of the owner of the painting.

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THE OLD BURGESS ROLL OF ANNAN. By Mr James Barbour, F.S.A.Scot.

Mr Barbour made a number of interesting remarks based on the Old Burgess Roll of Annan from 1682 to 1705, in which mnay details regarding the burgesses admitted were given.

Contribution to the Study of Dumfriesshire Fungi. By Miss A. Lorrain Smith, F.L.S.

Dumfriesshire has been well provided with a flora of seedplants, owing to the ungrudging labours of our President and of those associated with him, but the spore-plants, and more especially the fungi, have been somewhat neglected. I therefore venture to send this small contribution to mycology, hoping to supply some blanks in our knowledge of the county flora. For a number of years I have been making observations, but as my stay in the county has been limited and often too early for the autumn growths, my list has grown very slowly, and there are great gaps that might easily be filled by anyone on the spot. There should be a rich fungus-flora in a county of such varied conditions of lowland and moorland as we find in Dumfriesshire. The rather abundant rainfall that it shares with other western districts accounts for the rivers that have formed the great dales, and these are supplemented by the many waters and burns that have cut into the land and formed miniature dales and glens often beautifully wooded. It is in such places that we find the broken branches, the stumps, and the humus, with the moist atmosphere, that are so peculiarly advantageous to fungoid There are no forests of large extent or of great antiquity, but there are many bits of old woodland, and they provide happy hunting ground for the mycologist.

Fungi are somewhat fickle in their occurrence; and much depends on the season. A warm summer followed by heavy rains seems to be the most favourable weather for this crop; but even with good seasons the species do not recur as one would expect them to do. I found one autumn a beautiful growth of Psathyrella disseminata covering a large stump, but though I looked again year after year I did not see a single specimen. Tricholoma terreum grew abundantly in a field near a wood, one season only. As far as I could judge it seemed to have died out; and

so with other forms. There are, however, certain species such as Inocybe rimosa, Collybia radicata, Coprinus atramentarius, etc., that have come up several years in succession in the same locality. The subject is one of much interest, and I can assure any botanist that mycology will prove a study of never-failing enjoyment.

BASIDIOMYCETES.

- 1. Scleroderma vulgare Hornem. On the ground, common.
- 2. Sphaerobolus stellatus Tode. On very damp sticks, Half-Morton.
- 3. Crucibulum vulgare Tul. On posts, Annan, river banks.
- 4. Ithyphallus impudicus Fisch. In woods, near Annan.
- 5. Dacryomyces stillatus Nees. On paling, common.
- 6. Tremella viscosa Berk. On moist wood, Half-Morton.
- 7. Calocera viscosa Fr. On moist timber, in woods.
- 8. Clavaria cinerea Bull. On the ground, Annan, river banks.
- 9. Clavaria fusiformis Sow. On the ground, Annan, river banks.
- 10. Clavaria vermicularis Scop. On the ground, Half-Morton.
- 11. Clavaria cristata Pers. On the ground, Hoddom.
- 12. Pistillaria quisquiliaris Fr. On herbaceous stalks, in damp woods.
- 13. Thelephora laciniata Pers.
- 14. Soppittiella sebacea Mass. On the ground, Hoddom.
- 15. Soppittiella caesia Mass. On sticks, Hoddom.
- 16. Peniophora quercina Cooke. On sticks, Hoddom.
- 17. Hymenochaete rubiginosa Lév. On dead branches, Half-Morton.
- 18. Stereum hirsutum Fr. On dead branches, common.
- 19. Stereum sanguinolentum Fr. On dead branches, near Annan.
- 20. Solenia anomala Fr. On branches (dead), near Annan. 21. Hydnum repandum L. On the ground, Canonbie.
- 22. Grandinia granulosa Fr. On dead wood, Hoddom Bridge.
- 23. Merulius lacrymans Fr. In houses.
- 24. Daedalea quercina Pers.
- 25. Trametes gibbosa Fr.
- 26. Poria vaporaria Fr. On dead wood, common.
- 27. Polystictus veriscolor Fr. On dead wood, common.
- 28. Polystictus abietinus Cooke. On pine wood. 29. Polystictus velutinus Cooke. On dead wood.
- 30. Fomes annosus Cooke. On roots of stumps, Annan.
- 31. Fomes ferruginosus Mass. On fallen branches.
- 32. Polyporus squamosus Fr. On stumps, Annan.
- 33. Polyporus sulphureus Fr. On decaying trees.
- 34. Polyporus adustus Fr.
- 35. Boletus luteus L. Ground, Annan, river banks (in woods).
- 36. Boletus flavus With. Ground, Annan, river banks (in woods).

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- 37. Boletus chrysenteron Fr. Ground, Annan, river banks (in open fields).
- 38. Boletus piperatus Bull. Ground, Annan, river banks (in open
- 39. Boletus badius Fr. Ground, Annan, river banks (in woods).
- 40. Boletus luridus Schæff. Ground, Annan, river banks (in woods).
- 41. Boletus scaber Fr. Ground, Annan, river banks (in woods).
- 42. Boletus edulis Bull. Road sides, Annan.
- 43. Coprinus comatus Fr.
- 44. Coprinus atramentarius Fr. Base of tree, near Annan.
- 45. Coprinus micaceus Fr. Near stumps, Annan.
- 46. Coprinus plicatilis Fr. On dung in fields.
- 47. Anellaria separata Karst. On dung, road sides.
- 48. Panaeolus campanulatus L. On manured land, Annan.
- 49. Panaeolus phalaenarum Fr. On manured land, Annan.
- 50. Psathyrella disseminata Pers. On a stump in great abundance (only once), Annan.
- 51. Psilocybe semilanceata Fr. In fields, common.
- 52. Psilocybe cernua Vahl. In fields, common.
- 53. Psilocybe spadicea Fr. In woods.
- 54. Psilocybe foenisecii Pers. Among grass, near Annan.55. Psilocybe coprophila Bull. On dung in pasture.
- 56. Hypholoma fasciculare Huds. On stumps, common.
- 57. Hypholoma sublateritium Schæff. On stumps in woods.
- 58. Stropharia aeruginosa Curt. Among grass, common.
- 59. Stropharia squamosa Fr. In woods, near Annan.
- 60. Stropharia stercoraria Fr. On roadsides (on dung).
- 61. Stropharia semiglobata Batch. On dung in pastures.
- 62. Stropharia inuncta Fr. In wood among grass.
- 63. Agaricus campestris L. Among gross.
- 64. Agaricus arvensis Schæff. Among grass.
- 65. Paxillus involutus Fr. Annan, river banks (woods).
- 66. Cortinarius elatior Fr. Annan, river banks (woods).
- 67. Cortinarius cinnamomeus Fr.
- 68. Tubaria furfuracea Pers. Among grass, common.
- 69. Flammula alnicola Fr. In clusters on a thorn near Annan.
- 70. Flammula flavida Pers. On a beech trunk, near Annan.
- 71. Galera tenera Schæff. Among grass, common.
- 72. Galera spartea Fr. Among grass.
- 73. Galera hypnorum Batsch. Among moss, etc., common.
- 74. Galera rubiginosa Pers. Among moss, common.
- 75. Hebeloma mesophaeum Fr.
- 76. Inocybe rimosa Bull. Among grass, side of walk, Annan.
- 77. Inocybe geophylla Sow. Among grass, near Annan.
- 78. Inocybe margarispora Berk. Among grass, near Annan.
- 79. Pholiota spectablis Fr. On stumps, near Annan and near Cummertrees.

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- 81. Clitopilus prunulus Scop.
- 82. Nolanea pascua Pers. In fields.
- 83. Nolanea mammosa L. In fields.
- 84. Pluteus cervinus Schæff.
- 85. Lenzites betulina Fr.
- 86. Lentinus cochleatus Fr. On stumps, Hoddom.
- 87. Cantharellus cibarius Fr. Annan river bank.
- 88. Cantharellus aurantiacus Fr. Wood, Fairy Row.
- 89. Nyctalis asterophora Fr. Hoddom.
- 90. Hygrophorus coccineus Fr. Meadows, Annan river.
- 91. Hygrophorus puniceus Fr. Meadows, Annan river.
- 92 Hygrophorus conicus Fr. Meadows, Annan river.
- 93. Hygrophorus psittacinus Fr. Meadows, Annan river.
- 94. Hygrophorus virgineus Fr. Meadows, Annan river.
- 95. Omphalia pyxidata Bull.
- 96. Omphalia fibula Bull.
- 97. Clitocybe claoipes Pers.
- 98. Clitocybe odora Bull.
- 99. Clitocybe infundibuliformis Schæff.
- 100. Clitocybe (Laccaria) laccata Scop.
- 101. Lactarius scrobiculatus Fr.
- 102. Lactarius controversus Fr. Woods, Annan river bank.
- 103. Lactarius blennius Fr. Woods, Annan river bank.
- 104. Lactarius piperatus Fr. Woods, Annan river bank.
- 105. Lactarius deliciosus Fr.
- 106. Lactarius pallidus Fr.
- 107. Lactarius quietus Fr.
- 108. Lactarius aurantiacus Fr.
- 109. Lactarius rufus Fr.
- 110. Lactarius serifluus Fr.
- 111. Lactarius subdulcis Fr.
 112. Lactarius mitissimus Fr.
- 113. Russula alutacea Fr.
- 114. Russula coerulea Fr. Open turfy ground.
- 115. Russula nigricans Fr. Hoddom.
- 116. Russula adusta Fr. Hoddom.
- 117. Russula furcata Fr.
- 118. Russula fellea Fr. Wood near Annan.
- 119. Russula drimeia Cooke.
- 120. Russula ochracea Fr. Wood near Annan.
- 121. Russula ochroleuca Fr. Wood near Annan.
- 122. Russula foetens Fr. Woods, Hoddom.
- 123. Russula emetica Fr. Woods, Hoddom.
- 124. Russula fragilis Fr. Woods, Hoddom.
- 125. Russula integra Fr.
- 126. Russula sanguinea Fr.
- 127. Russula cyanoxantha Fr.

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- 128. Mycena epipterygia Scop.
- 129. Mycena galopoda Pers.
- 130. Mycena alcalina Fr.
- 131. Mycena rugosa Fr.
- 132. Mycena pura Pers.
- 133. Collybia radicata Relh. Near Annan.
- 134. Collybia platyphylla Fr. Wood, Half-Morton.
- 135. Collybia maculata A. and S. In woods, near Annan.
- 136. Collybia distorta Fr. Half-Morton.
- 137. Collybia butyracea Bull. Hoddom.
- 138. Collybia confluens Pers. Wood, near Annan.139. Collybia conigena Pers. Wood, near Annan.
- 140. Collybia dryophila Bull. Wood, near Annan.
- 141. Marasmius peronatus Fr. Hoddom, etc.
- 142. Marasmius oreades Fr. Among grass.
- 143. Marasmius ramealis Fr. On sticks, near Annan.
- 144. Marasmius rotula Fr. On sticks, near Annan.
- 145. Marasmius androsaceus Fr. On decaying grass, in woods.
- 146. Tricholoma rutilans Schæff. Open turfy ground.
- 147. Tricholoma terreum Schæff. Field near wood.
- 148. Tricholoma nudum Bull. Roadsides, near Annan.
- 149. Armillaria mellea Vahl. On stumps.
- 150. Lepiota procera Scop.
- 151. Lepiota rachodes Vitt.
- 152. Lepiota cristata A. and S.
- 153. Lepiota granulosa Batsch.
- 154. Amanita phalloides Fr. Roadsides, near Annan.
- 155. Amanita mappa Fr. Woods, Annan river bank.
- 156. Amanita muscaria L. Woods, Annan.
- 157. Amanita rubescens Fr. Woods, Annan.
- 158. Amanita vaginata Cooke. Woods, Annan.

HYPHOMYCETES.

- 159. Fusidium griseum Link. On oak leaves, common.
- 160. Monilia Koningii Oud. On herbaceous stalks, rare.
- 161. Oedocephalum roseum Cooke. Common on vegetation.
- 162. Aspergillus glaucus Link. Common.
- 163. Trichoderma lignorun Harz. On sticks, etc., common.
- 164. Penicillium glaucum Link. Common.
- 165. Botrytis cinerea Pers.
- 166. Botrytis cinerea var. sclerotiophila Sacc. On sclerotia formed on herb stems.
- 167. Sepedonium chrysospermum Fr. Common on Boletus.
- 168. Acrostalagmus cinnabarinus Corda. On dead vegetation, common.
- 169. Tricothecium roseum Link. On dead vegetation, common.
- 170. Acremoniella pallida Cooke and Mass. On herbaceous stalks.
- 171. Torula herbarum Link. On herbaceous stalks.

- 172. Bispora monilioides Corda. On beech stumps.
- 173. Haplographium finitimum Sacc. On fir leaves, Half-Morton.
- 174. Cladosporium herbarum Link.
- 175. Fumago vagans Pers.
- 176. Helminthosporium fusiforme Corda.
- 177. Triposporium elegans Corda.
- 178. Stemphylium alternariae Sacc. On damp wall paper.
- 179. Tubercularia vulgaris Tode.
- 180. Cylindrocolla Urticae Bon. On nettle stems.

