

THE TRANSACTIONS

AND

JOURNAL OF PROCEEDINGS

OF THE

Dumfriesshire and Galloway

Natural History and Antiquarian Society

Founded November, 1862



SESSION 1896-97

PRINTED AT THE STANDARD OFFICE, DUMFRIES

1898

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Birrens and its Antiquities

BY

JAMES MACDONALD, LL.D.,

AND

JAMES BARBOUR, F.S.A.(SCOT.).

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PROCEEDINGS AND TRANSACTIONS
OF THE
DUMFRIESSHIRE AND GALLOWAY
NATURAL HISTORY & ANTIQUARIAN SOCIETY.

SESSION 1896-7.

16th October, 1896.

ANNUAL MEETING.

Mr PHILIP SULLEY, Vice-President, in the Chair.

New Members.—Mr Edward C. Wrigley, Gelston Castle ;
Dr J. W. Martin, Holywood.

Donations and Exchanges.—The following were laid on the table:—Proceedings of the Natural Science Association of Staten Island—Staten Island Names; Proceedings of the Holmesdale Natural History Club; History of the Berwickshire Naturalists' Club, Vol. 15; Transactions of the Meriden Scientific Association; Journal of the Elisha Mitchell Scientific Society; The North American Fanna, Nos. 10, 11, 12 (from the U.S. Department of Agriculture); Transactions of the Canadian Institute; Proceedings of the Rochester (N. Y.) Academy of Sciences; Transactions of the Natural History Society of Glasgow; Proceedings of the Nova Scotian Institute of Science; Annals of the New York Academy of Sciences; County Records of the Name French in England, A.D. 1100-1350 (presented by the author, A. D. Weld French of Boston, U.S.).

SECRETARY'S REPORT.

The Secretary (Dr E. J. Chinnock) read the annual report :

Forty new members were elected during the outgoing session, of whom two are honorary and the rest ordinary members. The Society has sustained the loss of four members :—Dr Grant Bey of Cairo, Mrs Gunning, Mr John Stevens, Wallace Hall, and Major Young of Lincluden. Grant Bey was a contributor to the Transactions. His papers were always scholarly and interesting. One was received very shortly before his death, which occurred suddenly at the Bridge of Allan, where he was for a short holiday. Five members have resigned.

Nine evening meetings and two field meetings have been held. The visit to Eskdalemuir in May was successful in an exceptional degree. There is evidently a wide field for antiquarian research in that district. Twenty-one papers were read at the monthly meetings, some of them being of exceptional value. The session has been principally distinguished by the papers read by Mr Barbour and Dr Macdonald descriptive of the Roman Station at Birrens.

In the middle of the session the Rev. William Andson was associated with Mr Lennox in the office of Librarian. The thanks of the Society are due to both gentlemen for the careful discharge of the duties of their office, as also to the Misses Hannay for continuing to take charge of the Herbarium.

TREASURER'S REPORT.

The Treasurer (Mr J. A. Moodie) read the Annual Report from the 1st October, 1895, to the 30th September, 1896 :—

CHARGE.

Balance in Savings Bank at close of last account	...	...	£1	0	0
Balance in Treasurer's hands at do.	...	...	2	10	3½
			<hr/>		
			£3	10	3½
Subscriptions from 149 Members at 5s each	...	£37	5	0	
Do. 11 do. 2s 6d ,,	...	1	7	6	
			<hr/>		
			38	12	6
Entrance Fees from 23 New Members	...	...	2	17	6
Subscriptions paid in advance	...	...	0	5	0
			<hr/>		
Carry forward	...	...	£45	5	3½

Brought forward	£45	5	3½
Arrears paid	0	2	6
Copies of Transactions sold... ..	0	14	6
Interest on Bank account	0	3	7
Proceeds of Dr Macdonald's Lecture on the Inscribed Stones of Birrens	3	7	0
Donation from Mr George Neilson, P.F., Glasgow, towards cost of publishing his paper on "Old Annan" in Trans- actions	1	1	0
To balance due to Treasurer at 30th Sept., 1896	£2	11	3
Less - Balance in Savings Bank	1	3	7
	<hr/>		
	1	7	8
	<hr/>		
	£52	1	6½
	<hr/>		

DISCHARGE.

Paid Salary of Keeper of Rooms and additional gratuity for Heating Rooms	£2	11	0
Paid for Stationery, Printing, &c.	1	19	8
Paid for Periodicals and Books	2	3	6
Paid for Coals and Gas	0	6	8
Paid Fire Insurance Premium	0	4	6
Paid Secretary's Outlays and Posts	1	11	7
Paid Treasurer's do.	0	15	6
Paid expenses of calling Meetings as follows :—			
Post Cards... ..	£4	9	10
Addressing same	1	4	0
Printing same	1	11	0
	<hr/>		
	7	4	10
Paid expenses of Publishing Transactions for last year as follows :—			
Postages of Transactions to country members	£0	9	9
Account to Stevenson & Ogilvie, Lithographers, Edinburgh, for Photo. Plates... ..	3	5	9
Account to <i>Dumfries Herald</i> for Printing Trans- actions	25	15	8
	<hr/>		
	30	1	2
Paid expenses of Dr Macdonald's Lecture	3	0	2½
Paid for Repairs	1	0	6
Miscellaneous	1	2	5
	<hr/>		
	£52	1	6½
	<hr/>		

J. A. MOODIE, Hon. Treas.

DUMFRIES, 31st December, 1896.—I have examined the foregoing Account, and the Cash Book of the Society, compared them with the Vouchers, and find the balance stated to be correct.

JOHN NEILSON.

ELECTION OF OFFICE-BEARERS.

The following were elected office-bearers and members of the Council for the ensuing Session:—President, Sir R. T. Reid, M.P.; Vice-Presidents, Messrs James G. H. Starke, William J. Maxwell, Philip Sulley, and James Barbour; Secretary, Edward J. Chinnock, LL.D.; Treasurer, Mr John A. Moodie; Librarians and Curators of the Museum, Rev. Wm. Andson and Mr James Lennox; Curators of the Herbarium, Mr George F. Scott-Elliot and Miss Hannay; Members of Council, Rev. Robert Weir, Rev. John Cairns, Messrs Robert Murray, John Neilson, James S. Thomson, James Davidson, George H. Robb, J. Maxwell Ross, William Dickie, and Matthew Jamieson.

COMMUNICATION.

Ancient Egyptian Religion. By GRANT BEY.

A long and interesting paper on this subject by Grant Bey was read by Mr Andson. The paper was too long to be given *in extenso*. But the following abstract will give a fair idea of the principal points discussed in it:—

In treating of the Ancient Egyptian Religion, the author begins with the Cosmogony, or origin of the world. According to the ancient Egyptian belief there existed from all eternity, filling the infinitude of space, both matter and spirit. The material was called Nu, which in our language means the “primordial waters,” and the spiritual part was called by different names at the different periods of Egyptian history and at different religious centres. At Heliopolis, the most ancient Egyptian sanctuary, the primitive universal but latent spirit was called Atum, meaning “darkness;” at Thebes, Amon, the “concealed one;” and at Memphis, Phtah, “the one which opens,” or “moulder,” or “carver.” After remaining for an incalculable time in a passive state, the spirit, or Phtah, moved in Nu—the primordial waters—an idea probably derived from primitive tradition, and reminding us of the similar expression in Gen. i. 3. The result was the projection of Shu and Tafnut, the one corresponding with the light of the day, and the other with the light of the night. We now find that the Lotus plant makes its appearance, and out of the full blown Lotus flower the primitive spirit Phtah manifested itself in a material

form as Ka, the sun-god, and furnished him with material for the further creation of the earth and its contents. When Ka commenced to create, he did not do so by the ordinary way of generation, but by speaking and using distinct formulæ. And according to M. Naville, this is one of the most important points of resemblance between the Egyptian and Hebrew Cosmogonies. The creation of man now took place, and was pictured by Khnum, the spirit of Ka, sitting at a potter's wheel and moulding a lump of clay into the form of a human body, which he afterwards animated by breathing into it the breath of life. Ka himself at this period was represented as enthroned on the Lotus flower, dwelling on the earth, and ruling over man. Ka, therefore, was regarded as the most ancient king of Egypt in the mythical period of Egypt's history. He had his seat of power at Heliopolis, where he built a palace, called Nat-Sar, or house of the great one. Ka reigned many years over obedient, peaceful, and happy subjects, but a time arrived when they became headstrong and unruly, and ultimately they rebelled. So Ka called a council, who advised him to punish them. The task was committed to Sekhet (a personification of the red chemical rays of the sun), who proceeded to smite mankind, first with a destructive drought and then with a deluge, from which only a few people were saved through the intervention of Ka, who had been appeased with a sacrifice. Here, apparently, we have the primitive tradition of the flood. Ka is then represented as having withdrawn, displeased, from the earth to circle round in the heavens, at an unapproachable distance from man, leaving him in a hopeless and helpless condition. But at length the gods had pity on him, and as he could no more raise himself to the level of the gods, the gods lowered themselves by partaking of his nature, and thus they came again to the earth, to rule over and have friendly intercourse with man. The priests taught that Seb, the earth, and Nut, the sky, had a family of sons and daughters, who were partly celestial and partly terrestrial demi-gods. The most prominent among these were Osiris, Isis, and Set. Osiris was the personification of all that was good, and Set, influenced by undue ambition, having conspired against Osiris and killed him, he (Set) became the personification of all that was evil. Isis, who is represented as having been the wife as well as the sister of Osiris, wept in great distress over the dead body of her husband, and while thus engaged she miraculously became preg-

nant, and in due time gave birth to a son, Horus, who was destined to wage war against Set. This seems to have been intended to explain the continuance of good and evil on the earth, and Horus henceforth occupies a prominent place in the Egyptian mythology. Osiris before his death was Ka, the sun of the day, but after his death he became the sun of the night, and appeared no more upon earth in his own person, but in that of his son Horus, who was the sun at sunrise, the dispeller of darkness, and the giver of light and life to the world. The death of Osiris appears to have been considered as a sacrifice for sin, and it was the only sacrifice of this kind in the Egyptian religion. All the others were sacrifices of thanksgiving, in which they offered to the gods flowers, fruits, meat, and drink, the Egyptians believing that spiritual beings lived on the spiritual essences of material things. Osiris, Isis, and Horus were universally worshipped as a Triad, and there were other Triads that were more or less local in their cultus. They had also a moral code, in which the virtues of piety, sobriety, gentleness, chastity, the protection of the weak, benevolence toward the needy, deference to superiors, and respect for property were enjoined. Maspero believes that in the earliest periods the religion of the Egyptians was comparatively pure and spiritual, but in its later developments became grossly material, a kind of nature worship. By degrees animals were introduced as symbols of divine attributes, but in course of time the animals themselves became the real objects of worship, and each of them was worshipped as a separate deity. According to the language of Paul, they became vain in their imaginations, and changed the glory of the incorruptible God into an image made like unto corruptible man, and to birds and beasts and creeping things, and worshipped and served the creature instead of the Creator.

The belief of the ancient Egyptians with regard to human nature bore a resemblance to that which many modern speculators have held, that it was tripartite, consisting of body, soul, and spirit. They held that man was composed of three parts—1, Sahoo, the fleshy, substantial body; 2, Ka, the double, which was the exact counterpart of the first, only it was spiritual, and could not be seen—an intelligence which permeated the whole body and guided its different physical functions; and 3, Ba, signifying force, the spiritual part of our nature, which fits it for union with God. When the Sahoo—the body—died, the Ka and

the Ba continued to live, but separated from each other. The Ba, after the death of the body, went to the judgment hall of Osiris in Amenta, there to be judged according to the deeds done in the body, whether good or evil. The justified soul was admitted into the presence of Osiris, and made daily progress in the celestial life. The Ba was generally represented as a hawk with a human head. The hawk was the emblem of Horus, as if the seat of the soul was in the head, which was furnished with a hawk's wings to enable it to fly from earth to be with Horus, who, before introducing it to his father, Osiris, subjected it to the purgatorial fire, through which it had to pass to purge it from any earthly dross that might still cling to it. The Ka, meaning double, was represented by two human arms elevated at right angles at the elbows to indicate that the spiritual body was the exact counterpart of the natural or material body, just as one arm is like another, only it could not be seen. It was not furnished with wings so that it could not leave the earth, but continued to live where it was disembodied, and more particularly in the tomb, where it could rest in the mummy or in the portrait statues placed for it in the antechamber of the tomb; and it was for this purpose that the Egyptians were in the habit of embalming the bodies of their dead. The Ka continued to have hunger and thirst, and was supposed to live on the spiritual essence of the offerings brought to it. There is some indication of the future union of the Ba or spirit to the Ka or spiritual body. But the ancient Egyptians did not believe in the resurrection of the Sahoo or material body. The Mummy was simply a non-vital resting place for the double or spiritual body, and was never quickened again. With regard to the future state, the Egyptian priests taught that there were two grades of punishment for the condemned Ba. The more guilty were condemned to torture and devouring fire until they succumbed, and were ultimately annihilated. The less guilty were allowed a second probation, and sent back to the earth by transmigration into the form of some unclean animal. The justified soul was assimilated to Osiris, dwelt in his presence, and obeyed his commands. It had to take part in the daily celestial work, and to be continually attaining more knowledge and wisdom, to help it in its progress through the mansions of the blessed.

The sum of the observations contained in the paper is that in the ancient Egyptian religion, especially in its earlier stages.

there was some recognition of an unnamed Almighty Deity, who was uncreated and self-existent, but that in course of time the attributes of this one God were represented and symbolized by natural objects, which became themselves the objects of superstitious reverence, and were worshipped as separate deities. It is interesting to find, however, that in this very ancient religion there was a belief in the immortality of the soul, in a judgment after death, and in a future state of rewards and punishments according to the deeds done in the body.

13th November, 1896.

Mr JAMES G. H. STARKE, V.-P., in the Chair.

Donations and Exchanges.—The Chairman presented three Dumfries broadsheets of 1863 and 1865, and also copies of the Society's Transactions for 1876-1880.

The Secretary laid the following on the table:—Annals of the New York Academy of Sciences; Proceedings of the Manchester Microscopical Society; Proceedings of the Academy of Natural Sciences of Philadelphia; Proceedings of the Sheffield Naturalists' Club; Proceedings of the Cardiff Naturalists' Society; Proceedings of the Belfast Naturalists' Field Club.

COMMUNICATIONS.

I.—*Botanical Records for 1896.* By Mr JAMES M'ANDREW, New-Galloway.

During my last summer holidays (1896) I botanized in three different localities, viz., Carsethorn, in Kirkcudbrightshire, and Glenluce and Sorbie, in Wigtownshire. In the hope that, as on former similar occasions, the results of my work may be interesting to other botanists of the Society, I would now desire to make the following few remarks:—

The three south-western counties have now been so fully botanized and the results publicly recorded that comparatively few new plants are likely to be met with in the district embraced in the field of our Society's operations. My list of new finds for

this year is therefore rather meagre and disappointing, and to no one more than to myself; but the next best work to finding new records is to confirm old records of the rarer and more interesting plants, and to find out as far as one can what plants we now really have growing in our district. In this direction there is plenty of good, useful, and necessary work to be accomplished in our three counties. At Glenluce I was anxious to confirm the existence there of some of the rare plants recorded for that parish by the Rev. George Wilson. Here I made a new record for Wigtownshire in the grass *Milium effusum*, growing in several places in the Wood of Park. The *Thalictrum minus* on Luce Bay, at the east end of the Golf Course, and at the mouth of Luce Water, is var. *maritimum*. The Sea Holly, the Horned Poppy, and the Sea Bindweed were in abundance at the head of Luce Bay, as was also *Ruppia rostellata* in the lagoons of brackish water round the island of St. Helena. On Glenluce Old Abbey I saw Mullein, Gromwell, Barbarea, likely *præcox*, Wall Flower, &c., but I failed to find *Arum maculatum* and Wall pellitory there, though both of these plants have been recorded for the Abbey. Around Glenluce, and principally on the shore, I gathered such rare Wigtownshire plants as *Ranunculus sceleratus*, *Saponaria officinalis* and Tansy, both outcasts, *Malva moschata*, *Vicia sylvatica*, the Bullace tree, *Galium mollugo*, *Scabiosa arvensis*, *Carduus tenuiflorus*, *Juncus maritimus*, *Scirpus maritimus*, *Spergularia neglecta*, and *rupestris*, *Sagina apetala*, but I failed to see *Lobelia Dortmanna*, *Galium cruciatum*, *Teesdalia nudicaulis* (which disappears before July), *Stachys betonica*, and some others. At Whitefield Loch I gathered *Potamogeton perfoliatus* and *Potamogeton lucens*, the latter being a new record for Wigtownshire.

At Sorbie the Rev. Mr Gorrie and I paid another visit to Ravenstone Loch, which we found much changed since we saw it two years ago. It was almost entirely choked up with *myriophyllum*, so much so that we failed to find even the plants we gathered there on the former occasion. This affords a very good illustration of how plants, perhaps quite abundant once in a certain locality, have got crushed out and have become extinct by the overgrowth of ranker and stronger species, or by cultivation and drainage and other causes. We looked round the loch for *Cladium mariscus*, but failed to find it. *Typha latifolia* grew in the loch in great luxuriance and abundance. Thorn apple and

Henbane are spreading, and are now abundant in Rigg Bay, Garliestown. These two, with Black horehound (*Ballota nigra*) and Teasel, are all outcasts from the gardens of Galloway House. The two—Chenopodiums and Atriplexes—were in great profusion, and among them *Atriplex littoralis*, new to Wigtownshire. *Beta maritima* we also gathered there. In Galloway House Woods the Rev. Mr Gorrie gathered *Geranium pratense*. Further south I saw a large bed of *Pulicaria dysenterica*. At Sorbie I gathered *Veronica Buxbaumii* as a garden weed, and *Mentha sativa*, var. *paludosa*, by the side of Sorbie Burn. Mr Gorrie finds *Utricularia intermedia* in Capenoch Moss. To sum up, the following are new records for Wigtownshire:—1, *Milium effusum*, Wood of Park, Glenluce; 2, *Potamogeton lucens*, Whitefield Loch, Glenluce; 3, *Atriplex littoralis*, Rigg Bay, Garliestown; 4, *Ballota nigra*, Rigg Bay; 5, *Mentha sativa*, var. *paludosa*, Sorbie Burn; 6, *Carpinus betulis* (Hornbeam), planted in the woods of Galloway House; 7, *Orobus macrorrhizus*, var. *tenuifolius*, by the Rev. James Gorrie, near Moss Park, Sorbie.

At Carsethorn Mr Samuel Arnott and I had several delightful botanical rambles. We were disappointed in not finding several of the rare plants recorded for Arbigland, Southernness, and surrounding neighbourhood. The only new record for that district and for Kirkcudbrightshire is *Potamogeton pectinatus*, which I gathered in a ditch in the merse west of Southernness. In the same ditch grew *Glyceria* or *Poa aquatica*, the same grass which grows in such abundance in the moat of Caerlaverock Castle. Now *Catabrosa aquatica* is recorded for the Merse, west of Southernness, and I am almost certain that in this case there has been a confusion of names, as the two grasses are very unlike each other, though the name *aquatica* occurs in both. I was glad to be able to find and confirm *Scirpus Tabernæmontani* in abundance in the same locality and also north of the mouth of Kirkbean Burn. The three plants I was most anxious to find at Southernness were *Lepturus filiformis*, var. *incurvatus*, the Isle of Man Cabbage, and the Sea Bindweed. I spent part of two days searching for them, but in vain. *Juncus Balticus*, at Gillfoot, no doubt is a mistake, and is an example among several others of plants being at first incorrectly named, admitted into a local list, and afterwards copied by succeeding compilers. Among plants I gathered in the neighbourhood of Carsethorn and Southernness were *Hippuris*

vulgaris, *Epilobium angustifolium*, *parviflorum*, and *hirsutum*; Wild celery, *Juncus obtusiflorus*, in great abundance. *Scrophularia aquatica*, Gipsy wort, and *Ruppia rostellata* are still about the Needle's Eye in Colvend; *Myrrhis odorata*, Hop plant, *Convolvulus*, *Potentilla reptans*, *Galium cruciatum*, were in abundance; on the roadside at Cavens I confirmed *Leontodon hispidus* for Kirkcudbrightshire. Along the Arbigland shore I gathered Black medick, Mullein. *Ononis spinosa*, *Sanguisorba officinalis*, Wild marjoram, *Calamintha clinopodium*, *Arabis hirsuta*, Horned poppy and Sea holly getting very scarce. In the Arbigland Woods I saw Moneywort, Teasel, Periwinkle, *Epipactis latifolia*, *Carex remota*, &c; near Southernness, *Teesdalia nudicaulis*; in Kirkconnel Moss, *Drosera intermedia* and *Andromeda polifolia*; near Kirkbean, *Ranunculus floribundus*, *Allium carinatum*, and *Claytonia alsinoides*, a North American plant fast becoming naturalized; near Carsethorn, *Genista tinctoria*, *Blysmus compressus*, and *Senecio viscosus*; Wild succory has been got near Kirkbean; *Valeriana pyrenaica* in Kirkbean Churchyard. I did not see *Bromus erectus* in Newabbey Churchyard, neither did I see *Inula crithmoides* nor *Puicaria dysenterica* from Arbigland. Goat's beard is occasionally got. On Criffel, which is rather unproductive in plants, I gathered *Lycopodium selago*, *Vaccinium Vitis-idea*, but not *Salix herbacea*, which I expected to find there. In Kirkbean Glen I got *Campanula latifolia*, *Stellaria nemorum*, *Carex sylvatica*, *Milium effusum*, *Festuca gigantea*, *Melica uniflora*, *Bromus asper*, and *Poystichum lobatum*. On Criffel I gathered the mosses *Rhabdowicissia denticulata*, *Racomitrium ellipticum*, *Hypnum giganteum*, *Byrum alpinum*, *Zieria julacea*, and the rare *Rhabdoweissia crenulatus* and the Hepatics *Blepharozia ciliaris*, *Diplophyllum Dicksoni*, and *Lophozia incisa*; in Kirkconnel Moss, *Mylia anomala*; in Kirkbean Burn, *Anomodon viticulosus*, *Hypnum depressum*; and in Preston Mill Glen, *Hypnum fluviatile*. West of Southernness I gathered *Hypnum lutescens*, the first record of this moss for Kirkcudbrightshire. The Hepatic *Lophozia capitata* is also a new record for the Bennan Hill, Kirkcudbrightshire. I may also add *Hedwigia ciliata*, var. *striata*, for New Galloway. I got *Poa trivialis*, var. *Kæleri*, near New Galloway.

In conclusion, I would desire to remark that in looking over Mr G. F. Scott-Elliot's "Flora of Dumfriesshire," which is a very complete record of the plants of the three south-western counties,

there are several points which require elucidation, and I shall take the present opportunity of directing the attention of local botanists to some of these, in the hope that endeavours will be made to solve them. For instance, none of the following seaside plants have as yet been recorded for Dumfriesshire, though many of them are to be found in Kirkcudbrightshire on the eastern bank of the River Nith, and this fact affords a reasonable probability that some of them will yet be got between the mouths of the Nith and the Esk. They are *Scirpus Tabernæmontani*, *Senebiera coronopus*, *Ligusticum scoticum*, *Crithmum maritimum*, *Inula crithmoides*, *Pulicaria dysenterica*, *Mertensia maritima*, *Beta maritima*, *Atriplex laciniata*, *Zostera marina*, *Ruppia rostellata*, *Suaeda maritima*, *Carex arenaria*, *Raphanus maritimus*, *Astragalus hypoglottis* and *glycyphyllos*, *Crambe maritima*, *Geranium sanguineum*. These give a goodly list of eighteen plants to be added to the Dumfriesshire Flora. Again, of more inland plants, the following are not yet recorded for Dumfriesshire:—*Hypericum elodes*, *Pinguicula lusitanica*, *Scutellaria minor*, *Vicia lathyroides*, *Scirpus fluitans*, &c. *Brassica monensis* and *Convolvulus soldanella* seem to be extirpated from Southernness. Perhaps the former is not now to be found in Wigtownshire or Kirkcudbrightshire. Such plants as *Tofieldia palustris*, *Juncus balticus*, *Juncus castaneus*, *Juncus trifidus*, *Juncus biglumis*, and a few others, may with all safety be erased from our local lists. *Trientalis europæa* grows at a lower elevation, and may occur, but requires refinding.