DISCOMYCETES.

- 181. Dichaena quercina Fr. Common on oak branches.
- 182. Dichaena faginea Fr. On young beech, Annan river banks.
- 183. Rhytisma acerinum Fr. Common on sycamore leaves.
- 184. Bulgaria polymorpha Wettst. On logs, Hoddom.
- 185. Ascobolus furfuraceus Pers. On dung, fields near Annan.
- 186. Ascôphanus equinus Mass. On dung, fields.187. Ascophanus cinereus Boud. On dung, fields.
- 188. Saccobolus neglectus Boud. On dung, fields.
- 189. Mollisia cinerea Karst. Common.
- 190. Helotium virgultorum Karst.
- 191. Helotium cyathoideum Karst.
- 192. Helotium citrinum. Fr.
- 193. Dasyscypha virginea Fuck.
- 194. Dasyscypha barbata Mass.
- 195. Lachnea scutellata.
- 196. Humaria melaloma Mass.
- 197. Humaria granulata Bull.
- 198. Otidea onotica Fuck.
- 199. Acetabula vulgaris Fuck.
- 200. Helvella crispa Fr. In wood on Dumfries road.
- 201. Spathularia clavata Sacc. Hoddom.
- 202. Mitrula viridis Karst. Hoddom.
- 203. Morchella esculenta Pers. Hoddom.

PYRENOMYCETES.

- 204. Epichloe typhina Tul. On grass by the sea, Annan.
- 205. Cordyceps capitata Link. On the ground in wood on Dumfries road.
- 206. Claviceps purpurea Tul. Abundant in various grasses.
- 207. Nectria coccinea Fr.
- 208. Nectria cinnabarina Fr.
- 209. Gibberella cyanogena Sacc. On cabbage stalks.
- 210. Erysiphe graminis DC.
- 211. Erysiphe martii Lév. On cultivated peas.
- 212. Erysiphe Umbelliferarum de Bary. On hemlock.
- 213. Microsphaera Berberidis Lév. On Barberry.

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214. Myxotrichum chartarum Kunze.

215. Ticothecium pygmaeum Koerb. On fruits of Lecanora sp.

216. Rosellinia aquila De Not. On decaying wood.

217. Pleospora herbarum Rabenh. On herbaceous stalks.

218. Melanomma pulvis pyrius Fuck. Hoddom.

219. Leptosphaeria vagabunda Sacc. On gooseberry shoots.

220. Leptosphaeria doliolum Ces. and de Not. On herbaceous stalks.

On nettle stalks. 221. Leptosphaeria acuta Karst.

222. Trichosphaeria minima Wint.

223. Diatrypella quercina Nitschke.

224. Rhopographus Pteridis Wint. On bracken. 225. Hypoxylon concentricum Grev. Hoddom.

226. Hypoxylon coccineum Fuck. Hoddom.

227. Hypoxylon fuscum Fr. Hoddom.

228. Xylaria polymorpha Wint. Hoddom.

229. Xvlaria Hypoxylon Grev. Common on stumps.

SPHAEROPSIDEAE.

230. Steganosporium pyriforme Sacc. On sycamore.

231. Coniothyrium vagabundum Sacc. On gooseberry.

PHYCOMYCETES.

232. Peronospora leptosperma de Bary. On Compositae.

233. Mortierella nigrescens Van Tiegh. On decaying grass.

234. Pilobolus crystallinus Tode. On dnng.

235. Sporodinia aspergillus Schröt. On Russula.

236. Cystopus candidus Lév. On Shepherd's purse.

UREDINEAE.

237. Uromyces Ficariae Lév.

238. Uromyces Poae Rabenh.

239. Puccinia Magnusiana Körn. On Ranunculus.

240. Puccinia Adoxae DC.

241. Puccinia suaveolens Wint. On thistle, Hardgrave.

242. Puccinia galii Schwein. 243. Puccinia Poarum Nielsen.

244. Puccinia Menthae Pers.

245. Puccinia Malvacearum Mont.

246. Puccinia Violae Wint.

247. Puccinia Pimpinellae Strauss.

248. Puccinia Pringsheimiana Kleb. On gooseberry.

249. Phragmidium fragariastri Plowr.

250. Phragmidium subcorticium Wint. On roses.

251. Phragmidium violaceum Wint. On bramble.

252. Melampsora Helioscopiae Wint. On Euphorbia. 253. Melampsora farinosa Schröt. On willows.

254. Coleosporium Euphrasiae Wint.

255. Coleosporium Campanulae Lév. Hardgrave.

- 256. Ustilago Tragopogi Schröt.
- 257. Ustilago segetum Wint.
- 258. Urocystis anemones Schröt. Wood near Annan.

Where the locality is not indicated the specimens were collected in the immediate neighbourhood of Annan.

CHARTERS GRANTED TO ANNAN BY KINGS JAMES V. AND JAMES VI. Extracted from the Register of the Great Seal of Scotland, and Translated by E. J. CHINNOCK, LL.D.

26th of James V. At Edinburgh, 1st March, 1539.

The King, because the town and burgh of Annand, situated upon the western borders and near adjacent to the Kingdom of England, had frequently been burned and destroyed, and the burgesses and inhabitants had been plundered and slain by the English, in protection of the Kingdom of Scotland, in the times both of peace and war, and they had always been faithful and just Scots to his crown, and because the ancient charters of the foundation and infeofment of the said burgh, made by the King's ancestors had been destroyed and burnt through the siege and burning and otherwise by the enemies of the said King, whence the practise of trades had ceased among them; therefore he has enfeoffed anew to the said burgesses and community the burgh and town of Annand as a free burgh for ever, with all the lands, yearly rents, and possessions, and fishings whatsoever belonging to the same, viz., beginning at the Sandy-pule of Kirkbank Bencherbek and ascending to the height of Holingbog, bordering between Dunbertane and Wrmanbe to Robgillistrand to the carne of Cragkow, and then to the height of Ragilschawis, and thence to the three stones of Sandygile, and from these to the Southwood, and thence before the mor of Grekane to the Merebek running into the sea, and from this to the Altarestane within the water of Sulway, and thence to the foot of Annand-water, scare and schand; and so that the Northburnfute, with fishing nets from the river as far as the sea, with power of breaking up and cultivating the common land and of making mills besides, mill lands and water-courses, the dammis to their greatest advantage and profit; of electing annually bailies, etc., and swearing them in, of having a market-cross and a market day weekly on the Sabbath-day, and a market day called the

fare-day annually on the day of the Ascension called Alhallow Thurisday, and through the week of the same, with a town-hall, etc., with power of buying and selling, etc., burgh farms, etc., to be paid.

45th of James VI. At Edinburgh, 10th July, 1612.

The King, understanding that the town and burgh of Annand, then situated in the Middil schyrs of the Kingdom of Great Britain, has very often been destroyed, and calling to mind that King James V. had erected the said town into a free burgh by a charter, in which, through the ignorance of those who obtained it, no certain yearly rent was fixed to be paid to the King, but he was referred to the old custom of payment; whence it came to pass that it was uncertain what it had been the custom to pay; because the old charters had been destroyed; he has ratified the said charter and the others granted to the said burgh. Moreover he has again erected the said town into a free royal burgh, with all its lands, yearly rents, and fishings within the bounds specified, with salmon and other fishings by boats, nets, and the halfis and coupis; and from the Alterstane in Silway at the foot of Annand-water, with power to the burgesses of breaking up and filling the common lands, and of making mills, mill lands, and damis upon them; also of electing annually a provost, bailies, etc., with power of the pack and peill, of buying and selling, etc., also building a town-hall, prison, and market-cross and of holding a market on Thursday and Friday in each week, with free fairs twice a year, namely, on Ascension-day, called Allhallow Thurisday, and on St Michael's day, 29th of September, and through the weeks of the same, with customs, etc. 40 shillings to be paid, with the usual burghal service.

WATER OF ANNAN.

22nd of James V. At Striveling, 7th March, 1535.

The King has granted to John Kennedy, son and heir apparent of John Kennedy of Halleaths and to his heirs, 10 mercats of land of ancient extent of Halleaths, with the fishing of the same above the water of Annand between the church of Apilgarth and the King's lands and the lands of Lochmabane, in the parish of Lochmabane, stewartry of Annanderdale,

sheriffdom of Drumfres, which the said John the elder has resigned the rights and services due and customary to be performed; free tenement being reserved to the said John the elder.

Note on James V.'s Charter to Annan.—Before the time of the Reformation Saturday was called the Sabbath Day and Sunday the Lord's Day. Sabbati dies (Saturday) and Dies Dominicalis (Sunday). So Annan market day was on Saturday.

18th May, 1908.

Chairman-Dr Martin, Vice-President.

An Episode in the Life of Paul Jones. By Mr Joseph Robison.

Among the many incidents in the life of John Paul, or, as he is better known, Paul Jones, the father of the American Navy, none is more mysterious than his arrest at Kirkcudbright on a charge of being concerned in the death of one Mungo Maxwell, a native of Clonyards, Buittle. Jones followed the calling of the sea at an early age, and had made voyages to the States and West Indies. In 1766, although only 19 years of age, he was appointed chief mate of the brig Two Friends, a vessel engaged in the Slave Trade. Disgusted with the diabolical cruelties of that trade, he abandoned it on this account. This we may well believe, as wanton cruelty, so far as we can make out, was never one of the attributes of Jones. He took passage home to his native county of Kirkcudbright in the "John of Kirkcudbright" of and to that port, which appears to have been then in a much more flourishing condition than it is now. Captain M'Adam was the commander, and both he and his mate died of fever on the voyage. The qualities of Jones as a seaman came into requisition, as there was no one else on board capable of navigating the vessel home. He assumed the command and brought her safely to port, and, in recognition of his services the owners, Currie, Beck & Company, appointed him master and supercargo. So long as he remained in command he retained the confidence of his owners, and appears to have made several

voyages to the West Indies before the incident of Mungo Maxwell. In the beginning of October, 1769, we find a petition by Robert Maxwell, father of Mungo Maxwell, and residing at Clonyards, stating that "Mungo Maxwell was hired or engaged by John Beck, merchant in Kirkcudbright, who is one of the owners of the ship or brigantine, called the 'John of Kirkcudbright,' to go on board the said vessel, which was then about to sail for Jamaica and other parts of the West Indies, and to act on board the same as a carpenter until she should return to the port of Kirkcudbright." He goes on to say that his son accordingly entered on board the vessel, of which Paul Jones was master, and soon after the vessel sailed from Kirkcudbright. The "John" did not return to Kirkcudbright till Saturday, the 3rd November following, and the next day Robert Maxwell, having got notice of her arrival, went to Kirkcudbright to visit his son. He, however, was informed of his son's death, and the petition proceeds:- "While in the West Indies, and on board the said vessel, he (Mungo Maxwell) was most unmercifully, by the said John Paul, with a great cudgel or batton, beat, bled, and bruised, and wounded upon his back and other parts of his body, and of which wounds and bruises, he soon afterwards died on board the Barcelona packet of London, then in the West Indies, and lying near to the place where the said other vessel was. That the informer cannot learn the particular time or place, when and where his said son received the aforesaid death wounds, nor the particular time or place when and where he died; but he is well satisfied that the men and other sailors on board the said brigantine, upon examination before your lordships, will clear up the matter, and show that the said Mungo Maxwell was beat, bled, and wounded, and died in the manner before set forth. May it therefore please your lordships to precognose the whole sailors or mariners on board the said vessel or brigantine 'John,' and in the meantime to grant warrant to search for and apprehend the said John Paul, and to incarcerate his person in the Tolbooth of Kirkcudbright, or some other sure warding place, therein to remain to and while he be tried for the aforesaid crime, and be liberated in due course of law, according to justice, and the informer shall ever pray." The petition is addressed to the Right Honourable William Earl of March and Ruglen, Vice-Admiral of Scotland, and John Goldie,

Esquire of Craigmuie, his lordship's deputy for the bounds betwixt the south side of the water of Cree in Galloway, and the Border of England, and his substitute, offices long since fallen into desuetude.

His lordship or his deputies acted with great promptitude, and warrant was granted to Messengers-at-Arms, Officer of the Vice-Admiralty, Steward Officers, and Constables of the Stewartry of Kirkcudbright, and all officers of the law to search for and apprehend Jones wherever he can be found within the bounds of the jurisdiction. On being apprehended it was ordained that he should be imprisoned in the Toolbooth of Dumfries or Kirkcudbright, whichever of them happened to be nearest. The Magistrates of both burghs and the Keepers of the Tolbooths were required and warranted to receive and detain Iones, and further warrant was granted to summon the whole of the sailors and other persons on board the "John," whenever the vessel arrived at Kirkcudbright, before John Kirkpatrick of Raebury (afterwards Provost of the Burgh), William Gordon of Campbelton (another Provost), and James Laurie of Barnsoul. Warrant is also granted to the Magistrates to examine these persons on oath in relation to what they knew concerning the crime with which Iones was charged; that before he was imprisoned, he was to be carried before the three Justices for examination, and his declaration set down and signed by him and them. The warrant is given at Dumfries, dated 10th November, 1770, and signed John Goldie.

In the next paper Robert Maxwell acknowledges that the warrant has been granted and duly executed by James Fowler, Admiral Officer. No date is given as to when the apprehension took place, but it was at Kirkcudbright, as he had been delivered to the Magistrates there, along with the principal application and warrant. It being therefore necessary to have the "samen' returned to the Admiral Depute along with precognition of witnesses taken upon that subject, and the Magistrates affirming that the application and warrant was the only authority they had for the detaining of Jones, declined delivering the same to him without his granting the obligation underwritten. Maxwell therefore not only acknowledged the receipt of the principal obligation or warrant, but also obliged himself "to make the samen or a notorial copie thereof furthcoming to the Magistrates

whenever found necessary for their defence in case they shall ever be quarrelled for delivering the same to him in the penalty of £10 sterling in case he failed therein." This was subscribed at Kirkcudbright on 13th November, and was witnessed by John Thomson, clerk to William Gordon, and James M'Gowan, shoemaker, Kirkcudbright. On 15th November, 1770, a petition was presented by Jones to the Earl of March, in which he states that at present he is incarcerated in the Tolbooth of Kirkcudbright in virtue of a warrant issued by his lordship's deputy on Maxwell's information. He proceeds to say that he is conscious of his innocence, and that there is not the least cause or reason for harassing him or detaining him in prison upon the complaint, as the same is absolutely false and groundless; that from the precognition taken in the affair under his lordship's warrant there is not the least evidence or presumption that Mungo Maxwell died of any abuse received from the petitioner, nor was there any proof brought of his being actually dead. In these circumstances he applied to his lordship to be liberated on bail to stand trial for the alleged crime. That bail he says he is ready to find, whether by himself or by the help of his friends he does not say. He confidently anticipated liberation, as he does not entertain a doubt of his lordship complying with the request, and his argument that there was not the smallest presumption of his guilt was of itself sufficient to entitle him to be liberated. Further, his health and fortune and a valuable ship and cargo entrusted by his employers to his care were all at stake, and must suffer considerably if he is not immediately set at a liberty. Besides all this, he had good reason to believe that Robert Maxwell, the informer, would consent to his being liberated upon bail to stand trial. In respect of all this he appealed to his lordship to order the Magistrates of Kirkcudbright and their jailer to set him at liberty upon his finding sufficient caution to stand trial. The petition is signed by Thomas Stothart. follows the deliverance, in which the Vice-Admiral Deputy states he has considered the petition, and in respect of the consent of the informer, Robert Maxwell, finds that the crime charged against Jones was bailable, and grants warrant to the Magistrates to set him at liberty "furth of their Tolbooth upon his finding sufficient caution, and that he should appear and answer to any indictment or criminal libel that might be brought

against him in any competent court in Scotland within the space of six months under the penalty of 1000 merks Scots, and that he shall attend the whole diets of court, and not depart without leave of the same. The warrant is signed by John Goldie, and witnessed by Samuel Clark, clerk to the Court of Vice-Admiralty," kept at Dumfries in the bounds betwixt the Water of Cree and Galloway and the Borders of England."

Jones was set at liberty, and twelve days later presented his famous petition to the members of Lodge St. Bernard, Kirk-cudbright, for admission to the Lodge. The petition (now in the possession of Mr Andrew Montgomery of Netherhall, Kirk-cudbrightshire) is in the following terms:—

To the Worshipfull Master Wardens and Remanent Brethren of Free Accepted Masons of the Lodge of St. Bernard held at Kirkcudbright.

The Petition of John Paul, Commander of the "John of Kirkcudbright."

Humbly Sheweth,—That your Petitioner for a considerable time by past hath Entertained a strong and sincere Regaird for your most noble Honourable and Ancient society of free and Accepted Masons. But Hitherto not meeting with an seasonable opportunity Do now most Humbly Crave the Benefits of Receiving and Admitting me Into your fraternity as an Entered Apprentice promising assuring and Engaidging to you That I shall on all Rules and Orders of your Lodge be most obsequient and observiant. That I shall in all things Deport behave and act answerable to the Laws and Instructions of the Lodge, and in every thing to which I may be made Lyable, promising faithful obedience.

The Complyance of your Right Worshipfull wardens and rest of the Brethren will singularly oblidge and very much Honour Right Worshipfull your most Humble Petitioner and most Humble servant.

JNO. PAUL.

I do attest the Petitioner to be a Good man and a person whom I have no doubt will in due time become a worthy Brother.

JAMES SMITH.

From the above it will be seen that the brethren at any rate had sufficient confidence in the integrity of Jones, and that he

would be able to meet the charge hanging over him. He was duly admitted a member, and at the end of the entry is, "Paul Jones entered." This latter seems to dispose of the statement that it was in 1773, after inheriting his elder brother's property in Virginia, that he changed his name from John Paul to Paul Jones. It would therefore be extremely interesting to know what his reason really was for doing so. Could it be that he was so much scandalised by a charge of which he knew himself to be innocent? It is all the more strange in view of the fact that on 1st April, 1771, his employers, Currie, Beck & Co., gave him a testimonial stating that on two voyages of the "John" to the Indies he had acted as master, and had approved himself in every way qualified for the post. The firm had been dissolved. and the vessel sold, and the certificate goes on to say that all accounts between him and the owners had been amicably settled. They at anyrate had seemingly every confidence in him. The Lodge minutes give scanty information as to Jones. He was admitted on 27th November, and attended meetings on 29th and 30th of the same month. On 1st February, 1771, he was admitted to the 2nd degree, and the last time he was present was on 9th April. The latter was the occasion on which Jones marched with the brethren to the laying of the foundation stone of what is now known as Old Bank House, presently occupied by Sheriff Napier, and standing near the site of the Meikle Yett. The house built by Mr Freeland, a magistrate of the burgh, was that day named Castle Cannon, and it is curious to note how, in the process of time, the name in part has been transferred to the adjoining building, known as Cannonwalls.

The records are silent as to whether any further proceedings were taken against Jones in regard to the charge or whether they were quietly dropped. In any case, his innocence was manifested in an affidavit sworn at the Mansion House, London, on 30th January, 1773, by James Eastment, just about the date when Jones visited Virginia in connection with his brother's property. Eastment swore that Mungo Maxwell, in good health, came on board his vessel, the Barcelona packet, then lying in Great Rockley Bay, in the island of Tobago, about the middle of June, 1770, and in his capacity of carpenter. He was in perfect health for some days after he came on board, after which he was afflicted with fever and lowness of spirits. This continued for

four or five days, when he died on the passage from Tobago to Antigua. He never heard Maxwell complain of having received any ill-usage from John Paul, and he believed that his death was occasioned by fever and lowness of spirits. This should be sufficient to dispose of the charge, and one is glad to know that the fame of the "Father of the American Navy" is not besmirched by such a scandal. Whether it was his treatment at this period, or whether it was the result of honest conviction, one would like to know, but within another four years he had cast in his lot with the revolted Colonies and had offered his services to Congress. In April, 1778, he made his celebrated raid on these coasts in the "Ranger," 18 guns, and performed some daring exploits, which do not come within the scope of this paper, unless it be the descent on St Mary's Isle, when he carried off Lord Selkirk's plate, to restore it six years later. The wonder is that he did not come up the river to the town in whose Tolbooth he had been incarcerated on a serious charge. In Mackenzie's "History of Galloway" the curious may read a circumstantial account of the state of terror and excitement into which the inhabitants were thrown, and which was contributed by Malcolmson, the correspondent of Sir Walter Scott, the Ettrick Shepherd, and Joseph Train.

THE LAPWING. By the Late Mr WM. HUNTER, Carlaverock.

Everyone must be acquainted with the habits of the familiar lapwing, the bright and attractive form of which adorns almost every landscape. It is the most common of the plover family, and, during the daytime in the autumn and winter months, after its paternal and maternal duties are o'er, it is to be found scattered over the country, usually in large flocks, sometimes on pasture and marshy land, but more often on fallow land and land where root crops have been raised in search of worms, slugs, and other food. It is not easily seen on the latter ground as it runs to and fro, but whenever the birds take flight their bright, white under parts are then plainly visible. On pasture land, however, it is a very interesting bird to watch. How coolly does it go about all its movements too! After running a few feet over the surface of the ground, its head is lowered, and almost immediately its alert eye has caught sight of some unfortunate

worm, which, alarmed by the noise above his home, has come out of his hiding place to investigate matters, thinking the cause due to the action of his enemy the mole. Needless to relate, he is soon disposed of, while the lapwing goes on a fresh search, making, perhaps, several other short runs before he comes across any more. The lapwing procures a great deal of its food during the night-time, and as the shades of the silent evening hour are setting in, it is often observed in small flocks going through the air at a great rate, its wings then making a kind of rushing sound which is distinctly audible. Its cry is often heard at dusk either when flying overhead or emanating from some fallow or pasture land. It is especially noisy on clear moonlight evenings. After the frosts and snows of winter have gone the lapwing pairs, when it is very pleasant to listen to its breeding call, more especially when darkness has settled over the still country. Everything appears enshrouded in a solemn silence; bird songsters have. retired to roost amongst the trees, shrubs, etc., and the last thrush has stopped its evening lullaby until the advent of a new day, when the love song of the lapwing is heard from the fallow fields, where it is searching a place suitable for it and its mate to nest. If the night be calm its notes can be heard throughout the whole evening, but as daylight breaks it begins to get more silent, and its place is taken by some early thrush or blackbird, the songs of which seem to drown all other sounds. The notes during the breeding season somewhat resemble the words who-c wee, who-o-wee, who we, who we, whoo-we-e, the wee being pronounced like the French "oui." The lapwing rises a short distance in the air when uttering these notes, tumbling over several times when going downward, before it again returns to land. Its other notes at this time resemble "pee-weet," or "peesweep," whence the bird derives one of its names. It utters these usually when anyone is in the neighbourhood of its nest, the first syllable being prolonged, with a plaintive accent. At other times it seems to have a variety of calls, often first a shrill single note.

THE NESTING SEASON.

This is among the first of birds to nest, which is usually a round hole scraped on fallow, pasture, moor, or marshy land, lined at times with dead grass, small pieces of straw, or rushes, but often this is reduced to a minimum, especially on fallow land,

in which the bird lays its pyriform eggs. These are usually four in number, although I have heard of an instance where five has been found. This seems to be a very rare occurrence though, as I have noted from various works on ornithology. If the first clutch be taken the bird often lays no more than three next time, and it will not forsake the nest if one egg be left, which it will sit on and hatch. In going over the breeding haunts a great many empty nests may often be come across, seemingly just scraped in the soil. These are "false" nests which the male makes when showing off to its mate. The eggs vary a great deal in marking, being dark olive green in ground colour, spotted and blotched with shades of black and blackish brown. The nest is often found in some depression of the ground, like the footprints made by horses or cattle. The lapwing is a very close sitter, and soon after the last egg of the clutch is laid is very attentive over its brooding duties, when it places the eggs points inwards. Before that, however, when incubation has hardly commenced, they are often found sideways in the nest, and that is thought to be a sign that all are fresh. How zealously it guards the eggs, which are often very difficult to find owing to their being so like the ground around them! Should an intruder be seen at some distance off, if he be a close observer, he will notice the lapwing stealing away from its eggs in several short runs, and after going a certain length, it will rise straight up into the air, but should he be in hiding behind a bank or hedge and then suddenly spring up into full view of the breeding ground, all he has to do is to watch for the lapwing, which rises into the air, and then make for the spot from where the bird has flown, when he will likely be rewarded by a find, which otherwise he might have taken hours to accomplish. At times the bird adopts a great many tactics to entice its enemy from its breeding ground, such as wheeling around him with angry cries, even occasionally coming within reach of his head, often trailing itself on the ground in front of him pretending it has got a broken wing. The latter device is usually resorted to after the young are hatched, about which the parent birds show the greatest anxiety and concern. How closely do these harmonise with the vegetation around them too, where they will remain squatted until all danger is past, but when once "spotted" and made to run they will do so with the utmost rapidity, swimming across any shallow which may come

before them, when they will try to hide in any opening which may present itself, the old birds all the while giving vent to cries of woe, as they wheel around the intruder in the air above. The young run directly they leave the shell. The lapwing begins laying towards the end of March, and onwards to April, May, and June.

Enemies and other Disadvantages to contend with.

The hungry carrion crow is one of its greatest enemies, being most persistent in its search for the eggs. He usually glides quietly over some bank or other barrier next the breeding place, with beak pointed downwards, eagerly scanning the ground below him, which he does with the utmost precision, quartering every foot, with the result that not an egg escapes his observant eye. At last he sees a nest, and is up with an egg in his bill before the lapwings have realised what is going on. With speedy wing and cries of distress the parent birds make after the persecutor, but as the latter has obtained a start he serenely steers his course for the nearest refuge and there devours his ill-gotten gain. After his meal is finished, and when he thinks the course is again clear, once more he makes for the nesting ground, but the old birds are not to be caught napping this time, and before he has reached the desired object are giving him a much-needed lesson. They buffet him with their hard wings time after time, and, having been joined by all the lapwings in the neighbourhood, the crow is enjoying anything but a happy time—a piteous caw, caw being heard time and again, showing the effect of the punishment on him. Not until he has been thoroughly chased from their domain will the lapwings give up the hunt. Once more the noise subsides and the birds return to their haunts, happy in the thought that their hated enemy has been so disastrously beaten and discomfited. Needless to say that crow does not often return to the same place a third time on a like errand.