Some plants again, in all probability incorrectly named at first, are very doubtful records for our counties, as they go back fifty or sixty years. Some of these are:—*Bromus erectus*, *Phleum arenarium*, *Lychnis viscaria*, *Melampyrum sylvaticum*, *Eriophorum latifolium*, *Bartsia viscosa*, Dodder, *Lithospermum arvense*, *Orchis pyramidalis*, for Kirkcudbrightshire; *Geranium columbinum*, *Vicia gracilis*, and *Erodium moschatum*, for Southernness; and *Elymus arenarius*, for Dumfriesshire. Investigation may also proceed in the following direction. As some critical species of plants get their names introduced into local lists on insufficient grounds information about these is necessary, as for instance:—Is *Viola hirta* for Criffel the true plant? Have true *Myosotis palustris*, *Rumex sanguineus*, *Lepidium campestre*, been found in the district? **Sium angustifolium* requires looking into, as Dr Hooker says that

* Since found near Milnehead, Kirkmahoe.

it is found only in Wigtownshire in the west of Scotland. Is *Vicia lutea*, from Cluden Mills, the true plant, as it is generally found on shingle on the beach? No doubt *Ænanthe pimpinelloides* and *Ænanthe Lachenalii* are the same plant, as the former is a South of England plant. The same remark applies to *Ulex nanus* and *Ulex Gallii*, which are often confounded. *Ulex nanus* is a Midland and South of England plant, but has been gathered in Dumfriesshire and Kirkcudbrightshire. Has *Asplenium marinum* been gathered in Dumfries? Is there any recent account of finding *Lycopodium annotinum* in Dumfries? Surely *Myosotis sylvatica* for Wigtownshire is a mistake. All the foregoing plants require elucidation, and if our botanists, in the absence of finding new records, were to turn their attention to some or all of the doubtful plants I have indicated, good work would be done. It is in this hope, and not in the spirit of any carping criticism, that I have made the foregoing observations.

II.—*The Antiquities of Eskdalemuir.* By Rev. JOHN C. DICK, Eskdalemuir.

It is recorded of a certain individual, that on making his first acquaintance with Eskdalemuir as it is approached from its Western boundary, he scanned the prospect far and wide for some sign or trace of human habitation, and presumably finding none gave vent to his astonished feelings in the words, "This is a country of which it may be said that its principal inhabitants are sheep." This reminds me of another individual, an inveterate punster, by the way, who, together with a party of people he was supposed to lead, found himself, after wandering about for hours "in endless moorlands lost," suddenly face to face with a peat stack, whereupon (as the story goes) he perpetrated the following under the circumstances perhaps pardonable enough pun, "a peatiful country indeed." The beauty of these observations lies obviously in their truthfulness, for it will not be called in question either that Eskdalemuir is "peatiful," (*i.e.*) full of peats, or that sheep vastly exceed in numbers all other forms of animated existences. But while *this* is abundantly and heartily conceded, it will be my pleasing duty and aim to-night to point out to you that there are other and more noteworthy objects than peats to be seen and studied within the compass of our moorland Parish, and that,

as our genial and candid critic (by implication) himself allows, there is to be found (here and there) a sprinkling of human beings who, I am happy to say, make up in intelligence what they lack in numbers. The fact is that *that* wild stretch of moorland which lies between the two Kirks of Hutton and Eskdalemuir, and which is unredeemed by a single feature of interest to break its bleak monotony, represents but a fraction, and that the least attractive fraction, of the whole extent of the parish, which covers an area of 66 square miles, and is *facile princeps* the largest parish in Dumfriesshire. But if this five miles of unmitigated moorland be in itself the *ne plus ultra* of dreariness and desolation, it acts as a magnificent foil and introduction to the real beauty of the Dale of Esk itself—a Dale that rivals in sweetness and pastoral attractiveness any of the other great Dales of the Borderland (as Tweeddale, Teviotdale, Liddesdale, Annandale, Clydesdale). To all lovers of the beautiful, to all who would steep their senses in what Veitch finely calls “the pastoral melancholy of the Lowlands,” Eskdalemuir holds out inducements irresistible as they are innumerable. The student of ancient lore may here have his appetite for the mythical and the marvellous stimulated and strengthened by the tales and traditions that hover round and lend an indescribable charm to almost every square foot of land he treads or looks upon; while the Archæologist or Antiquarian will find in this sequestered vale “far from the madding crowd” a veritable happy hunting ground full of objects of interest and importance that will call forth all his powers of observation, and tax all his ingenuity to explain. Along that far-stretching line of river-flow, that extends from the water-shed of the parish down to its southern extremity, at the famous King pool, there stand out on either bank of the river, camps, forts, rings, and other remains, constituting the very earliest inhabited dwelling places on the Borders, dating back to the time of the Cymri, who were here during the Roman occupation, if indeed they were not here before it. These forts, mounds, and rings have been popularly designated Roman, though I am persuaded that in the vast majority of instances they have little or no claim to the title; for a careful examination of the root forms that enter into the names of many of the places and objects of the district would appear to point to a Cymric rather than a Roman derivation. As Professor Veitch has remarked in his references to the Border valleys generally, and

My own personal observation bears out in the case of my own parish in particular, these forts or mound-enclosures are for the most part to be found on the lower hills of the district, or on the knowes projecting from the slopes of the higher hills as they fall downwards to the valley, through which run the rivers, the Tweed, Clyde or Esk, as the case may be; a site or elevation of 1000 feet is a common enough one; the form is almost universally circular or oval, though in Eskdalemuir we have a very well defined example of a rectilinear enclosure at Raeburnfoot which is strongly suggestive of Roman construction, and which bears a striking resemblance in its general outline, form, and extent to the important Roman Station at Birrens, the opening up of which was such a pleasing revelation to all who take an interest in Antiquarian researches. As I have just remarked regarding these hill-forts in Eskdalemuir, with the solitary exception of Raeburnfoot, the circular or curvilinear form greatly preponderates. Dr Christison gives the proportion of rectilinear to curvilinear as 22 to 206—and certainly as far as Eskdalemuir is concerned this proportion is abundantly borne out by facts open to the observation of all. These rude hill-forts and camps, so conspicuous on almost every height, were evidently planted there by the aborigines for purposes of defence, and clearly testify to a time when this secluded and pastoral vale was often no doubt the battlefield of ancient Briton and Roman invader, or, to come down to more recent times when the Vale of Esk as well as the other adjoining vales and dales of the Border formed the land of foray and of feud—the land of hostile invasions from England and relentless retaliations from Scotland all through the Middle Ages down to the Union of the Crowns. If open war was not actually declared and actively engaged in between the two great rival kingdoms, yet there was that incessant petty warfare which originated in the deep-rooted feuds and quarrels of the great Border families or clans. In portraying this turbulent life of the ancient Borderers Scott has gilded not a little of it with the glowing colours of romance and chivalry. We have only to read his “*Lay of the Last Minstrel*” to discover that its main and governing idea is to set forth in poetic and vividly realistic form the manners, customs, and traditions that anciently prevailed on the borderlands of England and Scotland.

And now that you may have a less general and more particular idea of the parish than you may have been able to form from these few and fragmentary descriptions, I propose starting from the head of the parish, particularising as I proceed downwards, and commenting briefly upon any object, scene, or locality that that may be supposed to possess the smallest degree of interest for the Antiquarian. Well! looking down from our present point of vantage upon the spacious glen beneath our feet, we are looking upon what once formed, on the opposite side of the river, the lands given by Robert Avenel to the Monks of Melrose for pastoral, hunting, and sporting purposes generally. Then the wild deer and boar as wild frequented these upland solitudes—for Ettrick Parish coupled with Eskdalemuir was once a favourite hunting ground of the Scottish Kings. These lands appear to have been known by the ancient name of Weid-Kerroc or Weit-Kerrock. If a single passage or two in Armstrong's "History of the Debateable Land" are to be relied upon, then, during the reign of David First (1124 to 1153) Robert Avenel received from that Monarch a Charter of the lands of Tom-loher and Weit-Kerrock in Upper Eskdale. We are further told that the teinds of Eskdale were granted by him to the Monks of Melrose, and it is also stated for the repose of the souls of certain individuals whose names are given, and for his own soul and for the soul of his wife, Sibilla, he granted the aforementioned lands to the Monastery of Melrose. It may be proper to mention in this connection that David I. was uncommonly fond of establishing religious or Monastic Houses. As he was the great Benefactor of the Church, the clergy willingly bestowed on him the epithet of Saint, a character which one of his successors seemed to consider rather dubious. The alienation of so much of the Royal property led him to remark that "St. David had been a sair sanct to the croon." But to return to the name of the lands thus given to the monks at the head of Eskdale—viz., Weit Kerrock, I would have you note that the term *Caer* (c-a-e-r) which occurs in the Kerrock is, according to Professor Veitch, one of the most frequent names for a hill-fort in all the Lowlands of Scotland; it is a Celtic, even a Cymric term, and appears everywhere in the names of places already existing before the times of Caesar and Agricola. This being so, we at once look for a hill-fort, and we are not disappointed, for over against us, on the western side of the river, there stands a fine

specimen of an old Cymric camp commanding the whole valley both north and south. There is, I am told, an old Roman road running through the valley northwards starting from the ancient fort, although I myself have not been able to discover the faintest trace of it; but as the term Roman was often curiously applied to places, to building structures, and works of all kinds, that simply contradicted the most elementary canons that ruled all Roman handiwork, I have very little faith in the Roman theory as to this now "submerged" road. It wants to be discovered first before it can be pronounced either British or Roman. But from this road, real or traditional, the farmhouse standing immediately behind the ancient fort was called "Causeway," or "The Causeway." A modern amalgamation of both names, Kerrock and Causeway, has turned it into Cassock—and at the present time the Scotch pronunciation of the word is simply Cassa. The name Wat Carrick survives further down the glen, and applies both to a Chapel and Churchyard, as I shall presently show you. Confining my attention at present to the upper part of the parish, however, I need hardly say that not a few legends and traditions have gathered round and clung to these northern glens, cleuchs and gorges—a specimen or two of which I propose offering to you to-night. Naturally in an age when superstition held sway over the minds of a simple and ignorant people, it was only to be expected that they should pay tribute to their fears and beliefs in the supernatural, and that these fears and beliefs should, from time to time, find embodiment and expression (ludicrous enough oftentimes) in story, tale or ballad. The very names of many of the burns and glens are suggestive of the uncanny, and can be only adequately described as sanguineous. Glendearg (*e.g.*) means the red or bloody glen, and the upper half of another glen in close proximity is ominously called the Blood Hope. There or thereabouts it is said that many of the poor persecuted Covenanters found shelter and hiding. There is a legend that a conventicle held in the Cauldrons (and no fitter place could well be imagined for such a purpose) was disturbed by the approach of Claverhouse and his dragoons—but that the poor wretches thus tracked to their lair made a miraculous escape, being in a moment modified into moor-fowl. It seems they haunt the place in that shape (dear to all sportsmen) still, and must have proof of lead, for, says the bard of Ettrick, with perhaps a little poetical embellishment: Jamie

Glendinning has tauld me, and so has Tam Beattie of Muckledale. "These wights, to add to a' their crimes, have shot at them a hunner times." Another legend tells of a man Biggar, a staunch supporter of the Covenanting cause, who concealed on his farm and fed from his kitchen the persecuted Covenanters—how he was found out, became a marked man, and narrowly escaped being shot. The troopers were after him, led by Claverhouse in person, but when overtaken Biggar was equal to the occasion, nor for a moment lost his self-possession. Claverhouse laid on him with the handle of his whip. Biggar, turning round, looked him straight in the face, and said, "The devil is in the man; what are you striking at?" This satisfied the man of blood—riding back to his band he said, "There's an honest fellow that can swear; none of your canting rogues." We have yet another legend, of a distinctly dramatic order, in which a member of the old Blake family is promoted to the rôle of hero, although the manner in which he played his part can scarcely be described as heroic. This Blake legend is to me strongly reminiscent of Burns's immortal poem, "Tam o' Shanter." You all doubtless recollect that particular portion of Tam o' Shanter's ride where he is represented as followed by a "Hellish legion" of witches and warlocks in full cry at his tail, or rather "Maggie's"—and is, in consequence, so panic-stricken that he addresses his old and faithful mare in the following terms:—

"Now do thy speedy utmost Meg,
And win the key stane o' the brig;
There at them, thou thy tail may toss,
A runnin' stream they dar'na cross."

In Tam o' Shanter's case there was a horse—in our Blake's case there was a horse too. Tam had a water to cross, so had Blake, for the legend tells us that he was leading a cart load of tar on the opposite side of the river from his home, when he heard a witch or warlock in the guise of a moor-fowl roaring in his very lug, "Blake and the tar! Blake and the tar!" With one wild exclamation from the terrified man, "Ye'll no' get baith Bleak and the terr," he left horse and cart behind, plunged madly into mid-stream and drowned his terrors in the consolation that witches and evil spirits have no power to follow a poor wight any further than the middle of the nearest running stream. At this point it may be well for me to

mention for the benefit of benighted travellers in moorland stretches, that whatever danger there may be in going forward, there is infinitely greater danger in their turning back. Methinks this is very good general advice and ought to be acted upon as far as possible on all occasions. So let us avail ourselves of it, and go forward to the next object of interest. That object is to be found in a rude relic of persecuting days commonly called "The Through-Stane" (Scottice) stone coffin, which stands in a field on the right hand of the road as we come down the parish a little above the farmhouse of Craighaugh; the inscription on that rude sepulchre bears the following: "Here lyes Andr. Hislop, Martyr shot dead upon this place by Sir Thamas Johnston of Westerhall and John Graham of Claverhouse for adhering to the Word of God Christs Kingly government in his house and ye covenanted work of reformation agst. tyranny peq'qury and prelacy May 12th 1685 re: 12.11. Wait passenger, one word with thee or two, why I ly here, wouldst thou truly know by wicked hands, hands cruel and unjust without all law my life from me they thrust and being dead they left me on this spot & for burial this same place I got, truths friends in Eskdale, Now triumph then let *viz* the faithful for my seal that got 1702."

With a clearness and circumstantiality that leave nothing to be desired the eloquent Macaulay thus records the tragic tale: "While this was done in Clydesdale, an act not less horrible was perpetrated in Eskdale. One of the proscribed Covenanters overcome by sickness had found shelter in the house of a respectable widow and had died there. The corpse was discovered by the laird of Westerhall, a petty tyrant who had in the days of the covenant professed inordinate zeal for the Presbyterian Church; who had since the restoration purchased the favour of the Government by apostasy, and who felt toward the party he had deserted the implacable hatred of an apostate. This man pulled down the house of the poor widow, carried away her furniture, and leaving her and her younger children to wander in the fields, dragged her son Andrew, who was still a lad, before Claverhouse, who happened to be marching through that part of the country. Claverhouse was just then strangely lenient; some thought that he had not been quite himself since the death of the Christian carrier ten days before. But Westerhall was eager to signalise his loyalty, and extorted a sullen consent. The guns were loaded, and the youth

was told to pull his bonnet over his face. He refused, and stood confronting his murderers with the Bible in his hand. "I can look you in the face," he said; "I have done nothing of which I need be ashamed, but how will you look on that day when you shall be judged by what is written in this book?" He fell dead, and was buried where yonder slab keeps the memory of his heroism green for ever.

But now, to pass from "grave to gay," let me tell you something about the far-famed "Bogle at the Todshawhill." Todshawhill is a farmhouse on the Black Esk about three miles in a south-westerly direction distant from the Parish Church. According to Dr Brown, one of the Bogle's biographers, this creature made a stay of a week less or more at Todshawhill farmhouse, disappearing for the most part during the day only to reappear towards evening: its freaks and eccentricities very naturally attracted a number of people to the neighbourhood, and among the number Thomas Bell from West Side, the neighbouring farmer, who, in order to assure himself that it had flesh and blood like other folks, took it up in his arms and fully satisfied himself that it had its ample share of both. In appearance it resembled an old woman above the middle with very short legs and thighs, and it affected a style of walk at once so comical and undignified that the Rev. Dr aforesaid was compelled to pronounce it "waddling." The first intimation or indication of its presence in these parts was given, I understand, at the head of the Todshawhill bog, where some young callants who were engaged in fastening up the horses of the farm heard a cry at some little distance off. "Tint, Tint, Tint," to which one of the lads, William Nichol by name, at once replied "You shall not tine and me here," and then the lads made off, helter skelter, with the misshapen little creature at their heels. In his terror one of the lads fell head foremost into a hole or moss hag, and the creature "waddling" past him to get at the rest, came into violent contact with a cow, which naturally resenting such unceremonious treatment, pushed at it with its horns, whereupon the creature replied—"God help me, what means the cow?" This expression soothed, if it did not wholly allay, the fears of all concerned, for they at once concluded that if the creature had been a spirit it would not have mentioned the name of Deity in the way it did.

And in many more grotesque and ridiculous scenes did this curious little creature play the rôle of "Deus Ex Machina." As for the name of "Gilpin Horner," by which it was known throughout the Border country, *this* seems to have been given to it some time afterwards, for those who saw it at the time, and those who tell the story with the greatest veracity, never call it by any other name than the "Bogle at the Todshawhill." To those who are acquainted with the "Lay of the last Minstrel," it will at once occur that there are points of similarity (both numerous and various) between the bogle at the Todshawhill and Lord Cranstoun's "Goblin Page," who figures so prominently in that Border ballad of Scott's—points of similarity so strong that they can scarcely be accounted for on the theory of mere coincidence. Indeed, if we were not expressly told in a note to this poem—Canto number 2—that the idea of Lord Cranstoun's "Goblin's Page" was taken from the legend of "Gilpen Horner" we could have guessed it for ourselves. To give you an instance of this similarity, I will quote to you a few lines from Canto—number 2—beginning from line 352—which will powerfully recall to your minds the whole incident of the Todshawhill bogle's first appearance—when he scared the lads who were tying up the horses with the sudden and startling exclamation, "Tint, Tint, Tint." The passage which I mean to quote from Scott's Lay contains three words of identical import with the "Tint, Tint, Tint." The words in the Lay are "Lost, Lost, Lost." I should perhaps add that Cranstoun's "Goblin Page" was equally well-known by the title the "Baron's Dwarf." Here is the passage from the Lay—

"Beneath an oak, mossed o'er by eld,
 The 'Baron's Dwarf' his courser held,
 And held his crested helm and spear :
 That Dwarf was scarce an earthly man,
 If tales were true that of him ran
 Through all the Border far and near.
 'Twas said when the Baron a-hunting rode
 Through Reedsdale's glens, but rarely trod,
 He heard a voice cry Lost ! Lost ! Lost !
 And, like a tennis ball by racket tossed,
 A leap of thirty feet and three,
 Made from the gorse this elfin-shape,
 Distorted like some Dwarfish ape,
 And lighted at Lord Cranstoun's knee.

Lord Cranstoun was somewhat dismayed ;
 'Tis said that five good miles he rade
 To rid him of his company,
 But where he rode one mile the Dwarf ran four,
 And the Dwarf was first at the Castle door.

* * * * *

Use lessens marvel, it is said ;
 This elfish Dwarf with the Baron staid,
 Little he ate, and less he spoke,
 Nor mingled with the menial flock :
 And oft apart his arms he tossed,
 And often muttered Lost ! Lost ! Lost !"

One remark before I leave this subject. Whatever may be thought of my attempts to identify our once local "Bogle at the Todshawhill" with Scott's poetic creation the "Goblin Page," or the "Baron's Dwarf," there can be very little doubt that the identity is *there*, and I leave you to discover for yourselves other points of identity which had I the time I could have laid before you. From this little excursion we have now paid to the Black Esk, let us retrace our steps to the White. I would say a word or two about Wat Carrick Chapel and Churchyard, which are about a mile straight south of the Church—the names are what they are by reason of their proximity to a well-pronounced British fort, which overlooks both, rather, I should say, two forts—the one on the top of the hill, the other lower down. The term *Caer* occurring in the word Kerroc (as I have already explained) stands invariably wherever it occurs for hill fort. This Chapel of Wat Carrick belonged originally to the Parish of Westerkirk, and served the whole district of Upper Eskdale, not only until the year 1703, when Upper Eskdale was formed into a separate parish called Eskdalemuir, but for nearly twenty years longer, until, in short, the new parish of Eskdalemuir was in the position to possess itself of a Church of its own, which it was able to do in the year 1722. Now crossing the river we find ourselves on the farm of Cote ; the term Cote means mud cottage, and occurs in the names Cauldcote, Hoscot. In a field raised some little elevation above the level of the Esk, we have two circles of stones, in the form of Druidical temples (as Dr Brown styles them)—the one entire, measuring about ninety feet in circumference, the other having a portion of it worn away by the water, measuring about 340 feet. The interior of this larger one, indeed, is so extensive that I have

myself seen more than once a ploughman and his team of horses busy at work within it. These so-called "Druidical remains" (according to one authority) are simply the "standing stones," or "stanin' stanes," which are to be found on hill-sides, moors, open fields, and all manner of high and unfrequented spots: these remains, however, are not always found in such perfect form as we have them here, but consist very often of a single stone, with one or two other and lesser stones that have fallen down by its side, and are half covered in the moss. The well-known "Giant Stone" in Tweedsmuir, standing on the Menzion Moss, answers exactly to this description. These stones are unquestionably of great antiquity, as they are often referred to in the earliest charters, and accordingly utilised in them as boundary marks. According to Professor Veitch, some of them were originally set up as boundary stones, called "Har" or "Her." "Harstane" is not infrequently the name of a place, as the Harstane in Tweedsmuir. "Harstane" or "Herstan" simply means the stane by the burn. In this month's number of the *Sunday Magazine* for 1896 there is an exquisite piece of word painting descriptive of the standing stones. In point of antiquity they are compared to the sky itself, "they are, alike, so old—the ancient sky and the primeval stone—both the children of mystery." In another fine passage we read—"Of the primeval forest no trace is left—the eyes range to the everlasting hills—wide spaces are about the mystic circle—the ancient rites are gone with the hoary forest—their memory even is lost—and the stones are dumb—no record is graven there." We now pass down the valley to Castle O'er, with its splendidly preserved remains of what at one time must have been an encampment of great strength, occupying (as it does) by far the most commanding site in the parish; its mounds and ramparts we might almost call gigantic, and its trenches abysmal. Its whole appearance, lofty situation, but above all, its marvellous extent as shown by its lines of communication, extending not only down the Esk to Netherbie, on the one hand, but also down the water of Milk to Middlebie on the other, proclaim it to be the far-famed Camp of Overbie, one of that celebrated trio of which the names are—Overbie, Middlebie, and Netherbie. Mr Bell's mansion-house of Castle O'er lies at the base of this camp, between it and the White Esk; but his property extends to the lands on the other side of the river as well—rising up to the march dyke that divides

his ground from the farm of Billholm. Immediately over this dyke, in what is called Airdswood Moss, there was discovered a heap or pile of stones—a “tumulus” would, perhaps, be the more correct and classic name for it—but whatever be its proper name, I was told by Mr Bell himself that no fewer than 150 cart loads of stones were taken from it to build a portion of the above-mentioned march dyke between Billholm and Castle O’er. In the centre of this heap was found a rude slab-formed grave or “cist” in which a human body had evidently been interred, for some bones, and particularly a thigh bone, was long possessed by the late Geo. Graham Bell, Esq., of Castle O’er, but is now unhappily *non est*. There was a further find in the shape of a tooth which a local bard, William Park, at that time resident at Bridgend, has done his best to immortalise in a poem, entitled “Verses addressed to a tooth dug out of the cairn on Airdswood Moss.”

“Tooth of the olden time, I’d wish to learn
 Thy living history ; what age and nation
 Thou represented’st underneath the cairn,
 Fruitful of antiquarian speculation.
 What was thy owner, then ? a warrior dire,
 Who liv’d and died amid the din of battle ?
 Was he some consequential Feudal Squire,
 Who bought and sold his serfs like other cattle ?
 ’Twere an uncourteous question, did’st thou fare
 On luxuries which modern teeth disable ?
 Thy hardy frame and healthy looks declare
 That no such trash e’er trifled on thy table,
 Thine was the food of undegenerate ages,
 Else never had’st thou figured in my pages.
 And here thou art, a prodigy—a wonder—
 A monument of undecaying earth,
 Nor more of thee we’ll know, till the last thunder
 Shall from his slumbers call thy master forth ;
 These puzzles which I grapple with in vain
 Shall then be solved—and all thy case seem plain.”

To return to the subject of cist-burial, there were (as far as I can make out) two kinds of it ; the one was simple cist-burial underground, the other was cairn-burial above ground ; both kinds seem to have been common enough ; the example I have just described is clearly a cairn-burial ; that is to say, the body discovered had been buried in a cist or stone coffin on the surface

of the ground and the stones afterwards piled up over it. Of course wherever a discovery of this kind has been made we are sure to find a legend of some sort or other attaching to the spot, and so it is here. Tradition says that a battle between the Picts and the Scots was fought over the very ground where the ancient sepulchre still lies—that the Picts were beaten and completely routed—that their King (Schaw by name) who led them to battle having lost his way, either fell into, or was driven into, the pool which forms the junction of the two Esks, and has ever since been called the “King’s Pool.” The body was afterwards recovered, carried back to the battle field, and interred in the stone coffin, as already described.

And now that I have taken you as far as the King’s Pool, which marks the southernmost point of the parish, I wish to detain you there for a moment or two while I relate to you a very singular custom that once prevailed there. The place where this custom was observed is still called “Hand Fasting Haugh.” Here, in days gone by, a fair was held to which the young people of both sexes resorted in great numbers; between whom engagements were then made by joining hands; or, as it was then called, “hand fasting.” The connection then formed was binding for one year only, at the expiration of which time either party was at liberty to break up the engagement and form a new one—or in the event of both being satisfied the “hand fasting” was renewed for life. The custom is mentioned by several authors, and was by no means confined to the lower classes, John, Lord Maxwell, and a sister of the Earl of Angus, being thus “hand fasted” in January, 1572. I may mention that Lindsay in his reign of James II. says:—“James (Sixth Earl of Murray) begat upon Elizabeth Innes (daughter of the Laird of Innes) Alexauder Dunbar, a man of singular wit and courage. This Isabel was but hand-fast with him, and died before the marriage. In connection with this subject Dr Brown has published an extract of a letter he had received from the late John Maxwell, Esq. of Broomholm, to the following effect: “No account can be given of the period at which the custom of hand fasting commenced, but I was told by an old man, John Murray, who died at the farm of Irving as you go from Langholm to Canonbie, and had formerly been proprietor in Eskdalemuir, that he was acquainted with, or at least had seen, an old man (I think his name was Beattie) who was grandson to a couple of people who

had been "hand fasted." You perhaps know that the children born under the hand fasting engagement were reckoned lawful children and were not bastards, though the parents did afterwards resale. This custom of "hand fasting" does not seem to have been peculiar to our parish, for there are instances of its having prevailed elsewhere. Mention is made in some Histories of Scotland that Robert II. was hand fasted to Elizabeth More before he married Euphemia Ross, daughter of Hugh, Earl of that name, by both of whom he had children. And his eldest son John, by Elizabeth More, his "hand fasted" wife, (*i.e.*) King Robert III., commonly called Jock Ferngzear, succeeded to the throne, in preference to the sons of Euphemia, his married wife. Indeed, after Euphemia's death, he married his former hand fasted wife Elizabeth More.

Now before closing allow me to make a single remark in connection with this whole question. I confess that it has more than once occurred to me that there is a singular correspondence between the site selected for these "hand fasting" contracts and the contracts themselves. Perhaps this may be accounted for in the following way, which I have seen nowhere stated, and is therefore simply a suggestion of my own which I throw off for your consideration. The site selected for these "hand fasting" ceremonies is (as you may know) the tongue of land which is hemmed in by the Black and the White Esks. These streams, starting from their separate springs and pursuing their separate courses, gradually approach nearer and nearer until at last their waters commingle, and they become one stream. Does not this fact in outward nature observable to all who have eyes to behold it—the separation and then ultimate union of these two streams—but typify and set forth the separate and individual lives of two human beings until they *too* are joined together and made one flesh?

There is something of this idea surely suggested in the following beautiful lines, which, methinks, would not be inappropriate in the mouth of a youthful swain addressing the rustic maiden with whom he was about to be "hand fasted" after the old fashion long since passed away :

"Nothing in this world is single ;
 All things by a law Divine
 In one another's being mingle,
 Why not I with thine ?

See the mountains kiss high Heaven,
 And the waves clasp one another ;
 No sister flower would be forgiven
 If it disdained its brother.

And the sunlight clasps the earth,
 And the moonbeams kiss the sea ;
 What are all these kissings worth
 If thou kiss not me ?”

11th December, 1896.

MR JAMES BARBOUR, V.-P., in the chair.

Donations and Exchanges.—The Secretary laid the following on the table:—Transactions of the Canadian Institute; Variations of Latitude in New York City (from the New York Academy of Sciences); Bulletin of the Geological Institution of the University of Upsala, 1895; Proceedings of the Natural Science Association of Staten Island; Transactions of the Stirling Natural History and Archæological Society; The Bow-Pullers of Antiquity, by Edward S. Morse (from the Essex Institute, Salem, Massachusetts); Bagnall's Flora of Warwickshire (presented by Mr George F. Scott-Elliot).

Exhibits.—Mr S. Arnott, Kirkbean, exhibited two celts found at Kells, Southwick, and a shilling, the first coined in Massachusetts, in 1746.

COMMUNICATIONS.

I.—*Antiquities of Buttle.* By Rev. R. F. TARBET, B.D.

In noticing its topography the Rev. Mr Tarbet mentioned that Heston Island, the Isle Rathan of “The Raiders,” is daily connected with the parish by a neck of land when the tide recedes; and from this periodical connection he was for some time in doubt whether it was within his spiritual jurisdiction. He ventured to call on the one family who reside on the island, thinking they might know who was their spiritual father, but he was no wiser: they told him he was the first minister who had called on them.

He afterwards ascertained that the island forms part of the parish of Rerrick. Palmackie, the one village of the parish, had suffered decay in consequence of the introduction of railways, which had diverted traffic from its port. There were old people still to tell you of strings of carts extending from the little quay away up the street, waiting their turn at the vessels' side. At this period the village was the seat of a flourishing ship carpentry industry, many ships being repaired, and at least one built there. But he must not speak of the village as if it was dead. There was still considerable shipping, especially at some seasons of the year. The average number of vessels arriving was from 60 to 64 in the year. He had seen as many as seven schooners lying in the river at once; and a steamer sometimes found its way up. He found reference to a harbour church. That must have been what was known when he went to the parish as "the wooden kirk," but the wooden walls of which were then only used to shelter a wedding party engaged in their festivities. "To such base uses." As if anticipating a revival of the old prosperity, there was now in the village a substantial mission church of granite, built by his predecessor, the Rev. Mr Grant. Noticing the prominent heights in the parish, he observed that great part of Craignair was now to be found on the Thames Embankment and at the Liverpool docks, and its rough rock had made smooth the pavement of many a city since the granite-crushing process had been developed. Iron had been often sought without success. An old tenant on the farm of Barchain, he mentioned, went to Munches one day declaring excitedly that at last the metal had been found in quantity; but it turned out to be refuse iron from an old smithy. Among the antiquities of the parish first place was assigned to Buittle Castle, of which there are now no visible remains, which was built by John Baliol in the thirteenth century, and from which his widow, the Lady Devorgilla, dated the charter of Baliol College, Oxford. It had been said to him that Old Buittle farm steading, which is an old building with thick walls, formed part of the court of the castle. Reference was made to the former existence of a church at Kirkennan and the tradition that there was one on East Logan farm, where there is a field called the Kirkhill; but Mr Tarbet was puzzled to know what church was referred to as St. Colmonell, Buittle, in a grant to Sweetheart Abbey. The only name resembling Colmonell in the

parish was that of a well near the ruins of the old parish church, which was called Sancomel. Reference was also made to the round tower of Orchardton, to the burial cairn at Courthill, the remains of a vitrified fort on Castlegower, and the old mill at Buittle, a venerable building which had received its death-blow from the modern sanitary inspector. This mill, Mr Tarbet observed, appeared to have enjoyed some kind of royal grant. A month ago, he mentioned, there was found on Munches Hill a bronze implement called a battle-axe, but more resembling a chisel, which now lay at Munches. In the church an old custom survived in the use of shortbread at the communion. Some supposed that this was used because it was unleavened, but he thought the real reason would be found in a desire to use on this sacred occasion the finer food, at a time when only two kinds were made—the coarse bread and the shortbread. An odd story was told of Mr Crosbie, who was minister of the parish in the early decades of the century. A child found by the way-side was taken to the manse. The minister thought it proper that it should be baptised, and resolved to open the Bible and bestow on it the first name on which his eye lighted. This was Nebuchadnezzar. Whether influenced by the thought that the child had already had enough of grass, or by the general absurdity of the name, he resolved to give the child instead the name nearest to it in sound, and called it Ebenezer. He had the story from the old woman who brought Ebenezer up.

Rev. W. Andson proposed a vote of thanks to Mr Tarbet for his interesting paper.

Mr Rutherford of Jardington, in seconding the motion, said the generally accepted theory about the round towers was that they were watch towers. Touching on the subject of the mills, he said it would not be an exceptional favour that was conferred on Buittle, for by an old Act of the Scottish Parliament the people were required to send all their grain to the public mills to be ground, and were forbidden under penalties to use the hand querns.* That was the reason why so many of the querns were

* Mr Rutherford has since forwarded the following extract from Wilson's "Prehistoric Annals of Scotland":—The *quern* was employed down to the 13th century, when legal means were employed to compel the people to abandon it for the large water mills then introduced. In 1284, in the reign of Alex. III., it was provided that "Na man sall pre-

found in mosses; they had been hidden, to prevent the excisemen finding them.

Mr Tarbet said the site of the round tower was not at all suitable for watch purposes.

Mr Sulley said Orchardton had no connection with the ordinary round towers, such as are found in Ireland. It appeared to be a mediæval residence, of the same period as the Scottish keeps, but built round instead of square for some unknown reason.

Mr Barbour said there were traces of other buildings attached to Orchardton Tower, and up to the present its purpose had not been explained.

Mr J. A. Moodie referred to the fact that farms were commonly "thirled" to the mill of the estate, to which they had to pay multures.

Mr Barbour said there was no more curious instance of thirlage than existed in the town of Dumfries. There were two mills in the town. One was said to be built by Devorgilla. The "race" was carried from the weir, which was then at Stakeford, down the line of the present Brewery Street, and through the abutment of the Old Bridge, and the mill itself was at the end of the bridge. It passed into the hands of Lord Herries, and was then bought by the town. The town also acquired the Mill Hole Mill, as it was called, and which he believed was, like the other, connected with the church. The possession of these two mills secured to the town the thirlage of the whole district. Much trouble arose, because they were not able to grind all the grain of the district. They built a horse mill further up the river, on the site now occupied by the Old Brewery, and in addition they leased Stakeford to help to overtake the work. Then they built the mills on the Maxwelltown side of the river (Smeaton, the celebrated engineer, being the architect, but the mills erected to his plans were burned down and replaced by the present structure). A question arose whether the town could thirl the district to a

sume to grind quheit, mashlock, or rye with hands milne, except he be compelled be storm; or be lack of mills quhilk sould grind the samen. And in this case: gif a man grinds at hand milnes he shall gif the threitein measure as *multer*, and gif anie man contraveins this our prohibition he sall tine his hand mylnes perpetuallie." This act was not complied with strictly, as the quern was used long after that; but no doubt the majority of them would be laid aside at that time.

mill on the other side of the water. But it was decided that the thirlage was legal. Thirlage was legal to the present day. A case with reference to Gordieston, in the parish of Glencairn, had been decided in the Court of Session. That farm was within a mile of one mill and a mile and a half of another; but it was thirled to a mill three miles away, and the court decided that the farmer must either send his grain to the mill or pay multures to the miller.

II.—*Notes on Rerrick.* By Rev. GEO. M'CONACHIE and Mr P. SULLEY.

Mr Sulley laid before the meeting some notes on the parish of Rerrick, the joint work of the Rev. G. M'Conachie, M.A., and himself. Alluding to the former prevalence of smuggling in the district, a traffic for which the caves of Barlocco afforded good facilities, he said many smuggling cellars existed in the parish in places where they would never be suspected. Not many years ago a pig rooting about a ruined house suddenly disappeared, and disclosed the existence of a spacious rock cellar, but there was then not even an empty brandy barrel in it. There were formerly barytes mines on Barlocco, hematite iron mines at Auchenleck, and copper mines on Heston; but none of these are now worked. It was said that whenever the directors of the last company which worked the Auchenleck mine were expected it was regularly "salted" with hematite from Cumberland. Within living memory "a stone fire" had been placed in a farmhouse by the tenant who was leaving. It was at one time a common custom for a farmer who was evicted, or who was leaving his farm under a sense of grievance, to fill up the fire-place in every room with broken bottles and small stones and cover them over with larger flat stones, and to lay on his successor a curse which should never be lifted until these fires burned. When the stone fire had been laid and the curse said, the doors were locked and the tenant made his way out by the window, the curse alighting on the first person who entered thereafter. It was a custom also in such cases to sow a part of the farm with sand, and to curse the succeeding tenant until the sand should grow. This form of cursing was carried out in the parish perhaps seventy years ago, and tradition said that the incoming tenant did not thrive; but this was pro-

bably due more to the ill-will of his neighbours than to the curse of his predecessor. The Rerrick ghost, whose noisy manifestations at Ringcroft of Stocking baffled a whole Presbytery in 1695, and were the subject of a grave narrative by the Rev. Alexander Telfair, minister of the parish, was brought under notice. The visit of Queen Mary to the district on her flight from Langside was another subject of notice. The writers followed Froude's account, according to which the hapless Queen halted first at Sanquhar; then went to Terregles, where she spent the night of 14th May; from there went on the 15th to Dundrennan, spent her last night in the Abbey; and on the morning of Sunday, the 16th, sailed from Burnfoot in an open boat, landing in the evening at Workington. The other account, adopted by Mackenzie in the "History of Galloway," by Miss Strickland, and by M'Kerlie, was shewn to be inherently improbable. This account made the Queen ride without stopping from Langside to a hill in Tongland now called Queenshill, but which was called Barstobrick until 1800; then ride further south, cross the Dee, and then go to Corra Castle, in Kirkgunzeon, where she spent the night of the 13th (the date of the battle); proceed next day to Terregles, and on the 15th go to Dundrennan. Attached to this tradition was a story that she spent the night at Hazelfield, near the Abbey, and presented to a boy of the family a ruby ring and a damask table-cloth bearing the royal arms. It was strange she should have carried that table-cloth when, by her account, she was in "a condition not even suiting a simple gentlewoman, having saved nothing." It had been stated that the ring and table-cloth were preserved at Terregles; but no such articles connected with Queen Mary were known there. It was further mentioned that Maryport, in Cumberland, which is popularly supposed to be the place at which the royal fugitive landed, was formerly Ellensport, and was changed about a hundred years ago in honour of the daughter of a local benefactor; and that although Portmary, on the Scotch shore, undoubtedly received its modern name out of compliment to the Queen, it was known as Nether Riddick within the memory of persons still living. Some attention was bestowed on "the Nun Slab" in the Abbey burial-ground, with its much disputed figure and inscription. Mr M'Conachie showed that the animals on which the lady's feet rests are dogs, not lambs; that while the figure is that of a nun there is nothing to indicate the rank of a

prioress; and, on the supposition that an initial letter which he formerly read P may be an O, he suggested that the stone might commemorate a lady of Orchardton. The unset pebble seal discovered in the parish some time ago was mentioned, with the suggestion that it was probably the seal used by one of the dispossessed abbots after the Reformation.

Dr Chinnock proposed a vote of thanks to Mr M'Conachie and Mr Sulley for the paper; and further, that the society should express its regret that Mr Sulley, one of the vice-presidents, was leaving the district, and its high appreciation of his services to the society.

The motion was seconded by Mr Murray, George Street, and cordially adopted.

15th January, 1897.

Mr JOHN NEILSON in the chair.

New Member.—Mr R. F. Dudgeon, The Grange, Kirkcudbright.

Donation.—A copy of the U.S. Geological Survey, 16th annual Report, 1894-5, was laid upon the table.

COMMUNICATIONS.

I.—*Report on the Meteorology of Dumfries for 1896.* By the Rev. WM. ANDSON.

Barometer.—The most remarkable meteorological fact connected with the barometrical pressure for the past year was the extreme height to which it rose on the 9th January. At 9 A.M. of that day the reading was slightly above 31 inches, a reading which is believed to have been unprecedented in the British Islands during the period when regular observations have been taken. The high readings were not confined to a single day. From the 5th to the 11th they were unusually high, ranging from 30·500 in. on the first of these days to 31·016 in. on the 9th, and again gradually falling to 30·570 in. on the 11th. The highest point reached during the ten preceding years was 30·805 in. in

Report of Meteorological Observations taken at Dumfries during the year 1896.

Lat., 55° 4' N. ; Long., 3° 36' W. ; Elevation above sea level, 60 ft. ; Distance from sea, 9 miles.

1896. Months.	BAROMETER.				S.-R. THERMOMETER. In shade, 4 feet above grass.						RAINFALL.			HYGRO- METER.		Dew Point. Deg.	Relative Humidity. Sat. = 100.
	Highest in Month.	Lowest in Month.	Monthly Range.	Mean for Month.	Highest in Month.	Lowest in Month.	Mean Maximum.	Mean Minimum.	Monthly Range.	Mean temper. of Month.	Heaviest in 24 hours.	Amount.	Days on which it fell.	Mean Dry. Deg.	Mean Wet. Deg.		
Jan.	30.006	29.037	1.979	30.262	50.	20.8	45.	35.4	29.2	40.2	0.28	2.04	17	39.4	38.3	37.	91
Feb.	30.036	29.511	1.185	30.239	52.	24.6	46.3	37.	27.4	41.6	0.48	2.32	16	40.8	39.6	38.1	91
Mar.	30.216	28.367	1.849	29.674	58.	28.	50.	36.	30.	43.	0.56	4.02	19	41.8	40.	30.7	86
April	30.472	29.577	0.895	30.099	64.	29.7	56.9	40.6	34.3	48.8	0.28	1.50	15	47.6	44.2	41.6	74
May	30.610	29.965	0.645	30.291	80.7	32.8	67.9	43.4	47.9	55.7	0.20	0.50	3	55.5	50.1	45.	68
June	30.221	29.521	0.700	29.916	84.	39.	69.6	50.8	45.	60.2	0.99	3.28	16	59.6	55.4	50.1	75
July	30.405	29.528	0.877	30.029	72.	40.	66.6	51.	32.	58.8	0.94	4.36	19	58.4	55.9	54.	83
Aug.	30.341	29.571	0.770	30.029	73.	39.8	66.1	48.7	33.2	57.4	0.39	1.56	14	56.3	52.7	49.7	77
Sept.	30.424	28.750	1.674	29.676	74.	34.5	61.4	46.4	39.5	53.9	0.90	4.80	23	53.1	51.	48.9	85
Oct.	30.473	28.930	1.543	29.706	63.	23.7	50.4	36.7	39.3	43.5	1.47	3.47	19	42.3	40.4	38.3	86
Nov.	30.650	29.127	1.523	30.145	52.	22.5	46.5	35.2	29.5	40.8	0.28	1.12	12	40.5	39.	37.1	88
Dec.	30.280	28.761	1.519	29.691	51.7	21.	42.2	33.2	30.7	37.8	0.73	4.87	23	38.3	37.3	35.9	91
Year..	31.016	28.367	2.649	29.979	84.	20.8	55.7	41.2	63.2	48.5	1.47	33.93	196	47.8	45.3	42.6	83

WIND—

	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Var. or Calm.
Days ...	31½	44½	29	19½	32	51	75½	63	18

1895, which also occurred in the month of January. The readings on the last three days of January and the first three of February were also unusually high, ranging up to 30.800 in. The lowest reading of the year was 28.367 in. at 6 P.M. of the 3rd March. This gives the extensive range of 2.649 in. for the year. The mean annual pressure (reduced to 32 deg. and sea level) was 29.979 in., which is above the average of the last ten years by 0.073 in. Although the extreme range was wide, the weather on the whole was marked by the absence of severe storms, and for a considerable part of the year was more settled than usual. January, February, April, May, July, August, and November all had means exceeding 30 in., the highest being May with a mean of 30.291 in., and the next January with 30.262 in. March, September, and December had the lowest means, and these were also the wettest months and the most marked by cyclonic disturbances, although the cyclones were not on the whole so numerous or so severe as they often are; and the mean force of the wind for the year was decidedly under average.

Temperature (in shade, four feet above the grass).—The absolute maximum, or highest single reading of the thermometer for 1896, was 84 deg. on the 14th June. The absolute minimum, or lowest reading was 20.8 on the 23rd January, showing an annual range of 63.2 deg. The next highest reading occurred on the 14th May, when 80.7 deg. was registered. And it is noteworthy that twice in May and three times in June the maximum of 80 deg. and upwards was reached, while in July and August, which are often the warmest months, the maximum did not rise above 72 deg. in the former and 73 deg. in the latter, the explanation being that these months, and especially July, were largely characterised by deficiency of sunshine, and by cloudy and showery weather. The warmest month was June, with a mean of 60.2 deg., which is more than 2 deg. above the average of the last ten years. But January, February, March, April, May, and November all show an excess above the mean, ranging from 2 to 3½ deg., the greatest excess being in February and May, when it was considerably above 3 deg. The months in which a deficiency occurred were September and October, and especially the latter, which was short of the average by fully 2½ deg. It will thus be observed that the first half of the year was the most favourable in point of temperature. There was an extraordinary period indeed, extending from the middle of April to the first week in

June, when anti-cyclonic weather prevailed, with very light winds and abundance of sunshine, which largely contributed to the warmth of the spring and early summer; while January and February were also unusually mild for winter months. From this statement no one will be surprised to learn that the mean annual temperature of 1896 is above the average, being 48·5 deg. This has been exceeded only once during the last ten years, viz., in 1893, when it was 49·4 deg. It has ranged during these years from 46 deg. to 49·4 deg., the average being 47·5 deg., so that the past year has been 1 deg. above the average. This excess, however, has been due, not so much to an unusual number of warm days, as to the mildness of the winter and spring months, and to the limited number of very cold days and nights. To illustrate this, it may be mentioned that the number of days on which the maximum readings of the thermometer reached 70 deg. and above was 42, fourteen of which occurred in May, fourteen in June, nine in July, five in August, and three in September. In 1893 it was sixty-one, and in 1889 forty-six; but these were exceptional years; and the number in 1896 was rather above than below the average. The number of nights on which the protected thermometer fell to 32 degs. and under was 54, six of which occurred in January, with an aggregate of 22·7 degs. of frost; seven in February with 23·4 degs.; six in March with 13·6 degs.; one in April with 2·3 degs.; ten in October with 23·2 degs.; ten in November with 47·8 degs.; and fourteen in December with 63·6 degs., showing 196·6 aggregate degs. of frost in all—spread over 54 days. This contrasts strikingly with the report of the previous year, when there were 100 days, with an aggregate of 640 degs. of frost. That, however, was an exceptional year, in consequence of the extremely low temperature which characterised the months of January and February, the aggregate degs. of frost in each of which exceeded those of the whole of 1896, and amounted in the two months to 495 degs. The only year of the past ten to be compared with 1896 in respect to the mildness of the winter and spring months was 1889, which had 55 nights of frost, and an aggregate of 193 degs. But taking the mean of the period, the average is about 78 nights and 360 degs.

Rainfall.—The amount of rainfall for 1896 was 33·93 in., which is short of the average by from two to three inches. The number of days on which it fell was 196, on 26 of which, however, the fall did not exceed one hundredth of an inch. The

number of days is only a little short of the average. The heaviest fall in twenty-four hours was 1.47 in. on 7th October, which, happening to coincide with an extremely high spring tide, owing to the prevalence of strong south-westerly and westerly winds, caused serious flooding along the river bank, by which a good deal of damage was done. The wettest month was September, a rather unusual circumstance, with a record of 4.89 in., being about double the usual average, and with 23 days on which it fell. The next wettest was December, which registered 4.87 in., with 23 days also of rainfall. But March, June, and July had likewise an excess above the mean, varying from three-quarters of an inch in July to an inch and a half in March. But these excesses were more than compensated by the deficiencies of other months, the most remarkable of which were May, August, and November. The driest month was May, which registered only half an inch—0.50 in., less than-fourth of the average, with only *three* days on which it fell. But November, which is often a rainy month, was almost equally remarkable, shewing little more than one inch—1.12 in.—as compared with an average of 3.92 in. And August also was two and a half inches short of the mean for that month. There was an extended period of drought from the 16th April to the 4th June, a period of seven weeks, during which there were only nine days on which any rain fell, and to the amount of no more than 0.89 in., which would be less than a fourth of the average rainfall for the period. And it is sufficiently remarkable that on the 5th June more rain fell on a single day than during the previous seven weeks, 0.99 in., as compared with 0.89 in. In some parts of the country, and especially in the south and south-west England, the drought was more protracted and severe, extending into August, with the result of a very early harvest, and of a great deficiency of the hay crops and of cereals other than wheat, which thrives best in a warm and dry summer. In the more northern parts of the country, where the harvest is later, the rains which set in in the latter part of August, and continued throughout all September and the first ten days of October, interfered disastrously with the ripening and ingathering of the crops, and led to serious and heavy losses.