Partridges are often wont to stray near the nest, and no sooner does the lapwing see this than it endeavours to chase them off with its wings. The former, having no evil designs on the eggs, rather resent this unceremonious treatment, and there is often a short combat between the birds, which usually ends in favour of the peewit.

The eggs in some cases being laid rather early are often

apt to suffer through late frosts and snows, which always suspend further nesting operations. Then, too, a great many are destroyed when preparing the fallow fields for crop.

Large tides also occasionally account for the destruction of not a few when the nesting ground is submerged. Notwithstanding that, however, the lapwings always come back and nest close to the sea. In stating that fact, I can recall an occasion when a pair of landrails nested on marshy ground covered with rushes. I was unable to find the eggs, but after a very stormy evening, when the place was swept by a heavy tide, I came across several on the tide mark. As far as I can recollect, the landrails never again returned to breed after that trying experience.

Then, again, the eggs are collected up to a certain time in each year as a table delicacy, after which the birds are allowed to hatch them.

Many a lonely moor would be dismal indeed if it were not brightened up during the breeding season by the picturesque figure of the lapwing. Its wild notes and tumbling flight seem to add a charm to the solemn grandeur surrounding it, which is greatly increased if the day be a little stormy.

The lapwing is often found breeding in company with the redshank, and on several occasions I have found the nests of the two birds within a few yards of each other. There thus appears to be a kind of mutual understanding between them, the redshank ably performing the duties of a sentinel, which it does to perfection with its shrill, piping notes on the slightest approach of danger, and the lapwing undertaking the duties of a policeman by driving all bird robbers from the nesting ground. According to Mr Howard Saunders, "it is the male which indulges in such frantic swoops and twirls, accompanied by noisy cries, though when the young are hatched both parents practise every artifice to allure man or dog from their broods."

How pretty it is to watch the movements of the lapwing during the colder months! Perhaps a large flock, in close formation, may be seen flying in a certain direction and then suddenly change their minds. The close formation is broken up and a turning movement is performed, which makes the birds appear in a long, struggling line directing their course to quite a different destination. In this manner they go another short distance, the large flock being in the interval often split

up into several smaller companies, which after a while usually rejoin the main body. Perhaps this time they may make a fallow field their destination, and on arriving there swoop down close to the ground with an apparent intention of settling, but no—the flock is up in the air once more, going through a great many evolutions in like manner, after which they finally make in another direction. Against the dark background of "red" land the birds are seen to great advantage, one second appearing in a nice black coat with narrow strip of white at tail, and the next in a vivid white and black.

As an edible bird, the lapwing is inferior to the golden plover, but nevertheless is not to be despised. The wings of the lapwing, it will be noticed, are not pointed as in other plovers, but are rounded instead, and consequently have a much slower and heavier mode of flight.

The lapwing is one of the best friends the agriculturist has got, as it destroys a very large number of worms, caterpillars, and other injurious insects, which might do a great deal of harm if left undisturbed, and it should therefore be accorded a greater degree of protection than that at present afforded to it. Notwithstanding its merits, however, it is shot at wherever found by gunners whose sole object is to make up a bag. Luckily the birds get extremely wary, and are not easily got at by the ordinary gun, but a very large quantity must fall victims annually to the deadly punt gun with its raking charge of shot.

The cunning reynard, too, it may be mentioned, does not object to a lapwing for supper, as many a feather-strewn patch in some quiet nook plainly testifies. The lapwing is said to make a very nice garden pet, when it will prove itself of the greatest possible use in destroying all worms, slugs, and noxious insects found there.

Note on Gold Touch Piece of Charles II. Exhibited by Mr Jas. Davidson, Summerville. By Mr Davidson.

I exhibit a Gold Touch Piece of Charles II., which may be of interest to the members.

The English Sovereigns, according to the ancient custom of "Touching for the King's evil" or scrofula, by which it was supposed that persons afflicted by that malady could be healed by his touch, distributed to their patients the current gold coin called the Angel, which was hung round the neck of the afflicted person as a charm against further attacks of the disease.

Angels continued to be struck until the end of the reign of Charles I. After the Restoration, Charles II. substituted small gold medallets somewhat similar in type, which were known as Touch Pieces. The practice of touching was scorned by William III. Anne, however, continued to dispense the Royal Gift of Healing. One child she touched was Dr Samuel Johnson, whose Golden Touch Piece may be seen in the British Museum. The Touch Piece enclosed is one of the above medallets, and would be given to the sufferer by His Majesty King Charles. It would be suspended round the neck by means of a white silk ribbon.

On the obverse is a frigate of so many guns, with the legend, Car II, DG. M.B.FR.ET.HI.REX.

On the reverse side is St. Michael and the Dragon, with the motto—Soli Deo Gloria.

Buchanan's Account of the Death of Cumin. By Dr E. J. Chinnock.

George Buchanan's History of Scotland was published in 1582. I have translated his account of the death of Cumin, not because it is of any historic value in itself but because it gives a different account of the "mak' siccar" incident from that generally received.

Book VIII., Chapter 28.—"On the same night he set out with two companions, and men and horses being much fatigued, at last on the seventh day he arrived at his castle near the lake Maben. There he found his brother David and Robert Fleming, and taking them with him he explained to them the cause of his flight. He fell in with a courier, who was carrying a letter from Cuming to England. In this it was written that Robert must be removed as soon as possible; for that there was danger in delay, lest the man noble and popular, with equal wisdom and daring, might stir up a revolution. Having received this proof of Cumin's treachery, Robert, inflamed with wrath, proceeded straightway to Drumfries. For he learnt that his enemy was there. He found John in the church of the Franciscan friars, and

producing the letter he accused him. But as he shamelessly denied that the letter was his, Robert could not restrain his wrath, and driving his dagger into his belly, he left him lying as if dead. As he was mounting the horse James Lindesey, a kinsman of his, and Roger Kirkpatrick, an old friend, perceiving from his countenance that his mind was perturbed, asked him the reason. Having briefly explained, he added that he thought Cuming was dead. "What," said Lindesey, "have you then left so important a thing in doubt?" and with the word he entered the church and finished not only him but also Robert Cumin, who tried to protect his kinsman. This murder was committed in the year 1305, on the 10th of February."

Here Buchanan relates that Lindesey finished the deed commenced by Bruce, and gives Kirkpatrick the position of an accessory only. He calls him "Roger from the cell of Patrick." Like all legends this one took a long time in growing to maturity.

FIELD MEETINGS.

6th June, 1908.

AT TIBBERS AND DRUMLANRIG.

Ideal weather conditions favoured the first field meeting for the session of the Dumfriesshire and Galloway Natural History and Antiquarian Society, which took place on June 6 to Drumlanrig Castle and the ruins of Tibbers Castle. For the student of Scottish history this locality has many interesting associations, while the lover of nature is delighted by the picturesque scenery of the Nith valley; and needless to say a thoroughly enjoyable and interesting afternoon was spent. The party numbered over twenty, including half-a-dozen ladies. Having reached Thornhill by train, they had a pleasant drive of over two miles to Tibbers Castle, which is situated at the influx of Mar Burn to the river Nith, opposite the little village of Carronbridge. The remains of the castle are now very slight; but, standing as it does on ground rising from all sides, it is clear that it must have been a veritable stronghold. Its origin is uncertain, but according to one theory it was built by the Romans and named in honour of Tiberius Cæsar, the name being corrupted to Tibbers. On the other hand, there may be reason for believing it to have been of Norman architecture. Nothing certain is known of the history of the castle till near the end of the thirteenth century. In 1292 it was probably occupied by Sir Richard Siward on behalf of Edward I., shortly before being handed over to John Baliol. In 1297, as chronicled by Harry the Minstrel, the patriot Wallace, after overpowering the English at Stirling Bridge, rode through Durisdeer with three hundred picked men, lightly mounted, and drove the English before him to the Solway. In 1298, however, occupation was resumed by the English, and Sir Richard Siward again became Edward's Warden of Nithsdale and owner of Tibbers Castle, which he rebuilt or repaired, the King ordering payment of £100 due to him so that the work should

not be hindered. For eight years the castle remained in possession of the English, but in 1306 Bruce, after killing Comyn and taking the Castle of Dumfries, captured Tibbers, in which he imprisoned Siward. The castle was held for a few weeks on behalf of Bruce by Sir John de Seton, but it was re-captured by the English, and Seton was sentenced to be drawn and hanged. According to the indictment he was "taken in Richard Siward's castle of Tibbers, which he, John, was holding against the King, for Robert de Bruce, a traitor, and for aiding the said Robert in killing John Comyn in the Church of the Friars' Minors of Dumfries." Such is the first chapter in the known history of the castle. About 1380 it was occupied by the Earl of March, and afterwards by the Maitlands of Lethington. In 1509 the barony of Tibbers was conveyed to the sixth baron of Drumlanrig, but the castle mote had been reserved by the Earl of March. In 1544, James, seventh baron of Drumlanrig, acquired the castle. mote of Tibbers, and two acres of land belonging thereto from John Maitland of Auchengassel.

Except for a space in the centre, the site of the castle is now overgrown by trees. In the open space there is a well in a good state of preservation, judged to be nearly fifty feet in depth. The remaining foundations of the castle show that it has been of considerable extent, embracing a central court and surrounding buildings, and having round towers at three of the angles, and a similar tower on either side of the entrance.

Those of the party interested in botany found a variety of flowers at Tibbers. There is any quantity of the common bluebell, as well as wood loosestrife, wild parsley, and the early purple orchis. Less common flowers are the burnet saxifrage and the wood cranesbill, but the latter was found in rather unusual quantity.

The party afterwards drove to the gardens at Drumlanrig, which are situated on lower ground than the castle and nearer the Nith, and were there shown round by Mr George Angus. The walled-in garden extends to about four acres, and in it and the grounds and flower-beds at the castle forty men are employed. The whole length of one end of the enclosure is occupied by glass houses for the cultivation of fruit. One-half of these are devoted to peaches, the greater part of the other half to plums, and the rest to pears and figs. At the opposite end of the garden

a similar amount of space is taken up with vineries and hothouse flowers, tomato houses, and so forth. The houses, or most of them, are heated by underground furnaces, and the smoke is carried through a flue to a point in the woods a quarter of a mile away, where it escapes through a chimney. Most of the space in the garden is, of course, given over to the raising of kitchen produce and outdoor fruit, but the borders are very tastefully laid out with herbaceous flowering plants. The garden, which is kept in splendid order, was looking its best, there being a fine show of outdoor flowers in bloom, while vegetation was in an advanced stage of growth. It may be mentioned that strawberries and red currants give promise of an excellent crop this season. Gooseberries, however, will be rather thin, and black currants do not seem to be a success. The crop of apples should be satisfactory. The apple trees, which are numerous, are all under sixteen years old, the old ones having been removed some time ago. The hothouse flowers and fruit commanded a good deal of attention and admiration. There were two houses with a grand show of schizanthi and calceolarias, and another with a very fine show of miltoniaorchids, while there was a good deal of odontoglossum, but these were past their best. In one house there is a large mass of Malmaison carnations, but they were only beginning to come into flower. The vineries are looking very well indeed, some bearing better bunches than they have produced for years. The two varieties principally cultivated are the Black Hamburgh and le Gros Colman, the vines of these varieties being about thirty years old. One variety named the Duke of Buccleuch is also cultivated. It is a fine kind, but requires more than the usual care in management. On leaving the garden attention was directed to a very good example of the fern-leafed beech. Branches bearing the ordinary type of leaf appeared among the others, but getting too strong and numerous, they were cut away.

The stately castle of Drumlanrig was next visited, and although members of the party were able to form a very good idea of its characteristics, time proved all too short to permit of a thorough examination. The building, which is four storeys high, forms a hollow square, and is surmounted with corner turrets. There is such an array of windows that, according to a common saying, there is one for every day in the year. In front there is a

fine stairway in the form of a horseshoe ascending to the entrance, and the walls are richly ornamented, the architraves of windows and doors being profusely adorned with armorial bearings. Owing perhaps to its resemblance to Heriot's Hospital, the building has been ascribed to Inigo Jones, but this has been shown to be wrong. The present castle took ten years in building, and was finished in 1689, the year after the Revolution. Inside there is a wealth of tapestry and carving, with a large number of portraits, mostly by Lely and Kneller. One of these—a portrait of William III.—bears marks of Highland dirks, inflicted by some of Prince Charlie's men on their retreat from Derby in 1745. Among the other portraits is one of "Old Q," a noted patron of the turf and sport, who wrought havoc in the woods at the end of the eighteenth century, leaving the hills bleak and bare, though they continued so only for a short time, as a successor commenced the work of restoration in 1827. Among the features of the interior of the castle are the chapel, part of which, notably the doorway, is of very old architecture; the dining-room, with carving by Grinling Gibbons; and the drawing-room, in which there is very fine carving over both doorways, as well as a large extent of walls covered by tapestry on which are represented scenes, mostly of a martial character. In an ante-drawing-room, and in the smoking-room also, part of the walls are covered with tapestry. Family portraits are conspicuous in the dining and drawing-rooms, and especially in the entrance hall, in which there are also a number of antlers and other trophies of the chase. The outlook from some of the windows is magnificent. In one case the foreground is occupied by what is known as the American garden, and in another by finely laid out grounds with flowerbeds of brilliant colours, called "The Paisley Shawl." There are very few trees more than eighty years old standing in the grounds, apart from the lime-tree avenue of 1754; but from the North Avenue, along which the party passed on returning, a splendid view is obtained of the woods which encircle the castle. adding much to the dignity of Drumlanrig.