Under the head of rainfall I have said nothing of snow, because, in point of fact, there was exceedingly little snow, in the lower grounds at least, during the whole year. There was no onfall worthy of being called a snowstorm, and only twice—once

in March and again in October—was there a slight covering of it upon the ground, which speedily thawed and disappeared. But hail fell several times in the end of April and in September.

Thunderstorms were not numerous during the year. I observed only five, two of which occurred in June and three in September. The most severe was on the 6th of June, when twice during the day—at 11 A.M. and again between 1.30 and 3.30 P.M.—there was a thunderstorm of considerable severity. This was the accompaniment of the break of the weather after the protracted drought and heat which preceded it.

Hygrometer.—The mean of the dry bulb thermometer for the year was 47.8 deg.; mean wet, 45.3 deg. Temperature of the dew point, 42.6. Relative humidity (saturation being equal to 100), 83. May had the lowest relative humidity, viz., 68; April had 74, and June 75. The other monthly values ranged from 75 to 91. The relative humidity of 83 is about the average of the last ten years.

Wind.—With regard to the wind directions of the year, the westerly prevailed most out of the eight points reckoned in the report. But northerly and easterly winds were more than usually frequent. Grouping the N., N.E., E., and N.W. together, the number of days in which they prevailed was 168; while the S., S.E., S.W., and W. claimed 178; and calm or variable was 18. The mean force, however, as might have been expected from the more than average height of the barometer, was decidedly under the mean.

Mr J. S. Thomson, jeweller, proposed a vote of thanks to Mr Andson for his valuable report. In doing so he suggested that the society should take steps to get the gauge for indicating the height of the river replaced at the New Bridge, it having been carried away at the break-up of the ice in 1895.—Mr James Leunox seconded the vote of thanks.—Mr Rutherford of Jardington suggested that the gauge should be painted on the bridge itself.

Dr Maxwell Ross, medical officer for the county, said he always followed with interest the observations of Mr Andson as they were recorded in the *Standard* from time to time, and he found them very helpful, because there was a relation between the state of the weather and the recurrence of certain diseases. This had been laid down in the classical observations of Mr Buchan and Sir Arthur Mitchell, who, taking the Registrar-General's returns

for the London districts, were able to shew that there was a distinct seasonal prevalence of certain diseases. Scarlet fever, which usually had its maximum about November, had not followed that course in Dumfriesshire during the past year. It was more prevalent in the early part of the year. And diphtheria, which was usually most prevalent into the latter part of the year, was of most frequent occurrence during the months of September and October. In Dumfriesshire, in particular, experience led them to fear the occurrence of diphtheria during a wet season, and the two months of last year, when there was a prevalence of that disease and high mortality from it, were, he thought, wet months.—Mr Andson : September was the wettest month of the year.—Dr Ross added that the relation of damp and diphtheria did not hold all over the world, for the disease occurred in the dry climate of California. He was glad there had not been so much typhoid in Dumfriesshire last year as in 1895. They usually found that that disease was more prevalent in the autumn than during the earlier part of the year ; but in Dumfriesshire in 1896 the conditions were reversed. In the previous year, however, there were 51 cases noted in the last quarter of the year, and the prevalence in the first quarter of 1896 was entirely due to the fact that they formed a continuance of the epidemic of 1895. Last year they had the pleasing report that in Dumfriesshire there had been no cases of typhoid occurring during the season when we expected to find it prevalent. During 1896 only three cases of puerperal fever had been notified, two proving fatal. They all occurred during the last quarter of the year, agreeing in this respect with the usual seasonal prevalence. A large majority of the cases of erysipelas also were recorded during the last quarter of the year, showing the intimate relation between the seasons and disease.

II.—*The Martyr Graves of Wigtonshire.* By the Rev. JOHN H. THOMSON.

There are four Martyr Stones in Wigtonshire ; they are at Craigmodie and in Wigton Churchyard.

Craigmodie is about eight and a-half miles as the crow flies to the north-west of Kirkcowan, but it is at least ten miles by the road. The stone is an erect one, about three feet in height by two in breadth, and is much the same in appearance as the other

martyr gravestones in Galloway. It was put up in 1827, in the place of an older one. The original inscription has been preserved. It is—

HERE LYES
THE BODY OF ALEX
ANDER LIN, WHO WAS
SURPRISED AND INSTAN-
TLY SHOT TO DEATH
ON THIS PLACE BY
LIEUTENANT GENERAL
DRUMMOND FOR HIS
ADHERENCE TO SCOT-
LAND'S REFORMATION
COVENANTS NATION-
AL AND SOLEMN LEAGUE

1685

The other stones are in Wigtown Churchyard. They are to the north of the site of the old church. The largest of the three stones is that of Margaret Wilson. It is a flat stone, five feet in length and two feet in breadth. The inscription is :

HERE LYES MARGRAT
WILLSON DOUGHTER
TO GILBERT WILLSON
IN GLENVERNOCH
WHO WAS DROUNED
ANNO 1685 AGED 18.

LET EARTH AND STONE STILL WITNES BEARE
THEIR LYES A VIRGINE MARYRE HERE
MUTHERD FOR OWNING CHRIST SUPREAME
HEAD OF HIS CHURCH AND NO MORE CRIME
BUT NOT ABOLVING PRESBYTRY
AND HER NOT OWNING PRELACY
THEY HER CONDEND BY UNJUST LAW
OF HEAVEN NOR HELL THEY STOOD NO AW
WITHIN THE SEA TYD TO A STAKE
SHE SUFFERED FOR CHRIST JESUS SAKE
THE ACTORS OF THIS CRUEL CRIME
WAS LAGG-STACHAN, WINRAM, AND GRHAMIE
NEITHER YOUNG YEARES NOR YET OLD AGE
COULD STOP THE FURY OF THERE RAGE

Close to the stone to Margaret Wilson is that to Margaret Lachlan. It is a small upright stone. Its top edge is waved. Upon this waved edge the words "MEMENTO MORE" are chiselled out. The inscription is upon both sides of the stone. Upon the one side it is :

HERE LYES
MARGARET LACHLANE
WHO WAS BY UN
JUST LAW SENTENC
ED TO DIE BY LAGG
STRACHANE WIN
RAME AND GRHAME
AND TYED TO A
STAKE WITHIN THE
FLOOD FOR HER

On one of the edges of the stone SURNAMED GRIER, and upon the other side

Cross Bones and Skull.

ADHERENCE
TO SCOTLANDS RE
FORMATION COVE
NANTS NATIONAL
AND SOLEMN LEAGUE
AGED 63 1685

These two stones are remarkable for the controversy about the two Martyrs, denying or asserting their martyrdom that arose shortly after the publication of Sheriff Napier's Memorials and Letters of Dundee in 1859. The letters in the newspapers and articles in the reviews and pamphlets that soon appeared would fill several volumes.

The stones themselves at least existed in 1730, for in that year they appear among "the Epitaphs or inscriptions that are upon the tombs or gravestones of the martyrs in several churchyards and other places where they ly buried" in the third edition of the "Cloud of Witnesses." In the first edition of the "Cloud," published in 1714, they do not appear. This is the case also in the second edition, issued in 1720. It is an exact *fac simile* of the first, although it is said in the title page to be "enlarged," but the title page as a reprint must have been printed at the commencement of the printing of the volume, when it would be uncertain how the book would end. The last page in both editions is

printed down to the very bottom, and has the appearance as if matter prepared for the volume had been crowded out for want of space.

The third stone is within the same railing as encloses the stones to the memory of Margaret Wilson and Margaret Lachlan. It is an upright stone and waved on its upper edge, and is somewhat larger than the gravestone at its side to Margaret Lachlan. Upon its upper edge are the words MEMENTO MORI.

The inscription is :

HERE LYSE WILLIAM JOHNSTO^N
JOHN MILROY, GEORGE WALKER
WHO WAS WITHOUT SENTE
NCE OF LAW HANGED BY MA
JOR WINRAM FOR THEIR ADHER
ANCE TO SCOTLAND'S REFOR
MATION COVENANTS NATIO
NAL AND SOLEMN LEAGUE
1685

III.—*Hoddom Old Churchyard.* By Mr GEORGE IRVING, Newcastle.

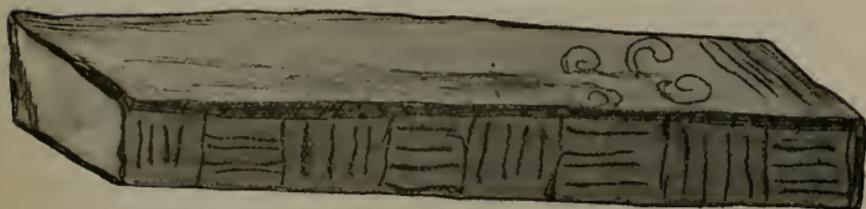
When strolling about Hoddom a few weeks ago I was told that there was an old font at the old churchyard. When I got there I found it was not a font but the base and socket of an old cross. I found it rolled up at the back of the south wall of the churchyard. It was partly imbedded in the ground, but sufficient of it above ground to get a correct view of it. It is made of coarse, gritty sandstone, four feet high if standing erect, and the socket on the top is one foot six inches square and six inches deep. The edge or rim of the socket is about seven inches thick, except at the four corners, which are rounded off to five inches. A part of one side of the rim has been broken off. Half-way between the top and bottom of the base there is a plinth of about two inches roughly worked upon the stone.

There is a small fragment of Hoddom Cross in the Museum of Antiquities in Edinburgh. Can this be the base? It is doubtless very old. The socket is calculated to hold a shaft, say ten feet high. If it is part of Hoddom Cross it is a most valuable historical relic, but if not it is still a valuable memento of the past. It lies within a few yards of the site of the old pre-Reformation

church, which before the erection of Hoddom Bridge was on the route to the old ford across the River Annan, where many a weary traveller was glad to see its well-known features.



BASE OF OLD CROSS.



OLD TOMB COVER.

When the present fence wall was erected round the churchyard the workmen had evidently left it outside, where it has lain for long unheeded and uncared for. It is very probable indeed that other fragments may be buried under the surface close by. I would like to suggest that it be moved into the enclosure just

inside the wall opposite to where it lies. A couple of masons would do it in a day, and if set erect would be seen by visitors.

There is also a very interesting and rare old tomb cover lying within the railing where the Curries of Newfield and the ancestors of the Irvings of Burnfoot are interred. I send herewith a drawing of the base of the old cross and also of the old tomb cover.

IV.—*Notice of a Pamphlet by the late Mr John Anderson on the Riding of the Marches, 1827. By Mr W. DICKIE.*

Mr W. Dickie read a humorous account of the riding of the marches by the Dumfries Trades on 23rd April, 1827, by the late Mr John Anderson, bookseller. He prefaced it by observing that when the system of trade incorporations was in full operation no person was allowed to carry on any handicraft or trade within the royal burgh unless he was either a freeman by birth or family relationship or purchased the privilege. Hence the boundaries to which this valuable monopoly extended were carefully guarded, and it was the custom every year to perambulate the marches, in order to impress them firmly in the minds of the generations as they grew up. The boundaries also marked the limits within which the burgh magistrates had a certain exclusive jurisdiction, and they likewise took part in the perambulations. It was a custom which had died out with the old trades system; but in some towns, as in Langholm and Hawick, a holiday pageant of a somewhat similar nature was still regularly observed. He read the following reference to the custom which is embodied in the Rev. Dr Burnside's manuscript history of Dumfries, and copied from an earlier record, known as "Edgar's Manuscript," viz. :

On the last day of October every year the whole Town Council, Incorporations, with all the freemen belonging to them, accompanied by the boys and school and other attendants, rode the marches. They began their march from the Market Cross, or Laigh Sands, proceeding up to the Castle, down the Friars' Vennel, up the Greensands, along the High Haugh to the Moat. There they stopt till the town officers threw among the crowd a bag of apples. They then proceeded by the grounds called Longlands and Lochend, on the north side of the old chapel [viz., the chapel on the site of the present St Mary's Church] to the Stoup, or horse course, where there was a race for a saddle and spurs. Thence they went eastward and

northward, betwixt the town's property and the estates of Craigs and Netherwood, traversing the marches that they might be able to decide in case of dispute. Thus they proceeded to Kelton Well, where the burgh's superiority terminated. There the Clerk called the roll of the heritors and burgesses, that the absents might be fined. From thence they returned to town, with haut-boys, ancient trumpets and drums, sounding before them. Some old people now living (1792) remember to have seen this procession frequently.

“The Laigh Sands,” the reader explained, would be the Whitesands. The Greensands and Whitesands used to be commonly distinguished as the Over Sandbeds and the Under Sandbeds. The flat land in the neighbourhood of the village of Stoop was for a long time the racecourse of the town and was the scene of many mounted contests. In 1827 the route of march was somewhat different from that mentioned in the extract just read. He learned from another contemporary account that “in the morning the trades, particularly the younger members, headed by the Convener and Deacons, with drums beating, fifes playing, and colours flying, proceeded along the Whitesands, Bridge Street, Greensands, Moat, &c., as far as Punfield Burn. From thence they went to Nunfield, Marchhill, Stoup, and Gasstown. From this point they crossed the country to Kelton Thorn, where refreshments were provided. The Provost and Magistrates, with the Town Clerks, followed in two chaises the main battalion of the marchers.” It was said that from six to eight hundred persons took part in that march. To his knowledge there were at least two of the survivors now resident in the town. They had a very vivid recollection of the proceedings, which were carried through in the midst of a violent snowstorm. The extract from Dr Burnside shewed that even towards the close of the last century the riding of the marches was falling into disuetude; and it was stated that before the year 1827, to which Mr Anderson's account referred, they had only been ridden three times within the memory of any then living. Mr Dickie then proceeded to read the narrative, which bore to be printed for private circulation, and was in form a parody of the narrative books of the Old Testament, after the manner of “the Caldee Manuscript” associated with the name of James Hogg. The pageantry of the day was described in burlesque terms; a humorous enumeration of the various trades was given; and the third and closing chapter was occupied with an account of

the banquet that followed in the Trades Hall, the premises now belonging to Messrs Moffat & Turner.

In course of a conversation which followed Mr Thomson said in some places a sound whipping used to be administered to the children at the various turning points, to impress them upon their memory. Mr Dickie said he had inquired at one of the survivors of the march of 1827 whether any such custom was observed here, and the reply was—"No. That belongs to the ages of barbarism; centuries ago." The Chairman said it might be possible to administer the whipping once, but hardly a second time. The children would next year be conspicuous by their absence.

The thanks of the society were tendered to Mr Dickie, and also to Mr Anderson, bookseller, for the loan of the pamphlet.

12th February, 1897.

Emu and Ostrich Farming in the Highlands of Dumfriesshire.

By Mr RICHARD BELL, of Castle O'er, Langholm.

The object of this paper is not to subject my hearers to a dry dissertation on Natural History, in which study, I am sure, many among you will be better versed than I am, but rather to offer you a few remarks and stray notes on the keeping of sundry creatures, zoological and ornithological, in confinement, and more particularly on the keeping and breeding in the uncongenial climate of Dumfriesshire the Australian Emu and the South American Ostrich, or Rhea.

I once stated in a weekly journal, devoted, among other articles, to natural history, that I claimed to be the first person who had succeeded in breeding Emus in Scotland, and challenged contradiction. As none was forthcoming, I think I may safely repeat the boast, and give credit to our own county as the first one in Scotland where these birds were bred. I have all my life been a lover of pets, and during my younger days these consisted of specimens most easily obtained and most conveniently and surreptitiously kept in a bedroom or outhouse. In the same ratio as my years increased so increased my ambition and the size of my pets, till about the year 1875 these had run from the bulk of

a white mouse to snakes, monkeys, kangaroos, tiger cats, vultures, eagles, &c., up to Emus and Rheas. In that year, 1875, the idea struck me that I would try my hand with the two latter birds. The Emu, as you probably all know, is a native of Australia, where on its vast plains they might have been seen in large flocks, when our colonists first settled there, but are now becoming very scarce in the more inhabited parts of the country, owing to the ruthless way they have been hunted down by men and dogs, and are now only to be found, in diminished numbers, at a safe distance from the settlements. Owing to their growing scarcity Emus are rather an expensive stock to lay in. This did not deter me from purchasing a pair, as I hoped, if successful, to recoup myself the initial outlay of £20, which was the figure charged by Jamrach, of Ratcliffe Highway, London, the famous dealer in wild animals. When they arrived home the children christened them "Tommy" and "Jenny," and by these names they will be distinguished in the course of my narrative. In the above hope I was not disappointed, as you will understand when I tell you that my experiment did succeed, and that I sold my young birds, thirty-one in number, at from £8 to £10 per pair, without guaranteeing the sexes, and that when I sold off my birds in 1885 I received £16 for the original pair, or only £4 less than I paid for them, and after gaining for ten years the profit from the sale of young birds and extra eggs. The eggs of both Emus and Rheas are worth 5s each, and as between both species they laid somewhere about 240 in all, you must allow that these birds are fairly profitable—certainly more profitable than sheep—and perhaps it might be advisable for farmers in these times of depression to introduce on their farms this novel Australian and South American stock. Let me here remark, however, as a warning to farmers or even to others, that to procure a breeding pair is a risky and difficult matter. The distinction of sex in the Emu can only be determined by an expert, the plumage of either sex being of the same colour in the adult state. There is a decided difference of colour when the young are in the "down," some having the stripes much darker than others, and at this stage colour may mark the sexes, but so soon as feathers are put on this distinction is lost. The sex of the Rhea is easily distinguished, even at a distance, the male being much darker than the female. It is only after long and minute observation that an amateur can

be certain that he is in possession of a male and female Emu. My first two Rheas were sold to me as a breeding pair, as I was ignorant of the differences in colour; but in course of time I found they were both females. I purchased three different birds, guaranteed as males, with no better result than adding to my stock of females. This guarantee of sexes is not of much value, and for this reason, that though you may purchase a bird at or near one breeding season, it frequently happens that owing to its inborn restlessness and its new surroundings it will not settle down in its new home, and it may be a year before you can tell which sex you have got—too late to return it to the seller without “difficulties.” As I failed in my attempt to procure a male Rhea, I cannot from experience pride myself as being able to distinguish their sex. I had not the same difficulty with my Emus, after their being in my possession some time. There is a difference in their “countenance,” with which you become familiar after close observation, but the peculiar and loud drumming noise of the female leaves no doubt. This sound is quite wanting in the male, whose voice is a loud, hoarse grunt. When the bird is excited this sound has a very terrifying effect upon strangers, though I myself, owing to my familiarity with it, was not afraid of “Tommy.” When he had young ones beside him he would “come for me” from the furthest corner of the field, grunting and striking out his feet in front as if he meant mischief, but I had only to stand my ground and seize him by the neck, when he at once stopped his fuss, though continuing to run round and round me in a great state of excitement. I must confess that this standing firm and shewing a bold front required some nerve at first, but the truth of the saying, “familiarity breeds contempt,” was vividly impressed upon my mind, and “Tommy” and I were always good friends. On one occasion a lady visitor nearly had a fit of hysterics when she witnessed one of his apparent attacks, fearing I was going to be annihilated on the spot, and was only consoled when she learned that his supposed attack was mere “bounce.” It would have been a different affair if she herself had been in the field, and I never allowed strangers to approach the birds during the breeding season without my presence also, and never allowed a lady to enter the field at that time whether accompanied or not. I have read of a gentleman, who was on a visit to Government House, near Sydney, having had his lungs

lacerated by the kick of an Emu in the back when he entered the park to view the birds. The kick of an Emu is a serious, if not a dangerous one, and is delivered in a forward direction and not from behind like the kick of a horse. When sporting they spring up in the air, kicking sideways and backwards, more like a cow. In addition to the blow the large claws make a lacerated wound. When trying to catch these birds one should always be provided with a shield of wicker-work, so as to guard themselves against serious, if not fatal injury. As previously stated, I purchased my parent birds from Jamrach in October, 1875, but as they fought so persistently on their arrival home, I was afraid at first that they were both of one sex. The one which I came to know was the female was so harassed by the other that she could get no food, and the points of her wings, or rather wing bones, were so lacerated by dashing against the fence in her endeavours to escape from her mate that they bled for about ten days, and I thought the veins were opened and that she would bleed to death. I therefore ran a fence across the field and separated them. They remained so during all the winter of 1875-1876, which was the cause, I have no doubt, of my losing a brood that year. In April, 1876, on my return from Edinburgh, where I had spent the winter, I again allowed them to run together. I was afraid they would again fight, but was gratified to find that they were most peaceably disposed towards each other. During all that summer and up till February, 1877, there was nothing in their appearance or otherwise to enable me, in my ignorance, to distinguish their sex, but on February 17th my shepherd, under whose special care the birds were placed during my absence in town, found three eggs lying together in a corner of the field. As I had been in the country on the previous day, and being on the look out for eggs had searched the field for them, and had, as I thought, looked into this very corner, I concluded from the fact of three eggs being found at once that both birds were laying. I found I was mistaken, however, and my hopes of securing a brood were now increased. The female laid regularly every third day at first, but afterwards a period of four days elapsed between the deposit of each egg. Altogether 19 were laid that season—the second year she laid 42—and when I saw from certain symptoms that “Tommy” wished to sit, I made an artificial nest in the corner where most of the eggs had been laid, and built a bower of spruce

branches over it. Eleven eggs were placed in the nest, and he immediately began to cover them up with leaves, &c. On April 1st—not a very auspicious day—he sat down in the nest, but till the 5th he never allowed twenty-four hours to pass without having the eggs all scattered round him outside the nest. This appeared to do them no harm, and the first young were hatched 58 days from the first day he sat down. At Billholm, her first residence, “Jenny” laid her eggs anywhere about the small enclosure, but when she was removed to Castle O’er, and to a larger enclosure, her habits changed. This enclosure was bounded on one side by a hedge 300 yards long, and was visible from the front windows of the house. When her day for laying arrived—which was generally about every third one—her preparations were of a most peculiar description. Almost exactly at 3 P.M. she began running along the hedge from end to end at full speed, and in the highest state of excitement, shortening her journey at each end by a few yards. This continued the whole afternoon, and the journey got shorter and shorter at each turn till towards the finale it consisted of a few steps only each way, and even degenerated into a mere swaying of the body from side to side for a few minutes, as if she were “ringing in,” after which she sat down, and, pressing herself up against the hedge, dropped her egg. As this took place generally, if not invariably at 6 P.M., she had run, without ever ceasing, for three hours, and, judging from her gaping mouth and heavy panting, she must have been pretty well exhausted. The laying season commenced in January or February, and as hard frost often prevailed, I generally went to the field at the time I expected the egg was due, or had been already laid, to secure it from being frozen. The first time I went she left the hedge and came up to me, walking round and round, at the same time pressing against me in a peculiar manner. I did not know at first what she meant, though she evidently wanted something, so I put one arm round her body, upon which she sat down, and dropped her egg. I now saw that what she did want was to have a better purchase than that afforded her by pressing against the hedge. After this discovery I went to her oftener *before* than *after* the egg was laid. I daresay you all know the colour of an Emu’s egg. They vary a good deal in the depth of their colour, some being a vivid green and some darker, and when freshly laid the tints are beautifully clear and bright, but soon

become toned down, as you will see from the specimen produced. I have one at home of quite a blue colour, and the shell is perfectly smooth, not granulated like the one you see. When the eggs are exposed to full daylight for some time they become a dirty grey colour. Their laying season lasts from January till April in this climate.