4th July, 1908.

AT ST. MARY'S ISLE.

(From the Kirkcudbrightshire Advertiser.)

On Saturday, about thirty ladies and gentlemen, members of the Dumfriesshire and Galloway Natural History and Antiquarian Society, held a field day at St. Mary's Isle, by the kind permission of Captain Hope, R.N. The party were met at Kirkcudbright by Mr John M'Kie, R.N., ex-Provost M'Ewen, and Mr Robison, hon. secretary to the local Museum Association, and conducted to some of the interesting places in the town. A start was made with the Old Church School, containing the M'Lellan tomb, on the latter of which Mr Barbour, architect, offered some observations. Part of the tomb, in his opinion, dated back to the 12th century, the remainder being clearly of other dates. A work was at present in progress in regard to the greyfriars of Scotland, including those of Kirkcudbright, and perhaps some information might be gleaned regarding the church, which stood on the site of the school. Other places pointed out were the old Tolbooth and Mercat. Cross, the site of the Meikle Yett and the Museum, with which the visitors were much interested. Later on, the party were conducted over the Isle grounds by Mr Jeffrey, head gardener, who was a most courteous guide. Entering by the north lodge, they traversed the main avenue for some distance, admiring on the way the many fine trees in the policies, and, turning to the right, followed the paths by the shore, where Professor Scott-Elliot observed several uncommon native plants. The heronry was also inspected, but, unfortunately, the nesting season was over, and only one or two herons were seen. Continuing the walk, Paul Jones's point was reached; before passing to the garden through the old and picturesque orchard, near which a singular specimen of Robinia pseudacacia of great age, which had been blown down and had rooted at various points, was seen. There are many noble trees of various kinds throughout the policies, and Professor Scott-Elliot remarked upon these. Great interest was manifested in an ancient font at the mansion house.

A considerable time was enjoyably spent in viewing the

beautiful gardens, noted for their arrangement and for the variety and beauty of the plants they contain, these including many shrubs and herbaceous plants, not generally hardy in Scotland, but thriving under the genial conditions of St. Mary's Isle. The gardens were found in perfect order, and the visitors were much delighted by their appearance and the wealth of bloom. Roses form a special feature of the gardens, and constant additions of the best of the new varieties are being made, while the most satisfactory of the older are retained. They are cultivated in various ways, especially beautiful being the pillar roses, those on the walls, and the weeping roses near the gardener's cottage. In the beds of dwarf roses there were many perfect flowers, worthy of being exhibited at any rose show. Much notice was taken of the stately giant lily, Lilium giganteum, from China, of which some fine specimens were seen—one being about 10 feet high. The borders contain a great variety of herbaceous plants, and many of these were in bloom, such as campanulas, delphiniums, hardy geraniums, the fine blue Lactuca Plumieri, a good French honeysuckle, poppies, irises, pyrethrums, pæonias, spiræas, and a host of others. Some extremely fine specimens of Phormium tenax, the New Zealand flax, were much admired. There are many shrubs and trees, including New Zealand shrubby Veronicas, a good collection of bamboos, which flourish at St. Mary's Isle, fine examples of the orange-ball tree, Buddleia globosa, and the Mexican orange, Choisya ternata, and a vast number of others, such as tree pæonias, clematises, smilax, and many more. The spacious conservatory and other ranges of glass houses were also inspected, the company viewing with admiration the flowers in the first-mentioned, where are splendid carnations, bougainvilleas, pelargoniums, and other tender plants. In the fernery some exceptionally fine gloxinias were much admired. The other plant houses were full of flowers and fruit in various stages of growth, displaying the cultural skill of Mr Jeffrey, the head gardener, and his staff. A new vinery, constructed a short time ago, is full of promising vines and other plants; while the out-door fruit and vegetable departments were found in a most promising condition. In the rockeries and borders adjoining the houses were to be seen some rare plants, and those of the party interested in flowers were

gratified to see crinums and agapanthuses flourishing in the open air. The mansion house is covered with roses and other climbing plants, and these were in perfect condition.

Captain and Mrs Hope and their family take keen interest in the gardens, and to the taste and interest they display, their beauty is due.

The company having again gathered together, Mr Barbour made a few remarks regarding the foundation of the ancient Priory. St. Mary's Isle, he said, was originally called the Island of Trayl, upon which Fergus, Lord of Galloway, built the Priory, and dedicated it to the Virgin Mary in 1129. was founded in the reign of David I. by Fergus, to regain the favour of the King, whom he had offended. He appeared in the habit of a canon regular, and was introduced to the King by the Abbot of Holyrood in full chapter. The Priory held the churches of Galtway, Anwoth, and Kirkandrews. The site of the precinct-gate is called the Great Cross, and Little Cross denotes the place of the court gate. Fergus granted the Isle of Trayl, with the Priory founded on it to the monks of Holyrood, where he died in 1161. The Prior was a Lord of Parliament, and at the Reformation it came into the hands of the Lidderdales. The charter of the foundation is a characteristic mediæval story, taken from Gordon's "Monasticon":--"This is the history of the foundation of the Priory of the Island of Trail, and how Fergus, Great Lord of Galloway, the founder thereof, obtained pardon from King David, and gave that island and other possessions to the Monasterv of Holyrood, and how, having become one of the religious, he was buried therein. When the fabric of the Monastery of Holyrood, near Edinburgh, was progressing under St. David, a most happy monarch, it happened that Fergus, Earl and Great Lord of Galloway, failed in his duty to his Majesty, and committed a grievous fault, at which the King, evidently very angry, determined to put the law in force rigorously against him. This Fergus, being very much devoted to God, and notwithstanding his accidental fault, always faithful to the King, knowing that the King was most determined in the execution of justice, was very much afraid, and in many ways and by various means was endeavouring to regain the King's favour. At length, being inspired by Divine counsel, in a change of habit, and in the most secret

manner, he repaired to Alwyn, Abbot of the Monastery of Holyrood, the King's confessor and confidential secretary, for advice and assistance. The Abbot therefore, compassionating the aforesaid penitent, Lord Fergus, prayed to God and obtained the Roval favour for him; and because he well knew in this case that the King's determination for the execution of justice was inflexible, he was afraid incautiously to intercede in his behalf. At last, by the ingenuity of both Fergus and the Abbot, it was contrived that the said Lord Fergus should assume the cloister habit of a canon regular, and thus, God directing, should obtain, along with his brethren, the King's favour, and at the same time the pardon of this offence, though supplication under a religious habit. Leaving to God their purpose, they wait for a convenient day and hour, with the intention of the Abbot speaking to the King on this matter. One day, as usual, when the King was visiting the builders of this monastery, the Abbot, at a seasonable moment, thus addressed him:—'O, most gracious Prince and founder, though unworthy petitioners and conventual chaplains, by reason of the wounds of our transgressions, to be cured only by a spiritual remedy, beg to have often the presence of your Highness in chapter.' At this the merciful Prince, highly pleased, enters the Chapter House, in order at the hour of meeting, sits down in the middle, the brethren prostrating themselves to the ground at the entrance. The Abbot thus speaks:- 'O, most gracious Prince, we, the petitioners of your Highness, confessing our faults that we are guilty and transgressors, most humbly beseech thee, in the bowels of Jesus Christ, that your most Benignant Highness would condescend to pardon us, every fault and offence committed against your Majesty, with a single unfeigned heart, and at the same time bestow upon us your blessing, in order that, for the future, we may be deserving to meditate and pray for the safety of your kingdom more holily and devotedly, and that your most merciful Highness would be pleased, in token of this gracious pardon, to bestow upon everyone of us the kiss of peace.' The King, with a most placid countenance, replied:—'Dearly beloved brethren, I forgive you all charges, and commend myself to your prayers;' and immediately rising from his seat, and taking the Abbot by the hand, kissed him saying—'Peace be to thee, brother, with the Divine benediction.

Mr S. Arnott, Sunnymead, Maxwelltown, hon. secretary to the Society, proposed the following as members:—Rev. A. Angus, U.F. Manse, Ruthwell; Dr Scott, Ruthwell; Mr S. H. were unanimously elected, the President, Professor Scott-Elliot, Scott, Dumfries; and Mr D. Paterson, solicitor, Thombill, who expressing his gratification at this accession.

Professor Scott-Elliot proposed a vote of thanks to Captain Hope for so kindly allowing them to go over his beautiful grounds. It had been a most interesting day in every respect, not merely in regard to the wild flowers along the seashore, of which many interesting varieties had been detected. They ought also to express their gratitude to Mrs Jeffrey for having forwarded a list of the wild flowers, especially of the rarer forms. It was a very large list-233-and showed conclusively what comparatively favourable climate and soil there were in that part of the country, and was very good indeed for such a small district as that. He thought he had never seen such quantities of roses. Each bush seemed to have been carefully consulted as to its individual requirements, and they had responded most satisfactorily in giving the greatest possible amount of bloom in order to show their gratitude for the care bestowed upon them. The trees also were very interesting, and especially from the fact that, although they grew within a few yards of the seashore, it would be difficult to find anywhere more magnificent specimens of forest timber. Round about Kirkcudbright was, perhaps, for climate and soil, one of the most favoured spots that existed in the South of Scotland.

Mr Arnott then proposed votes of thanks to ex-Provost M'Ewen, Mr Jeffrey, and Mr Robison, which were heartily awarded and acknowledged.

15th August, 1908.

AT RAEHILLS.

(From the Dumfries and Galloway Standard.)

On Saturday members of the Antiquarian Society, together with a few friends, spent a very enjoyable afternoon at Raehills, by the kind permission of Mr J. J. Hope-Johnstone of Annan-

dale. The weather, fortunately, was of an ideal description for such an outing. The party from Dumfries and Maxwelltown, which numbered twenty, assembled at Burns' Statue at one o'clock and drove in a char-a-banc provided by Mr Irving, King's Arms Hotel, the route being along the Moffat road, passing Locharbriggs and Amisfield, then across "the moor," over the Æ water, and onwards to St Ann's Bridge, where a turn to the left was made to Raehills, the distance in all being about fourteen miles. The drive was a very pleasant one, passing as it did through undulating and nicely-wooded country, with the fast-ripening crops making pleasing contrast with the still fresh green of the trees. A smaller contingent of visitors from Moffat and Lockerbie drove from the latter town, and arrived at Raehills some short time before their Dumfries friends. The party was cordially received by Mr Hope-Johnstone, who, after showing his visitors a number of fine family portraits in the hall and dining-room, also conducting them through the library, invited them to view the policies, which they did after partaking of tea on the lawn. The architectural beauties of the house received attention, while the extensive grounds which surround the house were the object of much admiration. The party, however, did not go any further afield, as their drive was a long one, and there was not much more than a couple of hours to spare. Had time permitted a visit to Raehills Glen or to the ruined tower of Lochwood, which is some two miles distant, would no doubt have been very interesting.

The mansion of Raehills was built in 1786 by James, third Earl of Hopetoun, and received a large addition in 1834. The Earl and his Countess, in the course of their visits abroad, were so pleased with a mansion house which they found there that they formed the idea of having a similar mansion on the lands of Raehills. Many plans were made of the proposed mansion, and much consideration was given to the subject between the years 1782 and 1786, during which portions of the building were proceeded with annually. The designers were Robert and James Adam, who studied in Italy and were prominent architects in their day. The Edinburgh University and the Register House at the east end of Princes Street, Edinburgh, are perhaps the best-known examples of their work. At one time it was proposed that the mansion at Raehills should be completed by a

great dome like that of the Register House, which had recently before been built. This scheme was, however, abandoned, as there was a belief that the dome of the Register House was the cause of so much smoke as to hinder the clerks in their work. The old part of Raehills mansion is of the Italian style of architecture, and includes two fine balconies supported by pillars of white stone believed to be quarried at Cove, near Annan. The modern part of the building is in a style resembling the Scottish baronial, but there is a freedom in the architecture which gives it charm. It is built of red Corncockle stone, and the architect was Burn, of Burn & Billings, Edinburgh. This addition added greatly to the accommodation of the house and made it one of the most imposing mansions in the south of Scotland.