At Castle O'er the Rheas had two large fields to roam in, as well as the grounds round the house. They laid their eggs sometimes in strange places, as you will hear presently. When they laid in the fields I never noticed any preliminary symptoms, and their laying season being in summer, and the eggs being free from the risk of frost, were not so particularly looked after as those of the Emus, but when one was *supposed* to be due the whole household turned out to look for them. We went in a line along the fields, and as, owing to their colour, they were easily seen, I do not think we ever missed one. As a corbie could not easily carry one away, and we never found a "sucked" one, I presume these robbers either did not know what they were, or suspecting they were "made in Germany," despised such foreign produce. Their eggs when newly laid are more of a very pale orange colour than the creamy tint they fade to when they are exposed to the light. When one lay over night the upper half was cream coloured, whereas the under half retained the darker yellow, being shaded from the light by itself and the grass upon which it lay. The average weight of Rheas eggs is just upon 1 lb. 9 oz; to be exact, 1 lb. $8\frac{5}{8}$ oz. At least, that is the result from six I weighed together. I have no written note of the average weight of Emus' eggs, but I am quite sure, in my own mind, that they averaged 1 lb. $10\frac{1}{2}$ oz. I know for certain that one balanced fourteen hen's eggs. Average size of twelve eggs: Rhea— $5\frac{6}{8}$ in. by $3\frac{5}{8}$ in.; Emu— $5\frac{5}{8}$ in. by $3\frac{5}{8}$ in; big one— $6\frac{2}{8}$ in. by $3\frac{4}{8}$ in., 1 lb. $9\frac{1}{4}$ oz. There are two birds of the same family, one of which at least should have had a first place in a paper treating of the "Cursores." I allude to the African ostrich and the Cassowary, a native of Malacca; but as I have never been the fortunate possessor of either, and as I have wished to confine my remarks to those only which have come under my own personal observation, I shall make no special reference to them or their habits. This can be found in any elementary work on Natural History. The chief of the whole group is the African ostrich, but I shall not take up your

time further than to shew you one of its eggs. I got it from a friend, who had it in his possession for thirty years. His father got it from an Indian surgeon. When my friend gave it to me he hoped it might remain under my roof-tree as long as it had been under his. He also stated that he had compared it with all the eggs in Gordon Cumming's collection, and it was larger than any of his. I have kept it for forty-two years, and if its *great-grandfather*, *i.e.*, the Indian surgeon, had it for thirty years it may have seen the light a century ago, and has therefore almost become an object of interest to the antiquarian members of our society, as well as to those on the Natural History side. Then, through the kindness of my friend Mr Bartlett, superintendent of the Zoological Gardens, London, I am enabled to shew you a rarer egg than any of them, *viz.*, that of the Cassowary, as well as some feathers from the back and two quills from the wing of that bird. These quills are curious appendages, and their use is not very obvious. There are five of them on each wing. The colour of the egg in daylight is a fine olive green, quite a different shade from those of the Emu. Size— $5\frac{2}{3}$ in. by $3\frac{1}{3}$ in. I have only one story of the Cassowary. It is very short, so perhaps you will allow me to tell it, but as the tragic event did not take place in my presence I do not vouch for its truth. There are several versions of it, but the one I know runs like this:—

“ There was once a Cassowary
On the plains of Timbuctoo
Who ate up a missionary,
Carpet bag, and hymn book too.”

The belief in that story is quite optional. As I said, when the Rheas had access to the grounds, they laid in queer places. On one occasion a lady was on a visit, and on our going to sit out on the lawn she spread a shawl on the ground but did not use it, preferring to sit on the grass. Great was her astonishment when a Rhea joined the party and laid an egg on the shawl. Again, a gentleman, who had just returned from China, was staying with us. Among his paraphernalia he had brought with him a pair of Chinese slippers, made of plaited grass. One morning, when going out for the day, he was putting on his walking boots at the front door. He sat on the door step, and placed his slippers on the gravel in front of him, when, to his amazement, a Rhea dropped an egg in one of them. Once more, two of my men were

engaged in some work near the glass range. They went into the potting shed to eat their dinner, leaving the door open. They sat on the floor, with their backs against the wall, when presently a Rhea entered the shed and, crushing herself in between them, laid an egg on the floor. The men had no fire handy, or probably I would not have seen that egg, as it arrived at a hungry and tempting moment. The laying season of Rheas is from June to August here. I do not mention these things as trivial reminiscences only, but rather to bring home to you the contrast between these wild and wary birds kept in confinement here familiar with man and their roaming at large on the Pampas of South America. They would not probably find, or take advantage of, tartan shawls, Chinese slippers, or even potting sheds there, and I am certain they would give a wide berth to two "gauchos" sitting eating their dinner of dried meat, each with a "bolas" or lasso lying handy by their side. I have been told by friends who have lived in South America that a dainty meal is made by cutting off the top of an egg, putting in herbs and spices, and roasting it on a fire. I once gave the cook one and told her to try it in an omelette. The result would have been fairly good had she not used the whole egg; it tasted of little else. I never felt valiant enough to tackle a plain boiled one for breakfast, but my shepherd once tried a fried one, and he told me he got quite a "fricht" when the whole bottom of the pan was filled with egg. The maternal duties of Emus cease so soon as the female finishes laying, and I always shut her off from the nest when the male began to incubate, as she only disturbed him by laying more eggs in the nest than were wanted. The male sits from 58 to 62 days, and during all that time he never touched food or water, though he always had a supply of both beside him. Besides the incubating he does all the rearing, and it is an interesting sight to see the huge bird striding along with the young all about his feet, and never treading on one.

The young are beautiful creatures when in life, much more so than the stuffed specimen I now shew you. The colours are very much faded. I fed the young on hard-boiled egg for the first few days, mixed with bread and biscuit crumb, then oatmeal, lettuce, and greens; but they begin very soon to graze like their parents, so their keep is not a very expensive affair. The old ones graze like geese, but I always gave them in addition a feed

of such mixture as the pigs got, varying this with maize. The bones of Emus bred in confinement are apt to become very brittle if the young birds are not supplied with lime, and many losses are sustained by breeders who are not aware of this fact. I discovered for myself the necessity of giving them lime by observing the young birds picking some off a wall. Ever afterwards I had lime rubbish in their "run," of which they consumed a great quantity. I only lost one from brittle bones; on running through a hole in a hedge, when frolicking, it broke its thigh bone, when six months old. I put its leg in splints, but it was no use, so I put it out of pain, got it stuffed, and presented it to the Edinburgh Museum of Science and Art, where it remains to be seen by anyone interested or desirous of studying a young Emu at an older stage of life than the one you have just seen.

As a proof of the hardihood of these birds, I may say that out of thirty-six hatched none ever died a natural death, and that I only lost five, all from violence, viz., the one mentioned before, three starved to death, and the one you have seen, which was killed by a log of wood falling upon it. None died from the rigour of our climate alone. Young Emus are most amusing creatures, as, from a few weeks old, they perform all sorts of antics, such as throwing themselves on their backs, then leaping a considerable height off the ground, meanwhile kicking in the same way as they do when adult and mean mischief. One performance which they went through was of another character, being admirable from its solemnity and the graceful attitudes of the performers. It consisted of a dance in the nature of a quadrille. They would practice some preliminary steps, then all meet in a common centre, with their breasts brought close together and their heads and necks stretched straight up in the air, then they would open out, change places, and repeat the manœuvre over and over again. This dance caused much more sober wonder to the spectators than the mere amusement derived from the ridiculous antics before described. Baby Emus, however, are indued with the same cantankerous nature as human babies, when mama wishes them to "show off" before female visitors; they sometimes won't "work," and when I wished to "set the machinery going" I had frequently to call in the aid of my children, who knew what to do. This consisted in throwing themselves about on the grass in the same convulsive

throes in which the birds were in the habit of indulging. The hint was generally taken, and the visitors delighted, though no extra charge was made for the exhibition.

We have all heard of some folks having the "digestion of an ostrich." As the subjects of this paper are of the same order of birds, their powers of digestion are equally good. A good appetite and a good digestion are blessings to poor suffering humanity, but we must not be jealous if the miscellaneous substances in which Emus delight are beyond our powers. One day the carpenter came to repair the fence, and he told me he had seen "thae queer birds, the 'A-moos,' busy swallowing chips of wood." He intimated this discovery with as much pride as Columbus might have done when he discovered America, but I, being quite aware of this propensity, was not much astonished. A few minutes later he proceeded to the place where he had deposited his bass of tools to get some nails, a paper parcel of which he had previously opened and placed beside his bass. When he found the paper empty he asked me if I had "lifted" them, strongly suspecting me of kleptomania. When I asked him if he had seen the "A-moos" near his bass he said he had, and I very soon told him where his nails had gone. He seemed to think I was "e-musing" myself at his expense, and stared at me incredulously, as much as to say, "I'm no' that easily gulled," but when I pointed out "Tommy" at that moment struggling in the vain endeavour to swallow his chisel he was convinced, and remarked that "there might be something in't." Whether he meant in the fact or inside the bird I failed to learn. Everything is "grist that comes to their mill," whether it be nails, coals, potsherds, small china dolls, or collars and cuffs. Many a tear has been dropped by members of the household over the loss of the latter, as well as other small articles of female attire, when the birds got access to the bleaching green. Their curiosity, or I should say their inquisitiveness, equals their voracity, and I could give many instances of this propensity generally, though I believe wrongly, attributed to the human female, but one will suffice. On one occasion the nurse was crossing their enclosure, carrying in her arms one of the children, then a baby in long clothes. This was too much for "Jenny," who wished to see what the bundle consisted of. The nurse was already sufficiently alarmed by the proximity of the "two monsters," but her terror was increased

when "Jeuny" proceeded to pull the veil off the baby's face, and she offered up a prayer of gratitude when she found herself, she could not tell how, on the outer side of the fence, whilst the "two monsters" were still in the field, grunting and drumming a fond farewell.

I took advantage of this vice at the time a photograph was being taken. It is almost impossible to "take" these birds except by "snap shot." I threw down a handkerchief on the ground and directed the photographer to "fire" the moment they stopped to investigate the attraction, and the result is what you can see for yourselves in the book of photographs I now hand round for inspection. You will recognise the one alluded to by the white blotch in the foreground. Once "Tommy" escaped from Billholm, and he probably would not have gone very far from "Jenny," but when the man in charge tried to drive him into the field again he became excited, and his temper was not soothed when his keeper sought assistance. "Tommy" promptly took to the hills, and, when the hue-and-cry was raised that he was off, all the men and collies in the neighbourhood joined in hot pursuit. I was from home at the time, but the run was described to me as a most brilliant affair, and certainly equal to any fox-hunt on record up to that day. The ground covered was about 20 miles, and it was many hours before he was "run to earth" at Castle O'er, five miles from home. Having had quite a nice "outing" he had reached this point on his way home to Billholm. Men and dogs had enough of it, and a cart was requisitioned, in which he was carried home in triumph to his paddock, from which he never again tried to escape unless pressed. Another escape took place, but it was a Rhea this time, and happened at Castle O'er. She, wishing to have a more extended view of the surrounding country, "climbed" the fence, and, taking "Tommy" as her example, carried out her intention by also taking to the hills. I heard of her from time to time, as having visited sundry farm houses and herd's cottages, many of them several miles away, as also of many a good hunt after her with collie dogs. Eventually, having been about fourteen days "at large," she appeared at Crurie, two miles from Castle O'er. I enlisted the aid of one of my servants, whom I shall call "John," and we started off to try to capture the delinquent. We found her in one of the fields, and I sent John to the farmhouse to borrow a piece of scone as bait. I

arranged the following plan of campaign. As the bird knew me well, I was to feed it. When busy with the bread I was to rush treacherously in, and, seizing her suddenly, throw her down, when, if the feat was successfully accomplished, John was, in his turn, to make a dive and get hold of her leg, I at the same time warning him to "look out for squalls" and hold firm. He gave me a look of scorn, mixed with pity, remarking that there was "ganging to be an unco fash to catch sic a wee beast as that." The operation was successful, and having caught her round the body before she had time to kick, I threw her over and lay on the top of her. John seized her legs, and a fierce struggle ensued on the part of all three. In a few minutes, John, with the perspiration streaming from his face, gasped out that "the sma' cratur had the strength and spite o' the Deevil." He was quite ignorant of the mass of muscle in the thigh of one of the "Cursors." I sent him to the farm for a wool bag, consenting to remain lying on the bird till his return. This consent I would not have given had I not been aware that she was pumped out with the struggle to a perfectly safe degree, still I *hoped* John would not be long. When he returned with the bag we shoved the "beast" in, and, rolling it up into a very decent parcel, sat down to take a rest after our exertions. In the meanwhile the "parcel" had rested also, and presently we heard a series of rents taking place in the cover, and saw "legs and airms a' walloping" through many holes in the bag, which was thin and worn from much use. John was now despatched for another bag, and again I "reclined upon my feather bed." The bundle was repacked in a double envelope, and the question arose, how was it to be conveyed home?—the farm hands and carts being all out at work. John consented to carry it on his back if I would help to "heez't" up. This was done, and we proceeded on our way. We had not gone half-a-mile till another "screed" was heard, and a leg, but fortunately one only this time, was seen waving in the air in a most menacing manner, and ominously near John's head. Having seen and felt a fair sample of the beast's powers, he cried out "For gude sake, sir, tak' haud o' that leg or it'll hae aff my lug." This I did, and we reached home without further mishap, though my arm was much cramped "wi' haudin'" that struggling leg for a mile and a half.

These birds are deprived by nature of the power of flight, but the enormous amount of thigh muscle provides them with a

ready means of escape by running. In the Emus the wings are quite rudimentary, being merely bones about ten inches long, though consisting of the usual joints of a bird's wing, but they appear as if they had been arrested in their growth. These bones are covered with the same sort of feathers as those which cover the body, and are of no use for enabling them to escape from their enemies. The feathers are quite unlike any we see on other birds. They are very ugly to look at, are harsh to the touch, and are double shafted, rising from a single quill. The Rhea, on the other hand, has large wings, covered with large feathers, but as they are long and soft, they are quite unsuited for flight. They use their wings as rudders; and it is quite marvellous how, by raising one in the air, the bird can shoot off from its course at a sharp tangent when going at the speed of a race-horse.

In 1879, when I left Billholm and went to reside at Castle O'er, I flitted my birds along with my other "furniture," and there they led a happier life than they had previously done. They had more space to roam about in, and, in addition, had a plantation in which they could shelter in cold weather, at least in cold rain or sleet. They did not seem to mind any other kind of weather, and their *bon bouche* was a piece of ice. I may here give you some idea of the amount of cold both species can suffer, and you will appreciate the information better if you will mentally compare the climate of South America, or even of Australia, with the winter temperature of the highlands of Dumfriesshire. The Rheas arrived upon the 17th November, 1874, when the first few days were wet and cold. I put them in a small enclosure, in which there was a wooden shed, but they never entered the shed unless driven in. By the 28th I had fenced in a larger space of ground as a run for them; at the same time the weather had changed to snow, followed by severe frost. On that day I gave them their liberty in their new enclosure, not without considerable misgiving. I must confess as to how they would stand the cold. I watched them all day and up till 11 P.M., when I retired for the night. It was bright moonlight, and I could see them stalking up and down among the snow, and I feared their feet would be frost-bitten. That night the thermometer fell to 26°. I was up by daylight next morning, and was much relieved to find they were still alive and moving about with complete composure. I could see from their tracks that they had never entered the shed. The weather

continued to increase in severity for some time, till the thermometer reached 13° , and as they showed no symptoms of suffering, my mind was fairly well set at rest with regard to their standing the rigours of a Scotch winter.

I got my Emus upon 20th October, 1875, or just a year after the Rheas, and any further remarks upon cold applies to both species. The pair of old Emus sometimes, though not always, went into a shed at night, but I have seen them oftener "roosting" in the snow. None of my young birds ever entered a shelter, and frequently, when they were only a few weeks old and newly feathered, I have seen them on hard frosty mornings lying on the ground with the tips of their feathers frozen to the soil. When they were disturbed they suddenly rose up, leaving a ring of torn out feathers all round the spot of their night's resting place. When I tell you that both species survived the terrible winter of 1880-81, you will agree with me in thinking that these birds will stand any amount of cold they are likely to encounter in this climate *provided they are well fed*. At the same time, that winter did not pass without disaster, though entirely owing to the cruel neglect of the man charged with the duty of feeding them. The ground was covered with snow more than a foot deep during the greater part of the winter, and the thermometer, which stood for many days at 1° only above zero at mid-day with a cloudless sky, fell on one night to 10° below zero. During the coldest time I found three of the young birds, then not quite half grown, dead, and the others in a very weak state, and I feared I would lose all. On offering the survivors food they ate it greedily, and my suspicions were roused as to my man's fidelity. On "putting him to the question" he confessed with great reluctance that for more than a week the weather had been "ow'er coorse for him to gang and feed them," though their feeding trough was no more than 200 yards from the dwelling-house. The Rheas were in much the same plight, but good feeding put them all to rights. I put the latter in a stall of the stable for a few days only till they regained the strength lost owing to their long fast. They were turned out again, and stood the prolonged and rigorous winter with impunity.

Here I cannot refrain from narrating an incident which happened during the visit of a certain legal friend, who shall be nameless, as I am glad to say he is still alive and in robust health,

and might resent my exposure in public of the chagrin he must have experienced. He came accompanied with a handsome and valuable collie. Before entering the enclosure I suggested the propriety of his leaving his dog outside. He, evidently thinking that I was alarmed for the safety of my pets, said his dog was very gentle and would not harm them. I retorted that I had no fear for my pets if he had none for his, and told him to "come on." No sooner had the dog leapt over the style than "Tommy" and "Jenny," who had a young brood beside them, went for the poor beast, and the scene that followed would have been ludicrous enough had it not been for the mortal terror of poor "bow-wow." He rushed round and round the enclosure, too closely followed by the whole pack to have time for a spring over the fence, but in his mad endeavour to escape trying to get through the bottom rails. The fence was an ordinary barred paling, 6 feet high, but backed by three feet of wire netting to confine the young ones. After trying in vain at every point to find an exit, and never getting a moment's respite he became quite exhausted and sought refuge in a corner where the fence joined a shed. Here "Tommy" promptly began to "perform the war dance" on the top of his vanquished foe, and had I not seized "Tommy" by the neck and pulled him away his foe would have been in a few minutes a dog with no name, good or bad.

When I sold off my birds in 1885, preparatory to my leaving the country for some years, I had the original pair of old ones, which by the way reared more young ones that season than ever they had done before, viz., 12, and though they were at least eleven years old. I had them, as previously stated, ten years, and how old they were when I got them I cannot say—they were certainly adult. Besides them I had five young ones full grown. The catching of so many at one time being a serious and laborious affair, ten men were gathered together to act as hounds, there being no other means of catching them except by running them down or putting up a large amount of fencing, at least 7 feet high. I have seen them scramble on to the top of one 6 feet high, without being pressed to do so. Their "run" consisted of a flat field of six acres with a smaller one of two acres. In the latter was a wood covering a steep bank, and running them down when this rough bank had to be negotiated was no easy matter. When we got each bird hemmed into a corner several men rushed in and

floored it, and it took the united strength of six men to carry it from the point of capture to the part of the field where the large travelling cases were ranged. During the fun "Tommy" escaped over the fence, an ordinary wire one, and got into the river, and I shall never forget the scene of the huge bird careering down the centre for a quarter of a mile with fountains of water splashing all round and over him. As the hunt had been carried on with considerable danger to all taking part in it, I was relieved when the roll was called after it was over to find that no more serious accident than a few cuts and bruises and the destruction of certain garments, both upper and nether, had occurred to mar the day's amusement.

In 1869 I built a large room and heated it with hot-water pipes, and in it was installed a small menagerie, the inmates of which formed a most miscellaneous collection. I regret very much that I did not keep daily notes of all the curious and interesting things I observed during the seven years of its existence. I might now have been able, if not to write a book myself, at least to furnish material for one, which would have been of some value to those whose hobby lay in the same direction as my own; but no notes were kept, and I can only now call to mind certain incidents which are more vividly impressed upon my memory. One among them, if you will allow me to narrate it, is the story of a monkey. I noticed in a local newspaper an advertisement intimating that there was to be held in this town of Dumfries a sale by auction of sundry foreign birds and animals, the latter including several species of monkeys. As I had long wished to add a certain kind of monkey to my collection, I started off without telling anyone the object of my journey, having serious and cowardly misgivings as to what my friends would say if they knew I was going to invest in a "puggy." On arriving in Dumfries I went straight to the saleroom, and among the "pugs" was the very species I wanted, to wit, a Sooty Mangabey. As its name implies, the colour of this animal is black or nearly so all over, something similar to a "faded chimney sweeper," the face is jet black, and its eyelids are white. As the colour has some connection with the denouement of the story please remember it. The "lot" was duly knocked down to the person whose determination to possess it defied all competition, and that person was myself. I proceeded to the nearest grocer's shop and borrowed

an empty soap box, in which "Jacko" was securely confined. I hailed a cab, and with my sable friend on the front boot, drove to the railway station. Here I handed the box to the first porter I saw, telling him to be sure to put it in the van when my train arrived. He deposited it on the platform, maliciously, as I thought, and it had not been long there till a jeering crowd was attracted by unwonted sounds proceeding from inside the package and two black paws protruding through the chinks of the lid. The remarks of the crowd were, to say the least of it, sarcastic in the highest degree, and when a nasty small boy wanted to know "wha owned the puggy," and when I saw several enquiring faces searching among the spectators for some indication of ownership, I nearly sank into my boots, and pretended that it "wasna me that owned it," and to further ensure myself against identification, ventured also to utter a few disparaging remarks such as I had heard, and specially addressed to the unknown "baldy" who was so weak-minded as to possess such a nonsensical and villainous beast. When the train entered the station I hastily secured a seat with the risk of leaving poor "Jacko" behind, but hoping the porter would be "true to his charge." I had previously "tipped" him, and this foresight saved me the discomfiture of my ownership being declared at the last moment by the man coming to the carriage door, putting in his hand in the way we all know and exclaiming: "The puggy's a' right in the van, sir." When the train reached its destination I found the porter had been faithful and fairly earned his "tip." It was now dark, and I escaped any further public demonstration under the cover of night. It was 10 P.M. when I reached home, and my assistant and "fidus Achatës" in matters zoological was in bed. I did not care to rouse him in case he also "smiled," and I was at a loss as to where I could house "Jacko" for the night. The heating apparatus of the greenhouse was in the potting shed, and I resolved to put him in the shed as it was warm. This apparatus consisted of a hot water boiler encased in a square building of brick-work with a flat top projecting from the back of the greenhouse wall. "Jacko" was already provided with a chain, one being included in the "lot" when knocked down to me at the sale. With a nail I secured the "lot" to a post, put down some straw on the top of the brick-work, and went to bed, satisfied that he would have a warm bed for the night. Next morning my man, who was gardener as well

as menagerie keeper, met me with a face as white as a sheet, saying he had seen something "awfu" in the stoke hole. He had gone to stoke the fire in the morning twilight, and when he was stooping to open the furnace door he heard an unusual noise overhead. On looking up his gaze met what he described to me as the "Deevil glowerin' doon o' the top o' him." He was so terrified that he did not remain to verify the fact of its really being "His Satanic Majesty," but rushed out of the shed to call for my assistance to exorcise the "fiend of darkness." Upon my explaining matters he *said* nothing, but I could see from his face that he *thought* some of the gibing remarks I had heard at the Dumfries railway station.

Some monkeys have a bad habit, arising from idleness, of nibbling their tail, which becomes so sore that it causes them much pain. Jacko was addicted to this habit, and the resulting sore became so bad that the tail broke through at one of the joints, about six inches from the "far end," and kept daugling about in a most uncomfortable-looking manner. This loose piece became "dead" and required cutting away, but I did not like to perform the operation myself, simple though it was. It happened, however, one day that the local doctor had been assisting to amputate a poor man's leg in the neighbourhood. He called on me on his way home, and I asked him, "as his hand was in," would he cut off the monkey's "tail piece." He readily consented. Jacko was placed in a sack, with his tail outside, and I held him under my arm. When the piece was amputated the stump was seared with a red-hot iron. The doctor stayed to dinner, and after the meal was over I went to see how the "patient" was, and brought him into the dining-room. As was his wont, he sat on the fender bar. I suggested he should have a glass of wine to freshen him up after the operation. This he got. He held the glass in one paw and the tail stump in the other. He would first look at his stump, emitting at the same time a most melancholy whimpering sound, and then take a sip of wine, repeating the action over and over again. The scene loses in the telling, but the whole thing was so ludicrous and still so human-like that the worthy doctor nearly fell off his chair with laughing.

Among my other possessions was a Boa Constrictor, eight feet long, and a young African Python. This Python was about two and a half feet long, and very thin in proportion to its length,

indeed its neck or throat was no thicker than a man's little finger. I could never induce the Boa to feed, though I tempted it with all the delicacies I could think of, such as rats, fowls, pigeons, and rabbits. These snakes are subject to a fungoid growth on their gums, which prevents them from feeding, and possibly this one had the disease, but, for obvious reasons, I never cared to examine its mouth. The teeth are very slight, and when the reptile bites the teeth are apt to break and cause a nasty festering wound. I kept the snakes in a large box, the front, ends, and top being of plate-glass, and inside were a pair of blankets. Though their room was heated, I thought this refusal to feed was owing to the want of sufficient warmth rather than diseased gums. All tropical snakes should be kept in a temperature of ninety degrees, and this I could not easily afford them. To give them as much heat as I could I introduced hot-water tins below their box. With this view I made another shallow box or frame, open at the top, in which the tins were placed, and on this frame stood their box. So as to allow the heat from the tins to ascend to the snakes I bored holes in the bottom of their cage. To facilitate the work of boring the holes I turned the box containing the snakes on its side. So soon as I did so I was startled by hearing a sound like a railway engine letting off steam. This sound proceeded from the Boa, who was in a "fearsome temper," and was rushing about "hissing like mad." When he saw me looking at him he struck at me with such force that one could have heard the sound of his "snout" striking the glass at a considerable distance off. I never was afraid of his breaking the glass, but was often afraid he would break his own neck. This he failed to do, but ever after was so fierce that he never failed to dash himself against the glass whenever I myself or visitors approached his cage. Before this change of temper I had been in the habit of "doing the showman" before visitors by taking him out of his cage and allowing him to twine round my neck and body, at the same time having a tight hold of his neck and seeing that he got no purchase by coiling his tail round any piece of furniture. When his temper broke I never dared touch him again, and prevailed upon myself to believe that his performance was much more entertaining than mine, and infinitely more safe for myself. He cast his skin more than once, and when he emerged from his old one, "beautiful for ever," one would have imagined that he had paid a recent visit to

the famous Madame Rachel. The fresh and bright colours of the new skin were in vivid contrast to those of the old faded one. Still the cast-off skin is a pretty enough object, as you will see from the one produced. One, which was shed in a perfect state, was so fine that the late Frank Buckland, who was on a visit to me, asked me to present it to him, which I did with pleasure. He told me afterwards that he had produced it at a wedding breakfast in London to entertain the guests, and that a lady took it away as a copy for lace-work. This Boa lived in my possession for 360 days without touching food, and how long he had fasted before coming into the hands of Mr Cross, of Liverpool, from whom I purchased it, no one can say.

But to return to the Python. One evening I put a rabbit of about two months old into the box, intending it for the Boa. As neither snake seemed to be hungry, I was going into the house to write some letters. As I was shutting the door of the room, which was detached from the dwelling-house, I heard the squealing of the rabbit, and on going back I found it was the Python which had seized it. It had merely the nose of the rabbit in its mouth, and I left with the mental remark that it was attempting rather too much. I returned in about half-an-hour, and great was my amazement when I found the feat accomplished, and the Python reduced in length from $2\frac{1}{2}$ feet to about 18 inches, with a huge bulge in the middle, which was the rabbit's tomb. I could distinctly see the shape of poor bunny under the distended skin of the snake. A few days afterwards I was going to show this wonderful sight to some visitors, but on opening the lid of the cage a disagreeable odour rose from it, and I found the rabbit among the blankets, and that the Python had evidently undergone the "Banting treatment." The swallowing was a serious undertaking, but the disgorgement must have been as bad, if not worse, considering that a snake's teeth point in the direction of the throat, and lie in the mouth like hooks. I was sorry that my visitors missed the sight, as they might have corroborated my assertion. Witnesses were not wanting among my own family and servants, but some independent testimony would have been more satisfactory. If any person had told *me* that *that* snake had swallowed *that* rabbit, I could not have swallowed his story. I would simply not have believed him, and I can only place myself in your hands, gentlemen, to be judged, asking you beforehand

this question, "Have *you* any good reason to doubt my veracity?" To that question I shall not pause for a reply, in case it might cause you some embarrassment to give one, but shall with it finish my already too lengthy and prosy paper, humbly apologising for having tried your patience so long. I shall be glad, however, if any of you have picked up a few crumbs only to add to your previous knowledge of Emus and Rheas. If my reminiscences and anecdotes have afforded to others even the smallest atom of amusement I shall be equally pleased.

Rev. Mr Andson moved a very hearty vote of thanks to Mr Bell for his extremely interesting and instructive paper. He had shewn a great deal of enterprise in rearing these birds in a climate so unsuitable for their natural habits.

Mr J. S. Thomson, jeweller, seconded the motion, which was supported by Mr R. Murray, George Street, and Mr Rutherford of Jardington.

Mr Bell, in replying to questions put by Mr Rutherford and others, said when the Emu was standing at rest his height would be about five and a half feet; but when he put up his head it would be about six feet. It could lift his (Mr Bell's) hat off his head quite easily, and his height was 6 ft. 2½ in. When he first kept them, he had them in a small enclosure and the fence was a high one—six feet; but after he removed to Castle O'er, where they had more space, the fence was simply an ordinary paling, four feet high. He never saw them attempt to go over it unless they were hunted. He repeated his warning that it was very precarious to procure a breeding pair, and also to get a good male, who would sit; although his own experience had been most fortunate. It was very difficult to say the possible profit. Sometimes he had only five young birds, and he might have perhaps twenty eggs in a season. To get five birds you perhaps had to set about twelve eggs, selling the extra eggs and the young birds. It was often difficult to get the young birds sold, although he did not experience difficulty. It was not a thing to go in for as a speculation. He had known many failures. He would not seriously advise that it should be taken up as a new industry. The feathers of the Emu, he mentioned, were of no value whatever. Their principal food was grass; but in this climate they must always have some extra food.

Dr Martin, Holywood, asked if the plumage was much modified to enable them to stand the climate better.

Mr Bell: I don't think the plumage was modified in any particular form.

At a subsequent business meeting of the Society, Mr R. Murray, George Street, was elected a vice-president in room of Mr Sulley, removed to Cupar.

12th March, 1897.

Mr JAMES BARBOUR, V.-P., in the chair.

Donations and Exchanges.—The Secretary laid upon the table the following:—The Report of the British Association for 1896; U.S. Geological Survey, 2 vols.; Proceedings of the Philadelphia Academy of Natural Sciences; Transactions of the Botanical Society of Edinburgh. Vol. xx., pts. 2 and 3; Transactions of the Banffshire Field Club, 1894-5; Thirtieth Report of the Peabody Museum (Harvard University).

COMMUNICATIONS.

I.—*Ruins and Stones of Holywood Abbey.* By Dr J. W. MARTIN.

Dr Martin excused himself from going into the literature of the subject, as it had been already dealt with in the transactions of the Society, and confined himself to an examination of its remains, which are to be found chiefly in the stones built into the parish church, the churchyard wall, and neighbouring buildings. The present minister of the parish (he said) informs me that his church was built in 1779 from stones taken out of the old abbey, without the facing stones. There is a stone in the tower with 1779 upon it. There are stones at one of his gates taken from the abbey. Mr Brown, farmer, Gullyhill, tells me his father has mentioned to him that there is a subterranean passage leading somewhere from the ruins of the old abbey, which are known to exist at the south-east corner of the churchyard. He could not say where it begins, but he has seen the old wall of the abbey at the place where the Nelsons' grave of Portrack was dug. There are

undoubtedly ruins. James M·Gregor, 23 years bellman, but now retired, says: The place went by the name of the old abbey or nunnery. There are stones above the surface to shew where it was. Once, when digging a child's grave, he came on an opening leading downwards, at one end of the grave, and he might have fallen through. The child's grave was sunk a long way next morning. He took a stick six feet long and a rope as long, and let it down, and it did not reach bottom. He says it was the subterranean passage. In digging three feet further over he came upon a fireplace and grate which belonged to the abbey. The grate contained ashes. He came to flooring, and on lifting up a slab, 4 feet by 3, saw causeway work made of small stones, like pebbles, and there was figuring; he could not say what the "figuring" was; perhaps a date. He also came upon a great many old bones—buckets of them, as he expressed it—decayed almost to powder, which he says are the bones of the monks that were buried there. He once came upon "a wall arranged in steps," which was probably a buttress to the side of the abbey. It was very solid and firm. He found a halbert, made of brass, which the late Mr Maxwell of Gribton got possession of. He is positive about the chamber with the causewaying and the subterranean passage. There is some one buried right in the middle of the flags referred to. He once fell through while digging at the spot, and was only prevented from going deeper by his arms holding on to the banks where he was digging. He says if he was driven down to the place he could point out where the flooring is. In the wall around the churchyard the stones peculiar to the abbey are seen to be mixed with other stones, but the former predominate. They are for the most part square and oblong blocks—the square 8 and 9 inches, the oblong from one to two feet, up to four and five feet. They are for the most part smooth, sometimes polished, and of one kind of freestone. The main building of the church is wholly built of these; but except for a certain ancient appearance there is nothing remarkable to note about them. In the churchyard wall, however, are some stones of special character, which the lecturer described, and of which he exhibited very careful drawings. One about the centre of the south wall has carved on it a rich floral design, and was such as you might expect to see over or at the side of a principal doorway of a monastery. Three plainly carved stones, in the same wall; one in the east wall with the

remains of a cross carved upon it; a stone to the left of the principal gateway, with the representation of a dragon carved upon it; and a stone inserted in the south wall upside down, bearing the legend *Margarat Wilson*—evidently a stone from the old abbey or its burial ground—were among other relics mentioned. Also a stone in the garden wall of the nearest of the Kirk Houses, with two weather-worn human figures upon it; and the side pillars of the lesser manse gate, which had been taken from the old abbey. This is disputed by some. Many of the stones of the churchyard wall have the original shell and lime mortar adhering to them, which, of course, bespeaks their origin. At the site of the abbey or chancel, which was standing rather more than a hundred years ago (and of which Dr Martin exhibited a contemporary drawing, borrowed from Edinburgh), there is still a portion of wall, running east and west, just appearing above the surface for a distance of three feet, though a neighbouring enclosed burial-ground encroaches upon nearly half of it. It is composed of ordinary stone and lime, and goes down for several feet, as has been shewn when digging graves beside it. It is no doubt at the site of the ancient chancel. It is near to this that the vault and subterranean passage are supposed to be. At the Abbey farm many of the stones of the abbey are built into the outhouses, having been carted over from the old farm-steading beside the ruins thirteen years ago; but none of them are carved or smoothed. From what he had seen of the stones and remains, the abbey must have been a structure of no mean dimensions and beauty. What remains are underneath the ground could only be brought to light by careful excavation, and there was an unoccupied piece of ground close to the ancient wall described, which he should recommend to be first explored. This might be fitting work for the Society to undertake, and at no distant date.

Mr Barbour expressed his sense of the value of Dr Martin's paper. The drawing of the chancel, he observed, shewed it to be of Early English architecture, accompanied as that often was by the rounded Norman doorway, and it might belong to the thirteenth century. The dimensions of the chancel did not seem to indicate that the buildings had been very extensive. He was doubtful about the pillars at the manse gate having come from the abbey, as the style of architecture to which they belonged was the

Renaissance. The stone with the two carved figures upon it might possibly, he suggested, have formed part of an ancient cross like that of Ruthwell.

II.—*History of the Dumfries Savings Bank.* By JAMES LENNOX, F.S.A.Scot.

In 1814 the Rev. H. Duncan published a pamphlet on the Parish Bank of Ruthwell, which he had founded in 1810, and in it he showed the advantages the labouring classes had derived therefrom by causing a love of thrift. He stated that for the four years they had deposited a sum of £1150, and he recommended other parts of the country to follow the example of establishing such banks. Edinburgh, Kelso, Inveresk, Lochmaben, all took the idea up and founded banks. In December, 1814, the Society for the Improvement of Sacred Music in the New Church of Dumfries, considering that such an institution would benefit this parish and district, asked the brother of the founder of savings banks to call a meeting. Dr Thomas Tudor Duncan intimated from the pulpit of the New Kirk [of which he was minister] that a meeting of the public would be held there on 10th January, 1815, to consider the advisability of forming a bank. I also see from the file of the *Courier* that such a meeting was to be held. At this meeting Provost Gass presided, when Dr Duncan explained the purpose of their being called together, and stated that his brother was present and would explain the working and advantages that had accrued to Ruthwell by the establishing of the first bank. The meeting thereafter voted its thanks to the Rev. Henry Duncan "for the zeal and intelligence with which he had come forward to establish an institution which possesses such important advantages to the community, and for the luminous exposition of its principles which he has made on the present occasion." The meeting appointed a committee to draw up rules and report to a future meeting. It included Provost Gass, three bailies, two bank agents, Dr Duncan, Rev. H. Duncan, the president and clerk of the musical society, and several merchants. On 30th January, 1815, the committee reported and submitted a set of rules, which rules, subject to slight alterations, have been those under which the bank has been conducted until now; and at that meeting the Dumfries Parish Bank became an accomplished fact. The meeting unanimously elected

“ Rev. Henry Duncan an honorary and extraordinary member for life for his philanthropic exertions for the establishment of parish banks in general and this society in particular.” The office-bearers then chosen consisted of: Governor, Sir Thomas Kirkpatrick of Closeburn, Sheriff-Depute of Dumfriesshire; depute governor, Provost Gass; trustee, D. Staig, agent in the Bank of Scotland; directors—W. Baillie, Sheriff-Substitute for Dumfriesshire; Samuel Denholm Young, Esq., of Gullyhill; W. Thomson, Esq., of Castle-dykes; John Commelin, Esq., of Troqueer Holm, agent for the B.L. Coy.’s Bank; John Staig, collector of H.M. customs; and a committee; secretary, Rev. Thomas Tudor Duncan, M.D.; and a paid treasurer, John Hill, accountant in the B.L. Coy.’s Bank. The auxiliary fund was at once started to provide working expenses, pay interest and premiums, and to aid this the New Church Musical Society gave a concert. Annual subscriptions were asked for both by circular and by canvas, and these continued until 1826, when the directors thought they could dispense with charity. The bank opened its books for depositors on Saturday, 4th February, 1815, on which date there was lodged £8 1s; but the book states that this might have been much greater had the officials not run out of receipt forms. The business was conducted in the New Church Session House, and continued to be carried on there until that place was rebuilt in 1827, when, owing to the awkward entrance in the dark, it was found very inconvenient for the depositors, and the then treasurer offered a room in his house in Chapel Street. The offer was accepted, and a rent paid of £7 a year; and in this place the business was conducted until 1849, when the present offices were built. A description of the furnishings of this office is rather peculiar at the present day. The counter or telling table consisted of two planks placed over a couple of barrels and lit by dip candles; so that the depositors must have seen a great change when the bank was removed into its permanent home. On the death of the Rev. Henry Duncan, D.D., it was resolved that a memorial of him should be erected, and after consideration it was decided that this should be a bank with a statue in front of it. A committee was appointed to look out for a site; and after considerable difficulty the ground belonging to the Hepburn Trust, and occupied by Mr Dunbar as a timber yard, was purchased at a cost, including transfer fees, of £176 19s, on 27th July, 1846.

Competitive plans were asked for, and on the 1st June, 1847, the one submitted by Mr J. Gregan, of Manchester, was selected as "A bank and Duncan monument." Estimates were accepted for the building of the bank on the 3rd September, 1847, amounting to £1046; and in August, 1848, Mr Crombie's estimate for the statue was accepted at £120, to be made of Cove sandstone. Mr Crombie did not execute the work himself, but employed Mr Corrie, a local sculptor, to whom he paid £80 19s, leaving about £40 for the stone and his own fees. A committee had been appointed to collect subscriptions for the Duncan Memorial. They raised £217 11s 6d, and after paying the cost of the statue the balance was applied to the building of the bank. The whole of the rest of the cost of building and furnishing the bank was paid from the auxiliary fund; but the amount of this not being great enough at the time, the balance was borrowed at interest from the depositors' account and repaid as the auxiliary fund again increased. The only other part that was not paid in this way was a gift by Mr Caldow of the telling table. The total cost of the building and statue completed was £1214 1s 4d. A few years later some slight additions were made at the cost of £51 18s, and larger safes and board room were added a year or two ago. The Rev. Thomas Duncan, the first secretary, continued to fill that honorary post till his death in 1857; and to him the bank must be for ever grateful for placing it on its sound basis. The treasurers have been: John Hill, from its start in 1815 to 1838; John Gibson, 28th February, 1818, to June, 1843; James Caldow, 6th June, 1843, to March, 1866; William Biggar, March, 1866, to March, 1894; John Symons, the present treasurer, from March, 1894. Mr Biggar was appointed Mr Caldow's assistant in March, 1844, so that he served the bank for 50 years. The whole deposits were first lodged in the Bank of Scotland at 5 per cent. interest; but they being unable to continue that interest, and this becoming so low, it was resolved to lend on landed security. Before doing so the directors took the opinion of counsel. The first money they lent in this way was in June, 1826; and in 1853 they granted the first loan over rates, and it is on security of rates of different classes that a very considerable portion of their money is now invested. The auxiliary or reserve fund is now so great that the interest on it is sufficient to pay the working expenses, leaving the gross amount earned by the depositors to be divided in interest amongst

them. In 1816, at the first balance, there was deposited £1410 2s 5d; in 1827, when they removed to Chapel Street, £5625 9s; in 1849, at the opening of the bank offices, £31,380 11s 3d; and at the balance in January last there was £233,003 13s 3d—giving an average this year of £44 14s 1d for every depositor. The interest paid the first year was 4 per cent., but it fell in 1826 to 2 per cent., when the directors found it necessary to lend money over land in order to keep up interest to the depositors. In 1848 it rose again to 4 per cent., and it has since fallen to 3 per cent., at which it now stands. The amount of interest paid at the first balance was £27 13s 3d, and at the last balance £6727 5s 6d. From the start until 1891 premiums were paid to regular depositors, but it was found that these were not passing into the hands of those for whom the bank was started, and the practice was discontinued. The first year there were 288 depositors, and last year there were 5233. In the cash book there are some rather strange remarks. Under date 29th September, 1832, the deposits being small, there is this note: "Awful visitation of cholera. This last week 250 cases; 65 deaths." Next week it is noted that there were 294 cases; 155 deaths. This last week there was one-fourth more drawn than deposited. At the annual general meeting held on 24th February, 1821, it is stated: "The meeting having taken into consideration the recommendation of the committee to take such steps as shall secure to this institution the benefits of the late Act of Parliament for the Protection of Banks for Savings in Scotland, unanimously approved thereof, and gave instructions to their secretary to take such measures as are requisite for the accomplishment of that object in terms of said Act." There is no minute shewing this was done; but by the old rules I see that the rules were certified before the Justices of Peace for the County of Dumfries in Quarter Sessions, within the Court House of Dumfries, on the 6th day of March, 1821. The docket is signed "John Kerr, C.P." The results of this bank have been the fostering of thrift amongst the working classes, and that to a greater extent than is the custom in other towns, as I am informed that, although this bank has gone on increasing both in amounts deposited and number of depositors, the Post Office Savings Bank has fully as large a turnover compared with places of a similar size. So the good the Rev. Henry Duncan's institution has done we will never be able to estimate. The average per depositor is now £44 1s 7d,

and for each 1000 of population there is deposited in this bank £11,500.

III.—*The Ancient Burial recently discovered at Locharbriggs.* By
MR JAMES BARBOUR.

The red sandstone of Dumfriesshire is widely and favourably known, and the reputation is shared by the neighbouring quarries at Locharbriggs. These are worked in a piece of rising ground opposite the village, designated on the Ordnance Map "The Quarry Hill." The summit, which is round in form and slightly peaked, is the highest point in the vicinity, and commands a very extensive and beautiful prospect, embracing the whole vale of the Nith and the Lochar, encircled with hills, except on the south, where are seen the town of Dumfries, and in the distance the waters of the Solway. All Lochar Moss, twelve miles in length, lies within view, and the head of the moss, round which armies were wont to approach and leave the town of Dumfries and the district of Galloway, there being no safe passage across it, is dominated by the hill. On 12th February last, when engaged tirling this ground, for the extension of the quarry, a workman came upon a structure which it is supposed was an ancient grave. Unfortunately it was broken up and destroyed before any examination had been made of it. According to information given me, it consisted of a cist composed of six undressed freestone slabs, viz., two sides, two ends, a bottom, and a cover. The stone forming the bottom was about three inches thick, and the others were about four inches. The cist, which lay east and west, and at a depth of 18 inches below the surface of the ground, measured outside four feet two inches in length, and two feet six inches in width, and the depth inside was 18 inches. Inside the cist a little sand lay on the bottom, and it contained also some bones, fragments of a vessel, probably an urn, and a piece of whinstone which was partly artificially shaped. These articles, with a description of the cist, were forwarded to Edinburgh, and probably Dr Anderson's views on the matter will in time be forthcoming. My purpose is, in view of the site being broken up, to notice the surroundings. The land has been under cultivation, and no cairn or mound remains to mark the burial; but it is significant that the cist should occupy the peak of a hill such as I have described. Known for-

merly as "Locharbriggs Hill," the place is not without note in history and traditional story. It was a rendezvous for troops. The Commissioners of Supply of the County of Dumfries being called upon by the Government for a levy of soldiers, they, according to a minute of date 15th April, 1672, "appoint that there be expended on each man £24 Scots in mounting him with a good blue cloth coat well lined with sufficient stuff or serge, a pair of double-soled shoes, stockings, and a black hat; two shirts and two gravats, and honest breaches and coat; all which mounting is to be examined narrowly when the men meet at Locharbridge Hill on the 21st instant." It is added "that the leaders of the different districts are to have their men ready on the said 21st under pain of imprisonment and other censure, as his Majesty's council may think fit." This was during the time of the persecution, and many of the leaders did not give their services willingly. Tradition assigns to this hill the importance of being the noted tryst of the Nithsdale and Galloway warlocks and witches, some of whom rode to the gatherings on broomsticks shod with murdered men's bones. Others, however, were provided with steeds of flesh and blood, as at one of the meetings, or Hallowmas rades, as they were called, some of these were swept away and drowned by the swell of the turbulent tide, and in revenge the arm of the sea which reached the head of the Lochar was, by deep incantation, transformed into a great quagmire or moss, so to remain for aye:

Once a wood, then a sea;
Now a moss, and aye will be.

The following is a fragment of the witches' "Gathering Hymn," preserved by Allan Cunningham:

When the grey howlet has thrice hoo'd,
When the grimy cat has three times mew'd,
When the tod has yowled three times i' the wode,
At the red moon cowering ahin the clud;
When the stars ha'e cruppen deep i' the drift,
Lest cantrips had pyked them out o' the lift,
Up horses a', but mair adowe,
Ryde, ryde, for *Locharbriggs Knowe!*

IV.—*The Antiquities of Girthon.* By Rev. W. W. COATS, B.D.

It is with some hesitation that I venture to offer any remarks on a subject to which I have not given special study. But, as I

have been invited to contribute a paper on the Antiquities of Girthon, it has occurred to me that there are, unfortunately, not many people able to say much more on the subject than myself. And it is possible that even the few imperfect and unlearned hints I am able to offer may lead to a deeper investigation by some more competent person.

Girthon is not a parish that figures largely in history. Celtic scholars say that the name is an abbreviation of "Girth-avon"—"the enclosure or sanctuary on the river." It has passed through various forms—Gerthoñ, Girthton, Girton, are all found. It is certainly difficult to say what enclosure or sanctuary can have suggested the name, for the ancient church, which is now in ruins, is not near the river Fleet. A curious instance of the tendency of the uncultured mind to invent a myth to account for a name is to be found in a tradition repeated by old people till within a few years ago. That old church, they said, was the third that has stood on the same spot. This may be true enough. But they added that the first had been built on the place because a gentleman had been killed there when hunting, *through the slipping of his saddlegirth*. There may be some foundation for the story, although I have never been able to find a trace of it. But it looks as if it had been invented to give a derivation for the name, which is, of course, absurd.

The church, now in ruins, is undoubtedly ancient. That it is a pre-Reformation building is quite evident from the piscina in the south wall at the east end. I cannot hazard a conjecture as to its date, and I have been quite unable to find out to what saint it was dedicated. It was used as a place of worship down to 1817, when the present parish church was built in Gatehouse, which is quite a modern town. The ancient bell—cast in Bristol—and given to the Kirk by Murray of Broughton in 1733 (as a Latin inscription sets forth), was removed to the new building, and has been disused only within the last 18 months. At the east end of the old church is buried Robert Lennox, a Covenanter, shot in 1685. He was a relative of the Lennoxes, who were then the lairds of Cally, and it may be claimed that his tombstone is undoubtedly the work of Old Mortality, on the authority of Sir Walter Scott himself, who tells a very curious story of the old man working in the Kirkyard of Girthon, at the end of the Introduction to his famous novel.