Raehills is very prominently and picturesquely situated in the valley of the Kinnel, which it dominates from its commanding position. The lands of Raehills, as the name indicates, lay in a bleak, hilly country, and the higher portions of it were frequently used as sporting ground for wild fowl. The Earl of Hopetoun, who in 1792 inherited the estates from his granduncle, the third Marquis of Annandale, made great improvements on them. He planted extensive woods, including some very fine trees on Gallowhill, while the policies of Raehills were laid out on an extensive scale, and were adorned by gardens, conservatories, and lakes. Previous to the time that the Earl of Hopetoun undertook the formation of Raehills a popular idea prevailed that the whole district did not contain a single tree in which even a "cat could have been hanged." The scene that now meets the eye is entirely different. The whole valley is laid out to the greatest advantage with numerous kinds of trees and shrubs, which include many fine specimens of firs, beeches, and oaks. Round about the mansion one of the most striking features is the fine display of rhododendron shrubs. very large and denselv-foliaged, and when in bloom must present a very imposing appearance. The visitors on Saturday, who strolled along the walks in groups, found much to admire in the grounds. After passing a lake in which a pair of swans and their brood were disporting themselves, they went on to the garden, which is situated in a sheltered position on the lower ground, and is surrounded by walls. It is not extensive, and

there is quite a small area under glass. It is, however, well laid out, though from a utilitarian point of view, the flower display not being specially prominent.

The connection of the Johnstone family with the lands of Raehills commences so early as the reign of King David the Bruce, from whom a member of the family whose history has not been traced obtained a charter of certain lands in the barony of Kirkmichael. But these lands passed out of his hands in the beginning of the following century, and though they reverted to a branch of the family for the few years between 1605 and 1612, it was not till 1659 that they resumed undisturbed posses-The owner at this time was the second Earl of Hartfell, afterwards created first Earl of Annandale, who married Ladv Henrietta Douglas. His son, William, who was a famous statesman, is described as the greatest of all the long line of his family. He lived in the reign of six sovereigns, and played various parts, taking a hand in the Revolution of 1688, though he was afterwards restored to royal favour and was created Marquis of Annandale in 1701. He was succeeded by two of his sons, neither of whom had issue—so that the marquisate became dormant in 1792-and one of his daughters married the Earl of Hopetoun, who adopted Raehills as his principal Annandale residence. Their great-grand-daughter, Anne, married Sir William Johnstone Hope, who served with distinction in the time of Nelson, being attached to the Bellerophon. A picture of the Admiral and Lady Anne and their family occupies a prominent position in the dining-room at Raehills, and there is a half-length portrait of the Admiral in the Court-house, Dumfries. Their eldest son, Mr John James Hope-Johnstone, was for long convener of the county, and there is a full-length portrait of him in the Court-house. In 1825 he claimed the title of Earl of Annandale, but this was repelled by the House of Lords, who again in 1879 adhered to their resolution. grandson, Mr John James Hope-Johnstone of Annandale, who was M.P. for the county in 1874-1880, is the present laird of Raehills. It may be mentioned that the famous Ben Jonson was really not a Jonson, but a Johnstone, a descendant of the Annandale Johnstones.

Before leaving, Mr James Barbour, architect, Dumfries, in a few appropriate words voiced the visitors' appreciation of

the beauties of Raehills, of the privilege of inspecting the seat of such an ancient family as the Johnstones, and of the hospitality of their host. Mr John F. Cormack, solicitor, Lockerbie, seconded the vote of thanks. Mr Hope-Johnstone, in reply, said he had great pleasure in receiving the party and giving them an opportunity of viewing the place. It being a fine day, they had had a pleasant drive, and that, he thought, was half the battle. He would be glad to see them back at Raehills on a future occasion. Mr Arnott, the secretary, proposed the election of Mr and Mrs Thomson, George Street, as members of the society. He said it had been greatly to the advantage of the society to come to Raehills, and he was sure they would be glad to avail themselves of Mr Hope-Johnstone's kind invitation at another date. The two parties then took their seats in the brakes, hearty cheers being raised as they made their departure homewards.

13th September, 1908.

IN CUMBERLAND.

(From the Dumfries and Galloway Standard.)

A party of twenty-two members of the Dumfries and Galloway Natural History and Antiquarian Society crossed the Solway on Saturday and paid a visit to the villages of Bowness and Burgh-by-Sands. As they steamed across the Viaduct, shortly before noon, a strong tide was flowing up the firth, under a brilliant sun. Alighting on the English shore, they turned their attention first to vestiges of the Roman Wall, which had its eastern end here and its western end seventy-two miles distant, at Wallsend, on Tyne. The remains are scanty, for the village, its church, the farm buildings and farm fences of the district, have all been built out of the quarry which the wall itself and the camp or station at Bowness furnished. Houses built within the last fifty years were pointed out for which the stones had been taken from the wall. Large part of the village sits within the space which the camp had occupied; and the fosse which marked its western boundary and part of a rampart at the northeastern angle are still apparent, the latter being a mound in a

back garden overlooking the firth. A small altar stone, dedicated to Jupiter, has been built into the front wall of a stable adjoining the King's Arms Hotel. The inscription is now much weathered. The line of the wall itself can be traced pretty continuously in the fields between Bowness and Port Carlisle. At no point does it now rise much above the level of the surrounding land; but at some places—where it slopes towards a water course, for example—the masonry can be detected. It was a herculean work, one of the many wonderful products of mechanical skill and vast labour which the Romans scattered over the lands which they held temporarily in their grip. A massive structure, twelve to fifteen feet high, and some eight feet broad, it was faced on both sides with squared freestone, conveyed often from distant quarries, and filled inside with rubble, bound together with strong mortar. At every mile there was a guard house, or "mile-castle;" every few miles a fully equipped station for a body of troops. And a deep fosse was excavated alongside the wall, on its northern side, as an additional defence. About fifteen thousand men, the late Dr Bruce has calculated, would be required to garrison the wall. same authority estimates that the stone wall and the earthen rampart, or "vallum," which crossed the same belt of country and was roughly parallel with it, would engage the labour of ten thousand men for two years, and represent an outlay of more than a million pounds of our currency. Hadrian's Wall is the name popularly applied to the stone structure; and Dr Bruce regards it and the vallum as contemporary works, and ascribes them both to that Emperor, who visited Britain in 119. But it is open to question whether it was not simply the vallum that was the work of Hadrian, and the wall itself was erected during the later reign of Severus, when it had been resolved to give up the attempt to conquer Scotland, and to fix the line from Tyne to Solway as the boundary of the Roman Empire.

The Solway at Bowness presents at full tide a sheet of water two miles in breadth; but when the tide recedes its sands are left bare to such an extent that it is fordable by those who know how to avoid the dangers of the course; and until the building of the railway viaduct brought the opposite shores into closer contact, a carrier at Dornock Brow used to act as ferryman, if we may use the word. A board displayed as a signal on the

English side brought him across with his cart for the conveyance of passengers or goods.

The parish church of Bowness, which is said to date from about the year 1300, is a building remarkable for the unusual size and strength of buttresses supporting it, on the south side and at the east and west ends. Doubtless a stone roof at one time added to the weight resting on the walls. The bells are hung in a belfry of peculiar flattened shape. Within a porch are placed two disused bells, one of them bearing the date 1616, the other without any date or inscription, which are known as "the stolen bells of Bowness." The story is that they were carried off by a party of English raiders from the churches of Middlebie and Dornock, and that the Scotsmen by wav of reprisal came over the Solway and took with them those of Bowness. These must have been sportive expeditions. It is said of the mosstroopers of earlier date that they would carry off anything which was neither too hot nor too heavy; but they generally, we fancy, sought something more utilitarian and less unwieldy than church bells. The church was restored some nineteen years ago; but its fine old architectural features have been preserved, alongside the elegance of modern equipment. The baptismal font is a massive and curious piece of antique carving, which had lain neglected for generations in a village garden.

Driving from Bowness to Burgh (which the Cumbrian pronounces Bruff), the way lay for some distance close to the Solway and along a road still wet from having been overflowed by the 21-feet tide of the previous night. At Port Carlisle, a mile from Bowness, is another tinv altar stone, built into the wall of the Steam Packet Inn. The name of the inn and the island remanant of a stout stone pier belong to a period when this was a busy shipping centre; but Silloth has long since superseded it as the port of Carlisle, and the barrier interposed by the Solway Viaduct prevents any ships from now reaching it. The "dandy railway," along which a one-horse car runs in the track of the old canal, links the stranded village on to the locomotive railway system at Drumburgh. At the latter place (three miles and three-quarters from Bowness) was a small military station of the Romans; and there is, in good preservation and serving as a farmhouse, a castle or fortified manor house of the Lords Dacre of the north. In the further course of the drive (extending to about eight miles in all) several pleasant and quaintlooking little villages were passed, and some farmhouses, at one of which a flock of white turkeys was observed. Burgh-by-Sands, the objective of the journey, is a long village, bright with flower gardens, with an air of ease and comfort, and a pleasant flavour of the antique in its architecture. Its chief object of interest is the church. Erected somewhere between 1080 to 1150, it has been well cared for, and the work of restoration recently carried out has been judiciously restrained; so that the fine old pillars and arches are fully preserved. Attached to the church, and forming with it one building, is a massive square tower intended as a place of strength, and with seven-feet thick walls loopholed for the purpose of firing on assailants. The vaulted chamber which forms the basement is entered from the nave of the church by a doorway in which the iron grill remains in situ. A narrow winding stair gives access to the upper chambers and to the belfry. The Rev. J. Baker, vicar of the church, who met the party and kindly acted as their guide, remarked that in all probability the same bell which tolled from that tower on the death of Queen Victoria tolled also the requiem for Edward I., when he died in his tent on Burgh March 601 years ago. Train arrangements did not permit of time to visit the modern monument which marks that spot, and which was seen in the distance.

On the return to Bowness a business meeting was held, under the presidency of Dr Maxwell Ross, and the following new members were admitted to the Society:—Mr W. Common, Gracefield, Dumfries; Mr Maitland-Heriot of Whitecroft; Mr R. Pairman Miller, 50 Queen Street, Edinburgh; Mr J. J. Carruthers, Sunderland; Mrs R. S. Dewar, George Street, Dumfries; Mr Bell, Schoolhouse, Parton; Mr R. W. Miln, Annandale Estate Office, Hillside, Lockerbie.

ABSTRACT OF ACCOUNTS

For Year ending 30th September, 1908.

	CHARGE.				
	Balance from last year	ars,	£6	17	4
	1 Life Member		61	5	0
	Transactions sold	•••	4	2	$\frac{6}{11}$
	Interest on Deposit Receipt Arrears of Subscriptions	•••		15	0
ο.	Arrears of Subscriptions	•••		10	
			£75	4	9
	DISCHARGE.				
1.	Rent, Taxes, and Insurances		£8	16	0
2.	Books bought and Transactions printed and issued—				
	Subscription for Periodicals £2 2				
	Books bought 5 10				
	Dumfries Standard for printing Transactions 24 0 Aberdeen Free Press for Blocks	0			
	Posts and Delivery of Transactions, &c 5 12	2			
	1 0000 that Donvery of Transactions, etc 0 12		38	2	4
2	Note.—This item includes the expense of posts of most the last two issues of the Transactions. Stationery, Advertising—	of			
υ.	J. Swan £0 11	0			
	Advertising Meetings 2 3	6			
	J. Maxwell & Son, Printing and Addressing				
	Post Cards calling Meetings 9 1	3			
		—	11	15	9
4.	Miscellaneous—	0			
	A. Turner, Chemist, Oxygen, &c £0 13 Rae Brothers, Photographic Dealers 0 14	9			
	Commission on Cheques 0 1	4			
	Gratuities 1 2	$\hat{6}$			
	Cabs 0 2	0			
	Secretary's Outlays 1 18	1			
	Treasurer's Do 1 0	0	_		
5.	Cash on Deposit Receipt, Life Member's Sub-	_	5	11	8
	scription 5 0	0			
	On hand 3 4	0			_
		_	8	4	0
	Arrears outstanding	•••	2	15	0
			£75	4	9

We have examined the Books and Accounts of the Dumfriesshire and Galloway Natural History and Antiquarian Society for the year ending 30th September last, and certify that the foregoing Abstract exhibits a true and correct account of the Treasurer's operations.

> (Sgd.) JOHN SYMONS, Auditor. BERTRAM M'GOWAN, Auditor.

EXHIBITS AND PRESENTATIONS TO THE SOCIETY.

SESSION 1907-8.

4тн Остовек, 1907.

Mr James Barbour—Photograph of Roman helmet found at Newstead Camp, Melrose.

Dr J. W. Martin-Natural history specimens.

Professor Scott-Elliot-Haloragia and Abelia.

Mr Samuel Arnott-Acaena burs, Tolmeia Menziesii.

1st November.

Mr Wellwood Maxwell—A number of specimens of tree diseases. Professor Scott-Elliot—A number of specimens illustrating his presidential address.

Mr William M'Cutcheon—Specimens of local fungi, including one of Gyromita esculenta, found near Thornhill, and said at Kew to be the second recorded from Scotland.