The farmhouse of "Girthon Kirk," adjoining the churchyard, was formerly the manse, and the residence of the Rev. John M'Naught, whose case was (according to Lockhart) far the most important business in which Sir Walter was employed just after he became an advocate.

About three-quarters of a mile from Old Girthon Kirk, in front of Enrick House, and not far from the Kirkcudbright and Gatehouse road, is Palace Yard. I do not know what to make of it. M'Taggart, in his Gallovidian Encyclopædia, describes it thus:—"A deep ditch surrounds a level space, containing about two acres. On this stands the ruined edifice. Over this ditch, which is about 30 feet, and filled with water, a drawbridge yet remains in perfection. This palace is thought to have belonged to our olden Scotch kings."

There is, indeed, a comparatively level space, about 100 yards long by 60 broad, surrounded by a ditch. But there is no "ruined edifice," and no water in the ditch, and no drawbridge; and I have not been able to find any person who remembers them.

The author of the "Statistical Account" of 1845 says:—"At Emrig there was a house dependent on the Abbey of Tongland, and which, it is supposed, formed the occasional residence of its abbots, and after the Reformation, of the Bishops of Galloway. Its site is still known yet as the 'Palace Yard.' Some old plane trees are growing, having a foliage different from those now propagated. The Palace had apparently been surrounded by a ditch and a wall, one of the arched gates having been standing within the memory of a person intimately known to the present writer."

So, between M'Taggart (1824) and the Statistical Account (1845), the "ruined edifice," the drawbridge, and the water have disappeared. There remains the memory of an arched gate, which in 1845 was apparently growing rather faint. That there were some plane trees I know, for I remember them. They were cut down within the last ten years. The tenant of Enrick tells me that there are still some wild fruit trees in the neighbourhood which look like the remains of an orchard. The statements about the ownership of the "Palace" evidently rest on conjecture, and are inconsistent. In M'Taggart "it is thought to have belonged to our olden Scotch kings." In the Account "it is supposed" to have been the residence of the Abbots of Tongland and Bishops of Galloway. There may be some foundation for these conjectures,

at least for the latter, but I do not know what it is, and in the absence of any authoritative statement I am disposed to accept the suggestion made by Sir Herbert Maxwell in his recently published "History of Dumfries and Galloway." "From Kirkcudbright," he says, "the King" (*i.e.*, Edward I. in the year 1300) "advanced as far as Cally, where his sojourn is perhaps commemorated in the name of a field on Enrick, called Palace Yard."

The present state of the ground is, I think, what we might expect on the site of a royal camp, for Edward resided in the parish for some days, fined the miller, and made an offering at the altar of the church. But in that case it is, of course, difficult to account for the "ruined edifice," the "arched gate," &c. (if they ever existed), for these all point to a structure of a more permanent character.

There are several remains of what have been apparently ancient fortifications, but of what periods I am not able to say. On Enrick, for instance, and within sight of Palace Yard, there are traces of what is reported to have been a clearly defined Roman camp. It has been very nearly obliterated by agricultural operations.

Within Cally grounds there is a square fortification of no great extent, surrounded by a ditch, which I take to have been British.

Opposite Barlae Mill there is a place on some rising ground, which appears to have been "improved" at some distant date for purposes of defence, and the miller reports that small balls of some hard substance have once or twice been discovered on the slope, a little under the surface.

Castramont, two miles further up the same road, is a tempting subject, but I really do not feel competent to say much about it. The name, of course, points at once to a Roman camp, but the etymology is just *too* easy. I am inclined to think that in its *present* form it is a fancy name of comparatively modern origin. It may be, of course, a revival of the true ancient name, but in the Session Records, under date December 3rd, 1701 (the earliest I can find), it is written "Carstramin." I cannot find "Castramont" until the present century, and I am inclined to think that form has been invented or resuscitated (1) for the sake of euphony, and (2) from an idea that it gives better sense than the old "Carstramin." Sir Herbert Maxwell does not accept the

theory of a Latin origin of the name, or connect it with a "Camp Hill" at all. Rightly or wrongly, he believes it is Celtic, and means "the Foot of the Elder Tree."

That there has been some ancient fortification at Castramont is, I suppose, certain. But it is very difficult to say at the present day how much of the appearance of the ground is due to it, and how much to the levelling when the present mansion-house was built. The author of "Lands and their Owners in Galloway" regards it as a piece of Roman work, and even suggests that a mound in the garden marks the site of the Prætorium. Such a suggestion is hazardous when one remembers Edie Ochiltree, and indeed there is at present living in the neighbourhood a person whose grandfather is said to have "minded the bigging o't" from some rubbish which could not be otherwise disposed of. For these reasons I venture to think that no one is entitled to speak with certainty on the subject of Castramont without a more careful and exhaustive survey than has yet been made.

Far up the parish, in the moors near Loch Skerrow, there is a stone, which I take to be an "Old Mortality," erected over the grave of Robert Fergusson, shot on the spot by Claverhouse in 1684.

These are the only ancient remains which I remember, for I do not consider a mere fragment of the ancient mansion-house of Cally (which is the only one named in the last "Statistical Account") of any interest at all. It is very probable that others might be found by some one who had the genuine antiquary's eye, and more leisure than I have enjoyed, in the remote and now uninhabited parts of the parish. There can be no doubt that at one time the population was much more equally distributed over its great extent than it is at present. The town of Gatehouse is modern, the first house having been built about 1760. There is a "town of Fleet" referred to in the History of Edward I.'s invasion, but where it was situated tradition does not say. Symson in 1684 refers to "a place called Gatehouse-of-Fleet." As usual, there are ever so many suggested derivations of the name—*e.g.*, the House at the Gate of Cally (which is absurd), the House where the Gaits (goats) were gathered (which is far-fetched), the House on the Gate, meaning the Road, which is more likely than either.

But judging from the situation of the church and the old parish records, the chief centres of population were on the one

hand nearer the sea, and on the other further up the parish inland than the present village. There are many signs of former cultivation in the most remote and barren parts of the hills, and districts were solemnly assigned to elders two hundred years ago where now not a single soul is to be met for miles.

The only ancient Kirk-Session Records in existence are from 1694 to 1701, and again some fragments (apparently jottings) from 1730 to 1742. They are very curious as a picture of the life and church discipline in Galloway between the Revolution and the '45, but they are probably not greatly different from similar Records in other parishes. I cannot find any passages that touch on matters of wider than parochial interest, except, perhaps, an entry in 1700 receiving John M'Millan, chaplain to Murray of Broughton, as an elder. This was the famous Cameronian who became minister of Balmaghie shortly after.

There is written into the Session book—apparently in the year 1700—a form of “Oath of Purgation,” which may not be unique, but is so much more terrific than that given in the “Form of Process” approved by the General Assembly of 1707, that I venture to transcribe it verbatim:—

“Whereas I.....in.....of Girthon have been and am accused by the Presbytery of Kirkcudbright and Session of Girthon of the horrid sin and scandall of Adultery alledged to be committed by me with..... I hereby declare myself Innocent of the said guilt, and in Testimony of my Innocence I swear by the Eternall God the Searcher of all hearts, Invocating him as Witness, Judge, and Avenger, wishing in case I be guilty that he himself may appear against me, as witness, and fix the guilt upon me; he himself may proceed as judge against me, who hath witnessed that whoremongers and adulterers he will judge (Heb. 13, 4), he himself may avenge his own cause who hath declared he will not hold them guiltless that taketh his name in vain (Exod. 20, 7), and that the Roll of God's curse which enters the house of false swearers (Zech. 5, 4) may enter my house if I be guilty and remaine in the midst thereof untill it consume the timber and stones yof (thereof) and root out the remembrance thereof from the earth, and that the righteous Lord may make me ane Example and Terror to all false swearers before I go off this world—and finally that all the curses written in the book of God from the beginning of the Genesis to the end of the

Revelation may fall upon me, particularly that I may never see the face of God in mercy, but be excommunicat from his presence and have my portion with divels and reprobats in hell to all eternitie if I be guilty; which forsaid oath I take in its true, genuin and ordinary sense, without equivocation or mentall reservation, and that this paper may stand as a wituess against me if I be guilty," &c.

Perhaps it may be worth adding that there is in the Girthon Session records a passage which throws some light on the relations between the Presbyterian clergy and their Episcopalian predecessors. In 1701 there was living in Girthon a Borgue man named James Dallzell, who seems to have been regarded as a suspicious character. The Session "appoints the minister to ask at Mr Monteith" (minister of Borgue) "at meeting what's the reason why this man gets not a testimonial." A fortnight after "the minister according to appointment spoke to Mr Monteith anent James Dallzell, who told him that he was not well looked upon by the people of Borg since the abuse he committed in Mr Hasty's House, late Incumbent at Borg."

Now, this Mr Hasty was an Episcopal curate, inducted to Borgue in 1682, and "rabbed" out in 1689. Hence probably the word "incumbent," unusual in Scotch church records. They would not admit he was "minister." Perhaps they looked upon "curate" as an illegal—at anyrate a very odious—title. "Incumbent" was neutral. One would like to know what the "abuse" committed in his house was. If it refers to the "rabbling," it would seem that Mr Monteith and his people (strong Presbyterians though they were) did not approve of the violent and lawless expulsion of the curate. On the other hand, Monteith was himself an instigator of the mob in the dyke-levelling riots of 1724.

Perhaps an explanation of the mysterious "abuse" may be found in a minute of Session of the same year, 1701—"Appoints John Aikine and John M'Knay to wait on Fryday at the Gatehouse mercat to take notice and delate such within this Parish as shall be found swearing or drinking, drunk, or committing any other abuse. And the rest of the Elders *per vices* thereafter." So after all the "abuse committed in Mr Hasty's house" may have been something of the nature of undue festivity. And I am afraid the zealous Presbyterians of 1700 were not likely to look with favour on a man who had been a companion of an "incumbent" before the Revolution.

2nd April, 1897.

Mr MURRAY, V.-P., in the chair.

New Members.—Mr W. H. Williams, Inland Revenue, Thistle Cottage; Mr John M'Naught, Royal Bank.

Donations and Exchanges.—The Secretary laid the following on the table:—Transactions of the Society of Antiquaries in Scotland; Smithsonian Report for 1894; Bulletin of Minnesota Academy of Natural Sciences; Transactions of the Geological Society of Glasgow.

COMMUNICATIONS.

I.—*Some Historical and Antiquarian Notes on the Parish of Cummertrees.* By Rev. WILLIAM JOHNSTON, Ormiston.

The parish of Cummertrees, situated on the shores of the Solway, is about 12 miles distant from Dumfries and 18 from Carlisle. In appearance it is flat and uninteresting, its highest elevation being Repentance Hill, 372 feet above the level of the sea.

The name has been spelt differently at different times. The following are the forms it has assumed, namely, Cumbertres, Cummertaies, Cumertreis, Cumbertrees, and Cummertrees.

According to Chalmers the name is derived from a Cymric word, Cum-ber-tre, signifying "the hamlet at the end of the short valley" (Caledonia). A somewhat similar view is that of J. A. Picton. "At first sight," he says, "it would seem natural to suppose that the *Cumber* in Cumberland and *Cummer* in Cummertrees are derived from the same source; but a little further examination will throw doubt on this. Cumberland is, of course, the land of the Cymry or Cumbri, so named by the Angles before it was conquered by them. Now, if Cummertrees, or Cumbertre, is derived from the name of the inhabitants, it must mean the abode or dwelling of the Cymry. It is scarcely likely that, dwelling in the midst of other Cymric settlements, the inhabitants themselves would have given it that name. On the other hand, their Anglian or Norse neighbours, if they wished to invent a name, would certainly not have adopted a foreign tongue. We must, therefore, look to another source for the origin of the name. All, or nearly all, Celtic names of places have a direct reference to

the physical peculiarities of the locality. Cum-ber-tre is a genuine Cymric word, meaning "the dwelling in the short hollow" (Notes and Queries, Oct., 1873). This view would seem to derive support from the physical peculiarities of the site of the ancient village of Cummertrees, which stood a little further to the south than the present village, on a "piece of level ground at the end of a short valley, formed into an angle by two streams"—the Hitchell burn and the Pow burn—"meeting in front" (New Statistical Account). It is doubtful, however, whether it can be accepted as correct. It appears at least as probable that Cumber-tre signifies the hamlet at the meeting of the streams. Taking it for granted that *tre* is the root of *trees* in Cummertrees, it is certain that *tre* or *tref* in Cymric means a dwelling. The question is as to the signification of Cumber or Cummer. Chalmers, followed by Picton, makes two words of it, Cum-ber, both interpreting *Cum* as a short valley or hollow. While the former gives to *ber* presumably the sense "at the end of," the latter also presumably gives to it the sense of "in," neither of them furnishing any special interpretation of it. Taylor, an excellent authority, maintains that *Cum* does not mean a valley, short or otherwise, but a trough or depression in the hills, and that it is the root of such words as *comb*, a measure of corn, and *comb* in honey-comb. The likelihood is that Cumber is one word, and comes from the Cymric Cymmar, which signifies a confluence of streams. This same Cymric word occurs in the Cumber in Cumbernauld, which, according to the writer of the New Statistical Account of that parish, is in Celtic Cumar-an-alt, which it is said means the meeting of streams, the name, it is added, being descriptive enough of the situation of the place, as several streams unite their waters a little below the village of Cumbernauld. Another form of Cymmar, namely, Hymyr, is found in Humber, the river of which name is formed by the confluence of the Trent, the Ouse, and the Don.

No mention of the parish occurs, so far as I know, before about the middle of the 12th century. It is well known that Robert de Brus, son of the first of the name who came to England with William the Conqueror, held a very large part of Dumfriesshire. Having formed an intimate acquaintanceship with David I., while Earl of Cumberland, he received at or shortly after David's accession to the throne a charter from that monarch conferring

upon him "Estrahannent et totam terram a divisâ Dunegal de Stranit usque ad divisam Randulphi Meschines." He died in 1141, and was interred in the priory of Gysburne, which he had previously built and endowed. His son Robert succeeded to his estates. Out of respect and affection for his father, Robert added to the endowments of Gysburne priory by bestowing upon it the lands and tithes of the Churches of Annan, Cumbertres, Graitenhou (Graitney), and of some others in the neighbourhood. If it is not certain in what precise year these gifts were made, they must have been made between the time of his father's death and the year of his own death, 1171.

A little further on we come upon the first known dweller in Cummertrees to whom lands, &c., were granted by the Brus. The following charter is by William de Brus, son of the Robert who bestowed on Gysburne the lands and tithes of the churches just named, and though without date, must be somewhere between 1191 and 1215, in which latter year he died. It is found in the MSS. history of "Lord Carlyle of Torthorwald," by the Rev. Peter Rae, minister of Kirkconnel at the beginning of last century, and is translated thus :--

"William de Brus to all his friends, French and English, and those who will be hereafter, greeting : Know that I have given and granted and by this my charter confirmed to Adam de Carleol, son of Robert, and his heirs, for his homage and service of the increase of his fourth part of one knight, which he holds of me in Kinnemid, one free salt-pan below Prestende, and one fishery and one net (stake) on the shore of the free sea between my fishery of Cummertaies, which belonged to my father and Cocho, wherever it may please him most, with all its just rights freely as it is the custom to the salt-pan and fishery, so that no one shall interfere with his salt-pan, stake net, or fishing, unless through my forfeiture, yet saving to me and my heirs, Strion and Craspeis. Witnesses : William de Heriz, then steward, Hudard of Hoddom, Hugh de Brus, Hugh de Cori, Gilbert son of John, Hugh Matuer, William de Hoyneville, Adam de Dinwoodie, Richard Fleming, Richard de Bass, Roger son of Udard, and some others." (Appendix A.)

This Adam de Carleol was an ancestor of the Torthorwald Carlyles. It is probable that the Carleols or Carlyles were originally Anglo-Norman colonists brought to Scotland by Robert de

Brus, who got the grant of Annandale from David I. They held possessions not only in Annandale but also in Cumberland, and perhaps took their name from its county town. One of them, a Sir John Carlyle, was made Lord Carlyle of Torthorwald for inflicting a defeat on the English at Annan, and to him, Froude relates, that a Dumfries antiquary traced with apparent success, through ten generations, the ancestry of the greatest who has yet borne the name Carlyle, when he became famous, and that although they laughed a good deal about it in the house in Cheyne Row, Carlyle himself was inclined to think that upon the whole the genealogy was correct.

“Kinnemid,” where Adam de Carleol was settled, is now known as Kinmount. It is named with more distinctness in another charter of William de Brus in Drumlanrig muniment room. There the inventory states that there are two charters to Adam de Carleol, son of Robert, of the land and mill of Kynimount, with the woods and pasture grounds there described with precision. The inventory also shows other charters in favour of later Carlyles, granted by Thomas Ranulph, Earl of Murray and Lord of Annandale, and conferring upon them certain other subjects at Kinmount. Being without a knowledge of the contents of these charters, it is impossible to say what extent of property in the parish was held by the Carlyles in those early times. Whatever it comprised it remained with them for hundreds of years. The Kinmount property was in the hands of the Torthorwald Carlyles up to the beginning of the 17th century. Then fortune frowned and a change came. Having got entangled in difficulties through law suits they had to part with it in 1613 to Sir Robert Douglas, master of the horse to Henry, Prince of Wales. The property passed from Sir Robert Douglas in 1633 to William, First Earl of Queensberry. Kinmount continued in the possession of his descendants till within the last few months, when the whole of the estate, with the exception of two or three farms, was sold to a neighbouring proprietor.

In reference to the Prestende mentioned in the charter, it may be assumed to answer to that portion of the parish which lies along the Solway and is now known as the Priestside. This is the first notice we have of salt-pans in that place. In this connection there used to be a tradition that the right of making salt was granted to the people in the Priestside district by Robert the

Bruce. "It is said," to quote from the *New Statistical Account* of the parish, "that when Bruce was on the shore at a place called Priestside, being weary and exhausted by hunger and fatigue, a farmer's wife fed him with bread and eggs, but without salt. On hearing that the people along the Priestside were not allowed to make salt, Bruce, with his usual generosity, immediately granted to the people in that quarter a charter to make salt duty free. Several years before the salt duty was removed the excise tried the validity of the Priestside, or rather Annandale, salt charter at Edinburgh, when, after much litigation, it was found to be good and sufficient; but that it was granted according to the circumstances handed down by tradition cannot be clearly proved. The exemption from salt-duty along the coast of the Solway in Annandale depends at present on an Act of the Scottish Parliament passed in the time of Charles II., but that Act records that it was a privilege enjoyed from time immemorial till invaded by the usurper, Oliver Cromwell." (Appendix B.)

To pass from salt-making, there was another occupation carried on in that locality which, if less legitimate, was more lucrative. If the parish is bare and monotonous along its Solway side, it yet derives some interest from the circumstance that it forms one of the scenes in Sir Walter's "*Redgauntlet*" and supplied him with the name at least of the Laird of Summertrees. There, as at other places on the Solway, smuggling was wont to go briskly on. A house at Powfoot called Hillhouse was specially built with a view to the trade, and provided with cellars for concealing the contraband goods. In a row of houses now away, but situated near Hillhouse, there was another house which did duty as a similar receptacle. The fields round about were thickly covered with whins, among which casks of brandy were deposited for the time being, and removed when favourable opportunities presented themselves. So plentiful was brandy in that quarter that the road leading from the high road to Powfoot got the name of the Brandy Loaning, and such a dish as "brandy porridge" was then not unknown. The farmhouse of Stonebriggs, about a quarter of a mile to the west of Cummertrees Village, was also a place noted for receiving smuggled articles. There was a cellar in the house, and at some distance from the house there constantly stood a peat stack, under which was another cellar, the two being connected by a curious subterranean passage. On one occasion

the farmer's wife saw approaching two excisemen, coming as she suspected to pay them an early visit, and leaving her husband, who had not got out of bed, to deal with them she quickly slipped out by the back door. After some talk with the farmer they discovered the cellar under the house, but while they were parleying above the wife was busy below removing some articles to the cellar under the peat stack, and coming in when the men were proceeding to inspect the cellar she was indignant that a douce farmer and his wife should have fallen under their evil and unwarranted suspicions.

The name of William de Heriz, the first witness to the charter of William de Brus to Adam de Carleol, takes us to the opposite or north side of the parish, where Hoddom Castle and Repentance Tower are situated. The former, with its spires rising among the surrounding woods, stands near the north-east corner and not far from the river in one of the most beautiful spots in the vale of the Annan. With respect to the history of this building there is an apparent discrepancy in the accounts that come down to us. There was an older house on the other or Hoddom side of the river which was inhabited by some of the Bruce family about the beginning of the fourteenth century. By the fifteenth century the Herries family had large possessions in Dumfriesshire, among them being the half-barony of Hoddom; and the old house referred to having been destroyed in a border foray, John Herries of Herries built with its stones the old part of the present castle, about the middle of that century. On the other hand, it is stated in an old family history which is printed in the Herries peerage case that John Maxwell, Lord Herries, son of Robert, fifth Lord Maxwell, "built the house of Hoddomstaines in Annandale and the watch tower of Repentance to be a beacon." This Lord Herries, who was a great friend of Mary Queen of Scots, lived a century after the John Herries just mentioned. Though these accounts appear contradictory both may be correct. In a raid of the English in 1572 or 1573, conducted by Lord Scrope and the Earl of Sussex, and directed principally against the Maxwells, Hoddom was one of a number of castles that suffered greatly. To use Scrope's own words, he "took and cast down the Castles of Caerlaverock, Hoddom, Dumfries, Tinwald, Cowhill, and sundry other gentlemen's houses, dependers on the house of Maxwell, and having burnt the town of Dumfries, returned with great spoil into

England." And therefore, when it is said that Lord Herries built "the house of Hoddomstaines," it may be taken as meaning that he rebuilt it after its demolition on that occasion. "The Castle," it is stated in the additions to Camden, "was soon after surrendered to the Regent Murray, and before the accession of James VI. was one of the places of defence on the borders:—'To be kept with one wise stout man, and to have with him four well horsed men, and these to have two stark footmen servants to keep their horses, and the principal to have one stout footman.'" The walls are of great thickness. Additions have been made to it from time to time, the most important being those carried by General Sharpe and the present proprietor.

Repentance Tower stands on the crown of a hill directly to the south of Hoddom Castle, and may be reached by a quarter of an hour's walk from that place. Its walls are 6 feet thick and about 30 feet high; and it measures 23 feet 9 inches by 21 feet 6 inches. On the top there is an erection for holding the alarm fires. In the old family history referred to, it is said to have been built by Lord Herries to be a beacon. There may have been something of the kind on the spot previously; at any rate it is certain that there was a beacon there a good while before his day. For immediately after the sudden and unexpected raid which the English made into Dumfriesshire in 1448, when they burnt Dumfries, William, eighth Earl of Douglas, summoned a convention, which met at Lincluden Abbey, at which the whole question of the beacon fires was considered, and among the arrangements adopted for putting matters in that respect on a more satisfactory footing, Trailtrow (now called Repentance Hill) was one of eleven places in Annandale where the Sheriff was appointed to see that men were employed to erect and light the beacons. The name Repentance came afterwards, but as to how it originated no authentic account exists. Human ingenuity has been much exercised to discover its origin, if one may judge from the number of fables it has invented. One story is that Lord Herries, having used the stones of the old Chapel of Trailtrow in building the house of Hoddomstaines, and having afterwards been sorry for the sacrilegious act, raised the tower as a memorial of his repentance. Another is that when returning by sea from a raid into England, and being in great danger of shipwreck, he vowed that if he escaped he would, as an atonement for his misdeeds, build a

tower and keep a watch in it to light a beacon to announce the hostile movements of the English on the border. And so on. Probably the correct explanation is that the name was given in jest, as the object evidently was to bring the thieves of Annandale and the English side to give up their lawless proceedings. Connected with the name of the building there is a *bon mot*, as it has been called, which has come down from Reformation times. A Sir Richard Steel, when one day in the neighbourhood of the tower, came upon a herd-boy lying on the ground and reading the Bible. On asking if he could tell him the way to Heaven, the boy replied: "Yes, sir, you must go by that tower" — Repentance. Some years ago a preacher, who had made some use of the story in a sermon on repentance, had it suggested to him by a learned friend immediately afterwards that the gentleman was not really asking the way to Heaven, but only to Hoddom, when to his chagrin he felt that something of the *bon* had departed from his discourse.