Mr R. H. Hunter—Specimens of Black Currant Mite, specimens of Spruce Gall attacking Larch—from Capenoch, Thornhill.

Mr Robert Service—Red Necked Phalarope, taken at Powfoot on September 8th, 1907; Stone Whorl of large size and beautifully incised pattern, sent to him by Mr John Hill, found at Bowerhouses, Ruthwell.

15TH NOVEMBER.

Mr John Corrie, Moniaive—Stone Hammer, found near Auchenstroan, Glencairn, 24th May, 1907, by, and the property of, Mr Hyslop; curious old Knife, found near Lorg, Dalry, the property of Mr Thomas Kerr, Holmhead.

Dr J. W. Martin-Old Property Receipt Book for rents, etc., paid.

6TH DECEMBER.

Mr John M. Corrie-Stone Axe.

Lady Johnson-Ferguson-Photograph of Ancient Tombstone, recently found in Kirkconnell Old Churchyard, with an interesting note thereon (vide Proceedings at Meeting of December 6th). The Photograph presented.

20th December.

Mr John T. Johnstone, Moffat-MS. Catalogue of the Library of the Marquis of Annandale.

Mr Andrew Watt, M.A.—Block showing Rainfall at Cargen from 1866 to 1905. Presented to the Society.

17th January.

Mr Thomas Fraser-Old Account Book, which belonged to the Carruthers' Family of Rammerscales. Presented.

Provost Nicholson-Old Book, printed in Glasgow in 1772 "for E. Wilson, Bookseller in Dumfries."

Miss Hearder-Copy of Bewick's "Birds" and Old Indian Teapot.

6TH MARCH.

Mrs Bryce Duncan, on behalf of Mr Henderson, Logan—A very fine collection of about 1600 Church Tokens.

20th March.

Mr Geddes-A number of Micro-Photographs by his brother, Mr Geddes, London.

Mr Bertram M'Gowan-British Butterflies, illustrating his

25TH APRIL.

At the District Meeting at Annan Colonel Jackson and others exhibited a large number of interesting Curios and Antiquities together with Natural History Specimens, the most interesting of which were a stone hammer head found in a field near Rigg-of-Gretna; a number of coins of the time of Robert I., Edward I., and William the Lion; Burmese knife; Afghan sword, with which several murders had been committed; Burmese comb, Burmese dice box, Burmese spoons, opium pipe, two old monastery seals, brooch of a Roman soldier; brooch worn by a Royalist in

the time of Charles I., containing two cameo portraits. Other exhibits were:—Ticket admitting Andrew Glendinning to the freedom of the burgh of Annan in 1802; Bible 275 years old, with genealogical tree from Adam to Christ, and "Psalms of Spiritual Songs," with music, etc.

18th May.

Professor Scott-Elliot-A number of interesting Plants.

Dr J. W. Martin—Stone Coral from the Arbigland Reef and other Specimens and Curios.

Rev. H. A. Whitelaw—A Coin of Claudius, struck to commemorate the Conquest of Great Britain by the Romans.

Mr Robert Rawson—A number of specimens of Wool and other Textile Raw Material. (Mr Rawson gave an interesting explanation of the materials and their values and uses.) Miss A. Murphie—An Old Edition of "Peden's Prophecies."

LIST OF EXCHANGES.

- 1. The British Museum.
- 2. The Advocates' Library, Edinburgh.
- 3. Bodleian Library, Oxford.
- 4. University Library, Cambridge.
- 5. The British Natural History Department, South Kensington.
- 6. The Yorkshire Naturalists' Union; The Museum, Hull.
- The United States Department of Agriculture, Washington, U.S.A.
- 8. Museum of Comparative Zoology, Cambridge, Mass., U.S.A.
- 9. Meriden Scientific Society, Meriden, Connecticut, U.S.A.
- Minnesota Academy of Natural Sciences, Minneapolos, Minnesota, U.S.A.
- 11. The Hawick Archæological Society, Hawick.
- 12. Harvard College of Comparative Zoology, Harvard, Cambridge, Pennsylvania, U.S.A.
- Austral Association for Science, 5 Elizabeth Street, Sydney, Australia.
- The Edinburgh Botanical Society, Royal Botanical Gardens, Edinburgh.
- 15. New York Academy of Sciences, New York, U.S.A.
- Philadelphia Academy of Natural Sciences, Philadelphia, Pa., U.S.A.
- 17. Rochester Academy of Sciences, Rochester, New York, U.S.A.
- Staten Island Association of Arts and Sciences, Staten Island, New Brighton, Borough of Richmond, New York, U.S.A.
- 19. Liverpool Institute of Commercial Research in the Tropics, Public Museum, Liverpool.
- Buenos Ayres Museo Nacional, Museo Nacional, Buenos Ayres, Argentina.
- Brooklyn Institute of Arts and Sciences, Brooklyn, New York, U.S.A.
- 22. The Edinburgh Geological Society, Edinburgh. (D. Gloag,

India Buildings, George IV. Bridge, Edinburgh, Secretary.)

23. Geological Society of Glasgow, Bath Street, Glasgow.

- 24. Wisconsin Academy of Arts and Sciences, Madison, Wisconsin, U.S.A.
- 25. Banffshire Field Club, Banff.
- Berwickshire Naturalists' Club, c/o Rev. J. Marshall Aitken, Ayton, N.B.
- 27. Glasgow Natural History Society, Bath Street, Glasgow.
- 28. Perthshire Society of Natural Science, Natural History Museum, Tay Street, Perth.
- 29. Stirling Natural History and Archæological Society, Stirling.
- 30. Belfast Naturalists' Field Club, Belfast, Ireland.
- 31. Cardiff Naturalists' Society, Cardiff, Wales.
- Essex Field Club, Essex County Museum of Natural History, Romford, Essex.
- 33. Holmesdale Natural History Club, Reigate.
- Marlborough College of Natural History, The College, Marlborough.
- 35. Nova Scotia Institute of Science, Halifax, Nova Scotia.
- 36. Smithsonian Institute, U.S. National Museum, Washington, U.S.A.
- 37. Davenport Academy of Natural Sciences, Davenport, Iowa, U.S.A.
- Elisha Mitchell Scientific Society, Chapelhill, N. Carolina, U.S.A.
- 39. U.S. Geological Survey, Washington, U.S.A.
- 40. U.S. Bureau of Ethnology, Washington, U.S.A.
- 41. Glasgow Archæological Society, 88 West Regent Street, Glasgow.
- 42. The Missouri Botanical Garden, St. Louis, Missouri, U.S.A.
- 43. Society of Antiquaries of Scotland, Queen Street. Edinburgh.
- 44. British Association for the Advancement of Science, Burlington House, London, W.
- 45. Canadian Institute, 198 College Street, Toronto.

LIST OF MEMBERS OF THE SOCIETY.

SESSION 1907-8

Those who joined the Society at its reorganisation on 3rd November, 1876, are indicated by an asterisk.

LIFE MEMBERS.

Duke of Buccleuch and Queensberry, K.G., K.T10th Jan., 189. Earl of Mansfield, Scone Palace, Perth	7. 1. 1. 3.
J. J. Hope-Johnstone, Raehills, Lockerbie	

HONORARY MEMBERS.

THE MEDIT OF THE PROPERTY.
Baker, J. G., F.R.S., F.L.S., V.M.H., 3 Cumberland Road, Kew
Chinnock F J JJ D Wilseum.
Chinnock, E. J., LL.D., 41 Brackley Road, Chiswick, W
Shirley, G. W., Dumfries
Wilson, Jos., Liverpool

CORRESPONDING MEMBERS.

Anderson, Dr Joseph, LL.D., H.R.S.A., Assistant Secretary Society of Antiquities of Scotland, Keeper of the National Museum of Antiquities, Edinburgh.

Borthwick, Dr A. W., B.Sc., Royal Botanic Gardens, Edinburgh.

Bryce, Professor Thos. H., M.A., M.D., F.R.S.E., F.S.A.Scot., Lecturer on Anatomy, Glasgow University, Member of the Royal Commission on Ancient and Historical Monuments, 2 Grantley Terrace, Glasgow.

Curle, James, W.S., F.S.A.Scot., Priorwood, Melrose.

Gregory, Professor J. W., D.Sc., F.R.S., F.R.S.E., F.G.S., M.I.M.M., etc., Professor of Geology, Glasgow University.

Holmes, Professor E. M., F.L.S., F.R.B.S., Edinburgh and London, F.R.H.S., etc., 17 Bloomsbury Square, London, W.C.

Johnstone, R. B., Hon. Secretary and Editor, Andersonian Naturalists' Society, 17 Cambridge Drive, Glasgow.

Keltie, J. Scott-, LL.D., F.S.A.Scot., Secretary, Royal Geographical Society, Hon. Member Royal Scottish Geographical Society, 1 Savile Row, Burlington Gardens, London, W.

Lewis, F. J., F.L.S., Lecturer in Geographical Botany, The

University, Liverpool.

Macdonald, Dr George, M.A., LL.D., 17 Learmonth Gardens, Edinburgh.

Reid, Clement, F.R.S., F.L.S., F.G.S., 28 Jermyn Street, London,

S.W.

Rhys, Professor Sir John, M.A., D.Litt., Professor of Celtic, and Principal of Jesus College, Oxford, Fellow of the British Academy.

Smith, Miss Annie Lorraine, B.Sc., F.L.S., Temporary Assistant, Botanical Department, British Museum, 20 Talgarth Road, West Kensington, London, W.

Watt, Andrew, M.A., F.R.S.E., Secretary Scottish Meteorological Society, 122 George Street, Edinburgh.

ORDINARY MEMBERS.

Dumfries28th Oct., 1904. Aitchison, Rev. Wm., M.A., Glendower, Castle-

Douglas19th Jan., 1908.

Barbour, James, F.S.A.Scot., St. Christopher's,	
Dumfries3rd Dec.,	1880.
Barbour, Robert, Belmont, Maxwelltown4th March,	1887.
Barbour, Robert, Solicitor, Maxwelltown11th May,	1889.
Barker, John, Redlands, Dumfries23rd Sept.,	1905.
Beattie, Thos., Davington, Langholm30th May,	1896.
Bedford, His Grace the Duke of7th Feb.,	
Bedford, Her Grace the Duchess of7th Feb.,	1908.
Bell, Richard, of Castle O'er, Langholm30th May,	1896.
Bell, T. Hope, Morrington, Dunscore22nd Oct.,	1897
	1001.
Bell, James, Schoolhouse, Parton.	1007
Bennet, Thos., Knockbrex Gardens, Kirkcudbright, 5th April,	1007.
Blacklock, J. E., Solicitor, Dumfries8th May,	1896.
Borland, John, Auchencairn, Closeburn7th Sept.,	1895.
Bowie, J. M., The Hain, Dalbeattie Road, Maxwell-	
town15th Dec.,	
Brodie, D., Ravenscraig, Rotchell Road, Dumfries, 23rd Dec.,	1908.
Browne, Sir James Crichton, 61 Carlisle Place,	
Mansions, Victoria Street, London, S.W3rd Sept.,	1892.
Brown, Stephen, Borland, Lockerbie10th June,	
Brown, T. M., Closeburn, Thornhill6th Aug.,	1891.
Bryson, Alex., Irish Street, Dumfries6th Feb.,	
Byers, J. R., Solicitor, Lockerbie	
Cairns, Rev. J., Rotchell Park, Dumfries6th Feb.,	
Cairns, R. D., Selmar, Dumfries20th Dec.,	1007
Carris, R. D., Seimar, Dumiries20th Dec.,	1507.
Campbell, Rev. J. Montgomery, St. Michael's Manse,	1005
Dumfries	1905.
Campbell, Rev. J. Marjoribanks, Torthorwald21st Nov.,	1908.
Carmont, James, Castledykes, Dumfries6th Feb.,	1891.
Carruthers, J. J., Park House, Southwick-on-Weir,	
SunderlandOct.,	1908.
Clarke, Dr, Charlotte Street, Dumfries6th June,	1889.
Charlton, John, Huntingdon, Dumfries15th Dec.,	
Chapman, A., Dinwiddie Lodge, Lockerbie	1907.
Crichton, Douglas, F.S.A.Scot., London7th Feb.,	
Coats, W. A., of Dalskairth18th Sept.,	1896.
Common, W. Bell, Gracefield, Dumfries14th Sept.,	
Copland, Miss, The Old House, Newabbey5th July,	
Cormack, J. F., Solicitor, Lockerbie4th June,	
Corrie, Jos., Millbank, Maxwelltown	
Corrie, John, Burnbank, Moniaive6th Aug.,	
Cornic John M Ct Michaell Character and Cath Oct	1007.
Corrie, John M., St. Michael's Street4th Oct.,	
Cowan, John, Glenview, Maxwelltown	
Cossar, Thos., Craignee, Maxwelltown	
*Davidson, James, Summerville, Maxwelltown3rd Nov.,	
Davidson, J., Hillhead, Bankend Road, Dumfries10th May,	
Dewar, R. S., 35 George Street, Dumfries 3rd Nov.,	1905.
Dickie, Wm., Merlewood, Maxwelltown6th Oct.,	1882.

Dickson, G. S., Moffat Academy, Moffat14th Sept., 1907.
*Dinwiddie, W. A., Bridgebank, Buccleuch Street,
Dumfries3rd Nov., 1876.
Dinwiddie, Rev. J. L., Ruthwell
Diswiddle, Rev. 5. L., Ruthwell10th May, 1908.
Dinwiddie, R., Overton, Moffat Road, Dumfries9th March, 1883.
Dods, J. W., St. Mary's Place, Dumfries2nd March, 1883.
Drummond, Bernard, Plumber, Dumfries7th Dec., 1888.
Drummond, J. G., Stewart Hall, Dumfries17th Nov., 1905.
Duncan, Jno. Bryce, of Newlands, Dumfries11th Feb., 1898.
Duncan, Mrs, of Newlands, Dumfries20th Dec., 1907.
Dunlop, Rev. S., Irongray Manse, Dumfries10th June, 1905.
Factorback Dr. Chickton House Democritics 2011 M 1 1000
Easterbrook, Dr. Crichton House, Dumfries20th March, 1908.
Edie, Rev. W., Greyfriars' Manse, Dumfries15th Dec., 1905.
Foster, Wm., Nunholm, Dumfries20th Oct., 1908.
Fergusson, Rev. G. F., St. Mary's Place, Dumfries15th Dec., 1905.
Forbes, Rev. J. M., Kirkmahoe
Gillespie, Wm., Solicitor, Castle-Douglas14th May, 1892.
Gladstone, H. Stewart, F.Z.S., Lannhall, Thornhill, 15th July, 1905.
Gladstone, Mrs H. S., Lannhall, Thornhill13th July, 1907.
Gladstone, J. B., Architect, Lockerbie15th Feb., 1907.
Glover, John, W.S., 1 Hill Street, Edinburgh23rd Nov., 1906.
Gooden, W. H., Glebe Terrace, Dumfries14th Sept., 1907.
Gordon, Robert, Brockham Park, Betchworth,
Cummary 1041 35 1005
Surrey
Surrey
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907.
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan,
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries
Gordon, Miss, Kenmure Terrace, Dumfries
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries14th Sept., 1907. Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire
Gordon, Miss, Kenmure Terrace, Dumfries

Hughes, Mrs, Dumfries25th April, 1908
Hunter, Dr Joseph, Castle Street, Dumfries24th June, 1905
1rving, Colonel, of Bonshaw, Annan18th Jan., 1901
Irving, John B., Balmacneil, Ballinluig, Perthshire 16th Oct., 1903
Irving, John A., West Fell, Corbridge-on-Tyne7th Dec., 1906
Irving, H. C., Burnfoot, Ecclefechan
Trying, H. C., Durinout, Ecclerectian
Irvine, Wm. Ferguson, F.S.A.Scot., Birkenhead7th Feb., 1908
Jackson, Colonel, 6 Fruid's Park, Annan9th Aug., 1905
Johnson-Ferguson, Sir J. E., Bart., of Springkell,
Ecclefechan
Johnson-Ferguson, A., Wiston Lodge, Lamington9th Sept., 1905
Johnstone, John T., Victoria House, Moffat4th April, 1890
Johnstone, T. F., Balvaig, Maxwelltown12th Sept., 1908
Johnstone, Mrs, Victoria Terrace, Dumfries17th Feb., 1896
Johnstone, W. S., Victoria Terrace, Dumfries11th Feb., 1898
Johnstone, T. S., Victoria Terrace, Dumfries.
Keswick, J. J., of Mabie6th March, 1908
Kidd, Rev. Thos., U.F. Manse, Moniaive29th June, 1895
Kirkpatrick, Rev. R. S., The Manse, Govan17th Feb., 1896
Laidlaw, John, Plasterer, Lockerbie18th Oct., 1901
Law, Rev. James, South U.F. Manse, Dumfries2nd June, 1905
Little, Thos., Buccleuch Street, Dumfries4th Oct., 1907
*Lennox, Jas., F.S.A.Scot., Edenbank, Maxwelltown, 3rd Nov., 1876
Loreburn, The Right Hon. Lord, 6 Eton Square,
London, S.W
London, S.W
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtown-
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtown-shire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtown-shire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire 2nd March, 1908 Lusk, Hugh D., Larch Villa, Annan 25th April, 1908 Malcolm, A., George Street, Dumfries 2nd Oct., 1894
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
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Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
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Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire
Lowrie, Rev. W. J., Manse of Stoneykirk, Wigtownshire

Millar, R. Pairman, S.S.C., 50 Queen Street, Edin-
burgh
Mond, Miss, Aberdour House, Dumfries9th Sept., 1905.
Murdoch, F. J., Cluden Bank, Holywood21st Dec., 1906.
Murphie, Miss Annie, Cresswell House, Dumfries23rd Nov., 1906.
Murray, G. Rigby, Parton House, Parton4th Dec., 1908.
Murray, Wm., Murraythwaite, Ecclefechan8th Feb., 1895.
Murray, Mrs, Murraythwaite, Ecclefechan29th July, 1905.
Murray, Mrs, Murraythwaite, Eccletechan25th July, 1905.
M'Burnie, John, Castle Brae, Dumfries21st Nov., 1908.
M. Call, James, of Caitloch, Moniaive
M'Cargo, James, Kirkpatrick-Durham24th April, 1896.
M'Cormick, Andrew. Solicitor, Newton-Stewart3rd Nov., 1905.
M'Cormick, Rev. F., F.S.A.Scot., Wellington, Salop 4th Oct., 1907.
M'Cracken, Miss, Fernbank, Lovers' Walk9th Nov., 1906.
M'Cutcheon, Wm., B.Sc., Inverie, Park Road, Max-
welltown
Macdonald, J. C. R., W.S., Dumfries6th Nov., 1885.
M'Dowall, Rev. W., U.F. Manse, Kirkmahoe20th March, 1908.
M'Evoy, Miss May, Benedictine Convent4th Dec., 1908.
M'Gowan, B., Solicitor, Dumfries26th Oct., 1900.
M'Jerrow, David, Town Clerk, Lockerbie
Mackenzie, Colonel, of Auchenskeoch
M'Kerrow, M. H., Solicitor, Dumfries
M'Kerrow, Matt. S., Boreland of Southwick9th Jan., 1890.
M'Kie, John, R.N., Anchorlea, Kirkcudbright4th April, 1881.
M'Kie, John, R.N., Anchoriea, Kirkeudoright4th April, 1001.
MacKinnel, W. A., The Sheiling, Maxwelltown22nd Feb., 1906.
MacKinnel, Mrs, The Sheiling, Maxwelltown22nd Feb., 1906.
M'Lachlan, Mrs Dryfemount, Lockerbie26th March, 1906.
M'Lachlan, Jas., M.D., Lockerbie25th Oct., 1895.
Neilson, George, LL.D., Wellfield, Partickhill Road,
Glasgow
Neilson, J., of Mollance, Castle-Douglas13th March, 1896.
Nicholson, J. H., Airlie, Maxwelltown9th Aug., 1904.
Ovens, Walter, of Torr, Auchencairn
Pairman, Dr. Moffat24th Feb., 1906.
Palmer, Charles, Woodbank Hotel, Dumfries29th July, 1905.
Paton, Rev. Henry, Mayfield Road. Edinburgh21st Nov., 1908.
Payne, J. W., 8 Bank Street, Annan8th Sept., 1906.
Paterson, D., Solicitor, Thornhill4th July, 1908.
Paterson, John, 7 Holmend, Moffat4th Dec., 1908.
Pattie, R., Buccleuch Street, Dumfries23rd Oct., 1908.
Penman, A. C., Mile Ash, Dumfries18th June, 1901.
Penman, Mrs, Mile Ash, Dumfries
Pl. C. C. December Final Description (4) Non-1905.
Phyn, C. S., Procurator-Fiscal, Dumfries
Pickering, R. Y., of Conheath, Dumfries26th Oct., 1900.
Primrose, John, Solicitor, Dumfries5th Dec., 1889.
Proudfoot, John, Ivy House, Moffat9th Jan., 1890.
Rae, Rev. R. Neill, The Manse, Lochmaben21st Dec., 1906.

Rawson, Robert, Glebe Street, Dumfries4th Oct.,	1907.
Reid, James, Chemist, Dumfries.	
Reid, R. C., of Mouswald Place18th Nov.,	1907.
Robertson, Dr J. M., Penpont3rd Feb.,	1886.
Robson, John, Westbourne, Maxwelltown25th May,	1895.
Robson, Dr J. D., Maxwelltown6th March,	1908.
Robertson, Rev. G. Philip, Sandhead U.F. Manse,	
Wigtownshire20th March,	1908.
Romanes, J. M., B.Sc., 6 Albany Place, Dumfries18th Jan.,	1907.
Ross, Dr J. Maxwell, Duntrune, Castle-Douglas	
Road11th July,	1891.
*Rutherford, J., Jardington, DumfriesNov.,	
Saunders, Mrs, Rosebank, Lockerbie.	
Scott-Elliot, G. F., F.L.S., F.R.G.S., of Newton,	
Dumfries4th March,	1887
Scott-Elliot, Mrs, Newton, Dumfries	
Scott, Alexander, Solicitor, Annan7th Nov.,	
Scott, Rev. J. Hay, F.S.A.Scot., Sanquhar6th Aug.,	
Scott, R. A., per Geo. Russell, Banker, Dumfries1st Oct.,	
Scott, S. H., Glebe Terrace, Dumfries4th July,	1000.
Scott, W. S., Redcastle, Dalbeattie14th Jan.,	
Scott, W. Hart, The Hovel, Maxwelltown9th Nov.,	
Scott, Dr W., Clarencefield4th July,	
Semple, Dr. D.Sc., Mile Ash, Dumfries12th June,	
*Service, Robert, M.B.O.U., Maxwelltown	
Service, Robert, Jun., Janefield, Maxwelltown24th March,	
Shannon, John P., Noblehill Mill, Dumfries18th Jan.,	
Sinclair, James, Langlands, Dumfries20th March,	
Smith, Miss, Llangarth, Maxwelltown	1905.
Stark, Rev. W. A., The Manse, Kirkpatrick-	1000
Durham	
Smart, J. T. W., Catherine Street	
Stephen, Rev. W. L., St. Mary's Manse, Moffat28th June,	
Stewart, William, Shambellie, Newabbey	
*Stobie, P., Cabinetmaker, Dumfries3rd Nov.,	1876.
Swan, J., Stationer, Dumfries.	1000
Symons, John Royal Bank, Dumfries2nd Feb.,	
Symons, John, Solicitor, Dumfries6th Nov.,	
Taylor, Captain William20th March,	
*Thomson, J. S., Jeweller, Dumfries3rd Nov.,	1876.
Thomson, Miss, c/o Miss Dunbar, Langlands, Dumfries.	
Thomson, Mrs, George Street, Dumfries4th July,	
Thomson, G. Ramsay, George Street, Dumfries4th July,	1908.
Thompson, Mrs H. A., Inveresk, Castle Street, Dum-	
fries	1904.
Todd, George Eyre, 7 Oakfield Terrace, Hillhead,	100-
Glasgow	1902.
Turner, Alex., Chemist, Dumfries17th Oct.,	1905.

Veitch, W. H., Factor, Hoddom26th Oct., 1900.
Waddell, J. B., Airlie, Dumfries11th June, 1901.
Wallace, M. G., Terreglestown, Dumfries11th March, 1898.
Wallace, James, The Hope, Moffat18th May, 1907.
Wallace, James Cecil, The Hope, Moffat18th May, 1907.
Wallace, Miss, Lochvale House, Lochmaben7th Oct., 1892.
Wallace, Robert, Durham Villa, Dumfries6th Nov., 1908.
Watt, James, Crawford Villa, Johnstone Park,
Dumfries
Watt, Miss, Crawford Villa, Johnstone Park,
Dumfries6th Oct., 1905.
Watson, Thos., Castlebank, Dumfries9th Jan., 1880.
Weatherstone, Andrew, Bank of Scotland House,
Dumfries
White, John, Oaklands, Noblehill28th July, 1906.
White, Mrs, Oaklands, Noblehill28th July, 1906.
Whitelaw, J. W., Solicitor, Dumfries6th Nov., 1885.
Whitelaw, Rev. H. A., U.F. Manse, Albany,
Dumfries
Wightman, J., Post Office, Dumfries18th Nov., 1907.
Will, Geo., Farm Manager, Crichton Royal Institu-
tion
Wilson, Mrs, Castledykes Cottage, Dumfries24th May, 1905.
Wilson, Miss, Castledykes Cottage, Dumfries24th Feb., 1906.
Wilson, J. R., Solicitor, Sanguhar24th Feb., 1805.
Witham, Colonel J. K. Maxwell, C.M.G., of Kirk-
connel, Dumfries
Witham, Miss Maud, Kirkconnel, Dumfries6th Feb., 1890.
Yerburgh, R. A., of Barwhillanty, Parton, R.S.O.,
per R. Powell, 25 Kensington Gore, London,
S.W17th Feb., 1896.

PRESENTED 14 SEP. 1909