A very little to the west of the tower, and on a lower level, stood the ancient Chapel of Trailtrow. Nothing remains of it to show what it was like, or even where its site was. Trailtrow was one of the preceptories of the Order of St. John of Jerusalem, but apparently a very poor one, and though there was a parish of the name, it does not seem that the preceptors had possession of the benefice unless as mere lay patrons. It was probably a perpetual vicarage. This Order having been put an end to at the Reformation, the house and lands at Trailtrow passed into the hands of Lord Herries, and the parish was united to that of Cummertrees in 1609.

Before quitting Repentance Hill it may be noticed that Thomas Carlyle spent one of the most important years of his life there. During his visit to London in 1824, growing weary of the great city and liking its literary society less and less, he conceived the idea of getting a farm near home, where he could have quietness, plenty of fresh air, and full liberty to do as he liked. Having seriously broached the idea in a letter to his mother, the farm of Hoddom Hill, the house and steading of which were at a short distance from Repentance Tower, and looked towards the Solway, was taken for him at a rent of £100 a year. When he returned from London in the spring of 1825 he found them putting in the crops, his brother Alexander and some other members of the family

having transported themselves from Mainhill to manage the farming operations, while he devoted himself to literary work. He did a good deal at German Romance, and meditated on other things that took outward shape afterwards. In his Reminiscences he says:—"My translation (German Romance) went steadily on, the pleasantest labour I ever had; and could be done by task in whatever humour or condition I was in, and was done by day (ten pages a day, I think) punctually and comfortably so performed. Internally, too, there were far higher things going on; a grand and ever joyful victory getting itself achieved at last. The final chaining down, trampling home 'for good,' home into their caves for ever, of all my spiritual dragons, which had wrought me sad woe, and for a decade past had made my life black and bitter." And so it was at Repentance Hill that his spiritual campaign, the first battle of which was won in Leith Walk four years before, came to a close.

Some have been inclined to think that besides the Chapel of Trailtrow there was another old chapel, nearer the centre of the parish, and there are one or two things which seem to lend some countenance to the supposition. On the farm of Wintersheugh there is (or was) a well called Chapel well, and near by pieces of finely wrought stone have been dug up from the ground. Moreover, in a field on the adjoining farm of Charlesfield portions of what looked to have been tombstones have been found. While these things may appear to indicate the existence of a chapel in that locality, there is no tradition of it, and no mention is made of it in any document that has come under my notice.

Up till 1743 the united parish of Cummertrees and Trailtrow was, along with the parish of Ruthwell, in the Presbytery of Lochmaben. In that year the Presbytery of Middlebie, which consisted of the parishes of Annan, Dornock, Hoddum, Middlebie, Kirkpatrick-Fleming, Graitney, Langholm, Ewes, Westerkirk, Eskdalemuir, and Canobie, petitioned the General Assembly to erect the first six of these, with Cummertrees and Ruthwell, into a new Presbytery, to be called the Presbytery of Annan, setting forth as their reasons for asking the change the distance of many of the parishes from the Presbytery seat and the badness of the roads. The petition was granted, and the Presbytery of Annan met for the first time on the first Tuesday of November, 1743.

There is nothing noteworthy either as regards the ministers of Cummertrees or its church. Two of its incumbents do stand out among the rest in a way—John Turing, in having deserted his charge at the Revolution, and Gilbert Ramsay, in having deserted his charge in 1700, and in being deposed in 1709 for enlisting as a private dragoon. The church is a plain cruciform building, destitute of all ornamentation. In 1753 the Presbytery reported to the Synod that the Church of “Cumbertrees was and had been for a long time by-gone in a ruinous state, to the great discouragement and marring of the public worship of God in that parish.” It does not appear whether anything followed immediately on this representation. It is likely enough that the heritors were in no great hurry to move, and that little or nothing was done till 1776 or 1777, when the church was renewed.

There have been several finds in the parish, but scarcely any of the finders would seem to have had enough of the antiquarian spirit to preserve them or to put them into hands that would be likely to preserve them.

With the exception of a stone-celt found by a labourer when clearing out the foundations of a house on the farm of Charlesfield about 35 years ago, nothing in the shape of prehistoric or Roman remains is known to me as having been discovered in the parish. It used to be in the possession of the late Mr Charles Carruthers, farmer there, and is now in the possession of his son, Mr Peter Carruthers of Portrack.

A great many English and Scottish coins were turned up on the farm of Hurkledale in 1833. About 28 years ago I saw one of the English coins, and am not able at this distance of time to describe it accurately, but from the description given of both by the writer of the New Statistical Account, who evidently had the opportunity of examining them and has described them minutely, I take it that they were English and Scottish silver pennies of the reigns of Edward I. and Alexander III. respectively. Many years after coins of the same description were found on the farm of Netherfield, and one also of silver and of the reign of Edward I., but of the size of a florin, was picked up near Moorbeck. I am not aware of anyone who is more likely to have one or more of these coins than Mr Carruthers of Portrack. (Appendix C.)

Considering the situation of the parish it was to be expected that some traces would be left to speak of battles fought between

our forefathers and the English. Whether the village of Cummertrees was one of those which were destroyed along with the town of Annan by Sir Henry Percy and Sir Robert Clifford about the beginning of the year 1297 is uncertain. Lord Scrope was at Cummertrees in 1570, and the village likely suffered then. That it was burnt in some of the English raids derives considerable certainty from the fact that charred wood, remnants of the rough timber erections which, covered with turf and heather, formed the houses of the common people in those days, has been dug up from the site which the ancient village occupied. On the farm of Broom is a Bruce's field, near by which swords were once found, and on the farm of Corrieknowes about 1830 there was turned up a large number of swords, spears, horseshoes, and a brass battle-axe. The farmer, the finder of these last named, seems to have been a thoroughpaced utilitarian, as it is said that he had them all converted into farming utensils, with the exception of the battle-axe, which being of brass would not serve his purpose, but the fate of which I have not been able to ascertain. (Appendix D.)

A.

Willelmus de Brus, omnibus hominibus, suis amicis, Francis, et Anglis, et futuris, salutem: Sciatis me dedisse et concessisse et hac mea charta confirmasse Ade de Carleolo filio Roberti et heredibus suis pro homagio suo et servicio de incremento sue quarte partis unius militis quam de me tenet in Kimmemid unam salinam liberam subtus de prestende (sic) et unam piscariam et unum rete in litore maris libere inter piscariam meam de Cummertales, quae fuit patris mei et Cocho (sic), ubi ipse melius voluerit, cum racionalibus (sic) et sufficientibus necessariis libere sicut de Cessessio (sic) de prestende et de more ad salinam et piscariam, ita quod mellius poterit (pistura aut rete secum?) vel piscariam suam, nisi per illum super forisfactorum meam, salvo tamen mihi et heredibus meis, Strione et Craspeis. Testibus, Willelmo de Heriz, tum Senescaldo, Hudardo de Hodelmo, Hugone de Brus, Hugone de Cori, Gilberto filio Johannis, Hugone Matuer, Willelmo de Hoynville, Ade de Dunwithie, Ricardo Fleming, Ricardo de Basso, Rogero filio Udardi et nonnullis aliis.

B.

The following is an extract of the Act referred to, which is of date 12th July, 1671 :—

“The Estates of Parliament having heard a supplication presented to them by Adam Newall, in behalf of some tenants and people in Ammandale, who, by their industry and wholesome labour, do from sand draw salt for the use of private families in that bounds ; and who, in regard to the painfulness and singularity of the work, have ever been free from public imposition or exaction, until the year one thousand six hundred and fifty-six or thereby, that the late usurper, contrary to all reason, equity, or former practice, forced from them an exaction to their overthrow and ruin, and thereby dispossessed them that they are in a starving condition.

“Humbly therefore desiring that they may be freed from that unwarrantable exaction, and also having heard and considered the report from the Commissioners for trade and bills, with their opinion thereanent : the King’s Majesty, with the advice and consent of the Estates of Parliament, declares the said salters, winning and making salt within the bounds specified, in manner above written, to be free of any excise, and therefore discharges all collectors, or others, from any uplifting or exacting the same in all time coming.”

C.

“The Scotch coins have on the right side the following inscription :—Alexander Dei Gra + encircling the profile of a king’s head crowned with an inverted sword placed in front of the head. On the reverse side there is in very distinct characters Rex Scotorum, encircling a cross and four stars, one in each angle of the cross. On the right side of the English coins there is a front view of a king’s head crowned, which is encircled with the following letters, Edw R. Angl Dns IVB +. and on the reverse a cross with twelve balls, three forming a triangle in each angle of the cross. The inscriptions round the cross on the English coins are various. On some the words Civitas London are very distinct ; on others, Civitas Cantor ; on others, Civitas Ebrocae ; on others, Civitas Dublinie ; and on others, Civitas Waterford, probably to specify the different places of their coinage. The English and Scotch coins are nearly of the same weight and size, and two pieces are scarcely equal in

weight to one sixpence. There is no date on any of the coins, and as there are no numerals after either of the kings' names, it is likely that the Scotch are of the reign of Alexander I. of Scotland, and the English of Edward I. of England. The brow of Alexander as marked on the coins is lofty, and the countenance fierce, agreeable to the epithet 'acer' given to that king in history; while the countenance and bushy locks on the coins of Edward bear a strong resemblance to the portraits of that monarch." (New Statistical Account, Cummertrees, 1834.)

D.

"The farmer who found the arms, considering them of no value to the public, had them all but a brass battle-axe converted into husbandry utensils. He says that the swords were about two feet in length, edged on the one side to the handle, and on the other for the half length of the blade; that the spears were long, but were nearly all broken, and were more injured by rust than the swords; that in the same field he also found a number of horse shoes, some of which were an entire circle, and others curiously turned in at the heel, while none of them were exactly in the form of the present horse shoe. The arms were scattered over the field, and not more than eight inches from the surface."

"It would seem from this that the arms had not been buried nor hid there, but that each lay on the place where it had fallen from the hands of its owner. But if this supposition be correct, the battle must have been fought previous to the founding of the Burgh of Annau, which is within a mile of the field and when the surrounding country was an almost entire wilderness; for, upon any other supposition than that of almost total destitution of inhabitants in the neighbourhood, it would be difficult to conceive how such a great quantity of arms was permitted to remain unmoved till the natural accumulation of debris on the earth's surface formed a covering over them. The subsoil of the field in which they were found is a hard till, almost as impenetrable as rock, otherwise they would no doubt have been sunk much deeper than they were." (New Statistical Account, Cummertrees, 1834.)

II.—*Notes of a Naturalist in West Africa.* By Dr J. W. MARTIN,
Holywood.

Dr Martin, Holywood, submitted some "Notes of a Naturalist in West Africa," the result of his observations during a residence of several years when acting as medical officer at one of the trading stations; and he exhibited an extensive and interesting collection of natural history specimens, including a beautiful python skin, scorpions, lizards, Goliath and horned beetles, and large land shells.

III.—*The Castle of Greenan.* By Rev. R. SIMPSON, B.D.,
Dunscore.

The ancient land of Carrick, extending from the banks of Doon to the borders of Galloway, is gradually becoming better known. Time was when the tourist stopped short of it, thinking that nothing worthy of his attention lay beyond what he chose to call the Land of Burns. The knowledge of the Burns pilgrim is not always commensurate with his enthusiasm, and he sometimes forgets that a most important part of the poet's life was spent with his mother's people at Kirkoswald, in the very heart of Carrick. There is great wealth of historical association, along with vast treasure of antiquarian lore, bound up with the old castles of which the district is full. These feudal fortresses make the country between the Doon and the Stinchar resemble a bit of the Rhineland, where every height bears some ancient ruined tower, each with its own grim legend of war, or sweet, sad story of human passion to tell.

Near the northern boundary of Carrick stands the ruined tower of Greenan. It is perched on the summit of a rock, rising abruptly from the level fields near the Doon. The tide comes up to the very base of the cliff. The castle commands an extensive view. Westward across the sea are the peaks of Arran, always majestic in their appearance. To the north is the grand sweep of the Bay of Ayr, with an almost unbroken line of houses extending from the "auld toon" itself to the busy seaport of Ardrossan. Over the low hills may be seen, if the day is clear, the shadowy form of Ben Lomond. Inland lies the fertile strath watered by the Doon, and to the south the view is closed by the perpendicular cliffs of the Heads of Ayr, the haunt of hawk and seafowl.

Centre of this delightful scene stands the ruined tower, lonely and grim, reminding one in its appearance and situation of the

castles that fringe the banks of the Rhine, but looking much sterner and more severe than they. Our climate is less careful of the relics of the past than that of the Rhineland; and though the Drachenfels and Rolandseck and the Mouse Tower of Bingen have withstood for centuries all the ravages of the elements, the goodly Castle of Greenan, not yet three hundred years old, is rapidly mouldering away. Every winter sees some portion of its masonry thrown down on the sands at the base of the cliff. It grieves one to see such utter destruction, and to think that nothing is done to preserve such a fine memorial of the times of old.

The tower, which is almost all that remains of a much more considerable building, is not itself of very great antiquity. Over the doorway the date 1603 is still legible, along with the letters J. K., the initials of John Kennedy, the proprietor who built it. From the evidence of various records there can be no doubt, however, that a stronghold existed on the spot centuries before. The chartulary of Melrose contains an entry regarding a grant of the Doon fishings, made in the reign of William the Lion by Roger de Scalebroc, vassal of Duncan, Earl of Carrick—he was a M'Dowall, and ancestor of the M'Dowalls of Logan and Garthland, in Galloway—to the monks of Melrose. These "holy friars" seem to have had the knack of gaining possession of some of the richest land in the Lowlands of Scotland. In the same monarch's reign they obtained a grant of Friars' Carse and other monk lands in Nithsdale from the Lady Affrica of Stranith, who afterwards became the wife of Olaf, King of Man. It was of them that the evidently truthful rhyme was composed:—

" The monks of Melrose made good kail
On Fridays when they fasted,
Nor wanted they good beef and ale
As long's their neighbours' lasted."

We need not be astonished, then, at the fact that shortly afterwards they were in possession not only of the rights of fishing in the Doon—which presumably they valued as a provision for their Fridays' fare—but also of the whole lands of Greenan. Passing from the hands of the Church into those of the Lords of the Isles, the barony of Greenan was in 1475 feued to John Davidson, whose descendants—known as the Davidsons of Pennyglen, near Culzean—retained it until 1576. In that year it was transferred to Paul Reid, a burgess of Ayr, in a deed which mentions a tower

and a fortalice. Reid does not appear to have held possession long, for in 1591 we find that the owner is John Kennedy of Baltersan, holding the lands direct from the Crown. Baltersan is close to Crossraguel Abbey, and its owner was connected not only with the "kings of Carrick," but with the scarcely less distinguished families of Blairquhan and Auchindrane. It was this John Kennedy who carved his initials over the doorway, and it seems he built the tower in addition to, or in place of, buildings already existing. The date 1603 cannot be taken as that of the first erection of a castle at Greenan. In 1642, the year of the outbreak of the Civil War, the estate passed into the hands of Sir Alexander Kennedy of Culzean. The Culzean family was then distinct from that of Cassillis, though they both belonged to the same clan and bore the same name, and though the two houses are now united. The barony was held for a time by the Honourable David Kennedy of Newark, who disposed of it, in 1766, to his brother, Thomas Kennedy, Earl of Cassillis. It has remained in his family ever since, and the present owner is his descendant, the Marquess of Ailsa.

The history of Greenan is on the whole peaceful. There are few records connected with it as with Turnberry and Dunure, few legends like those told of Cassillis and the Coves of Culzean. Notwithstanding this, several writers of fiction have made it the scene of their stories, encouraged no doubt by the situation of the tower, so suggestive of romance. On one occasion, however, it was closely connected with one of the tragedies so frequent in the history of the Kennedys. Shortly after the fight near Lady Cross, in which the Laird of Bargany was slain by the Cassillis faction, the eldest son of the Laird of Culzean died abroad. He was provost of the Collegiate Church of Maybole, and the office thus became vacant. The Earl of Cassillis was patron, and Culzean hoped that his second son would be appointed. But, probably because Culzean had been heard to express disapproval of the plot that ended in Bargany's death, the Earl gave the post to one Gilbert Ross, a notary. Culzean was greatly offended at this, and a coolness ensued between him and the head of the clan. Meantime the friends of the slain laird of Bargany were taking measures to avenge his death, seeking the hurt of all the Earl's friends, of whom Culzean was reckoned one. The most energetic of the avengers of blood was Thomas Kennedy of Dinmurchie, the dead

man's brother. Hearing that Culzean was meditating a journey to Edinburgh on some law business, he arranged to way-lay him. With Walter Mure of Cloncaird and four attendants he waited at Ayr till he heard that the journey was commenced.

On the 12th of May, 1602, the Laird of Culzean set out, attended only by a single servant, Lancelot Kennedy. His route lay along the coast from the Cove of Culzean to Greenan, thence across the Doon and on towards Holmston Ford, where he would cross the river Ayr about two miles above the town. Dimmurchie and his followers saw Culzean alight at Greenan Castle, and immediately placed themselves in ambush behind the ruined chapel of St. Leonard's, overlooking a stream which flows into the Doon. From this point there was a view of the whole route from Greenan nearly to Holmston. After a considerable time Culzean and his single attendant were seen to leave the castle and ford the Doon, making straight for St. Leonard's Chapel. Here the six conspirators, as the old historian says, "Brak at him, and slew him maist cruellie with schottis and straikis." The body was plundered, and Dimmurchie and his men departed, leaving Lancelot to convey the remains to Greenan, whence they were carried on a litter to Maybole, and buried in the Collegiate Church. Dimmurchie fled to France, and though he made bold in the lapse of time to live in Ireland, he never dared return to his own country.

Such is a specimen of the doings of these old times, and it is the only one of the sort connected with Greenan. For the subsequent developments of the plot—for the death of Culzean was by no means the end of the hostilities—reference may be made to Sir Walter Scott's "Auchindrane, or The Ayrshire Tragedy," and to one or two novels of the present day, including William Robertson's "The Kings of Carrick," and S. R. Crockett's "The Grey Man." The author of "The Raiders" makes an exceedingly interesting story out of the feuds of the Kennedys, but his foot is not so firm and sure as on his native heath of Galloway. He does not know the topography of the Carrick land so well, and his imperfect acquaintance with the history leads him into occasional anachronisms. The town of Girvan had no existence three hundred years ago, though he speaks of it as a considerable place, and the seat of a court which should rather have been held in Maybole. Then golf as now understood was not played among the dunes of the Ayrshire coast in the reign of King James VI. although it was

well known at St. Andrew's and elsewhere in the east. Yet Mr Crockett's story, though far from being a masterpiece like "The Raiders," is of value as a life-like picture of those stirring times, and for reviving an interest in the most powerful feudal family of the south-west of Scotland.

14th May, 1897.

Mr JAMES G. H. STARKE, V.-P., in the chair.

New Member.—Mr William Gillespie, solicitor, Castle-Douglas.

Donations and Exchanges.—The Secretary laid the following on the table:—Proceedings of the Nova Scotian Institute of Science, Halifax; Botanical Papers by Mr Arthur Bennet, F.L.S.

Exhibit.—Mr John Corrie showed a stone hammer found in Glencairn, and, so far as known, the only one ever found there.

COMMUNICATIONS.

I.—*Children's Singing Games and Rhymes Current in Kirkbean.*
By Mr S. ARNOTT.

In fulfilment of a promise made last session, I have now the pleasure of giving the members of the Society the result of an endeavour to collect some of the singing games and rhymes current among the children of Kirkbean. They differ little from those which give pleasure to the young folks of other localities, and I have not ventured to do much in the way of comparison from want of access to suitable books on the subject. One cannot but regret also that the games cannot be presented as they are performed. They lose incalculably from the absence of the happy faces, lithe movements, and sweet voices of the children, to whom they give such keen delight. Delivered in almost monotone, they lack their greatest charm, but this cannot be avoided.

Others might have been added to the collection, had it not been that illness prevented me from prosecuting my inquiries about these games and rhymes. I owe what have been collected to the

help of some of the young folks of the parish, who kindly furnished me with the words and other particulars. To them my best thanks are due.

In the following, which is done by two girls facing each other, both strike the palms of their hands against those of the other, and then give one clap with their own hands :—

Mistress Brown went to town
 Riding on her pony,
 When she came back
 She had a brown hat,
 And called her Miss Maloney.

Where have you been all this time ?
 Down the valley courting Sally,
 Down in the valley courting me.

The rose is red, the violet's blue,
 The honey's sweet, and so are you.
 When we meet we'll have a kiss,
 When we part we'll have another—
 That's the way to love each other.
 So are they that sent me this,
 When we meet we'll have a kiss.

Sandy Toe.

Sandy Toe, Sandy Toe,
 Sandy teedle-um, teedle-um, Toe,
 Was a man, a man, indeed,
 Sowed his garden full of seed ;
 When the seed began to grow,
 Like a diamond in the snow ;
 When the snow began to melt,
 Like a ship without a belt ;
 When the ship began to sail,
 Like a bird without a tail ;
 When the bird began to fly,
 Like a diamond in the sky ;
 When the sky began to roar
 Like a lion at my door ;
 When my door began to crack,

Like a stick across my back ;
 When my back began to bleed,
 It was very sore indeed.
 Pop goes one, pop goes two,
 Pop goes my hand over you.

The motions in this are very similar to those of the foregoing.

The movements in the next are almost the same, except that only one hand of each girl is used when clapping each others hands, the hands being used alternately, *i.e.*, the right hands of both and then the left :—

My wee cheety pussy,
 Cheety pussy, cheety pussy,
 My wee cheety pussy
 Likes new milk.

This is frequently repeated.

In the next two girls stand opposite each other and clasp hands, the arms being outstretched. A row of others, holding on by the dress of the one preceding, pass under the arms of the two while the following words are sung :—

Broken bridges falling down,
 Falling down, falling down,
 Broken bridges, falling down.
 My fair lady.
 Breakfast time, dinner time,
 Tea time, supper time,
 Catching time.

At the words "catching time" the two girls enclose with their arms the one who is passing under them at the time and occasionally, with a swaying movement of the arms, sing :—

Here's a prisoner we have got,
 We have got, we have got,
 Here's a prisoner we have got,
 My fair lady.

Then the following words are sung :—

What's the prisoner done to you,
 Done to you, done to you,

What's the prisoner done to you,
My fair lady?

The next verse is the reply :—

Broke my locks and stole my gold,
Stole my gold, stole my gold,
Broke my locks and stole my gold,
My fair lady.

The question is then asked :—

What will you take to set her free,
Set her free, set her free,
What will you take to set her free,
My fair lady?

The reply is :—

A guinea and a half to set her free,
Set her free, &c.

The ransom demanded is too high, so the others say :—

A guinea and a half you shall not get,
Shall not get, &c.

The gaolers then sing :—

Then off to prison she must go,
She must go, &c.

And convey the prisoner away to a place selected. When she is thus in custody she is asked which of two things she prefers, *e.g.*, a gold or a silver watch. When she makes her choice the prisoner is placed to one side or other, according to her selection of the article, one of the captors representing, say, the silver and the other the gold. The game is then repeated.

For the following, four girls stand clasping each others hands, forming as it were a Maltese cross. They then sing, pulling back and forward in time with the music :—

Draw buckets of water,
Upon a lady's daughter;
One in a bush, two in a bush,
A pretty young lady come under my bush.

At the words "one in a bush" one twists herself round with her back to the centre, and so on until all are in that position, still

grasping hands. When all are in they jump up and down and sing :—

A bunch o' rags,
A bunch o' rags,
A bunch o' rags.

A rather familiar singing game, usually known as "We are three brethren come from Spain," appears in Kirkbean as "Here are two Jews just come from Spain." The version varies greatly in other respects from that given in "Popular Rhymes in Scotland." The suitors are sometimes one, sometimes two or three, and these advance towards the other party, which is supposed to consist of a mother and her daughters. It opens thus :—

We are two Jews just come from Spain
To call upon your daughter Jane.

The other party reply :—

My daughter Jane, she's far too young,
I cannot bear your flattering tongue.

The suitors retire, but the others, apparently relenting, sing :—

Come back, come back, your choice is free,
And choose the fairest one you see.

The lovers return, saying :—

The fairest one that I can see
Is bonnie wee (Jenny), will ye come tae me?

Jenny refuses in a very curt fashion by saying "No," and the suitors join hands and dance round singing, in a very uncomplimentary way :—

She's a dirty wee slap, she wadna come in,
She wadna come in, she wadna come in ;
She's a dirty wee slap, she wadna come in
To help us wi' the dancin'.

The maiden named, though proof against flattery, cannot resist the disparaging references to herself, and joins the party of suitors, who, with this addition, dance in a circle, singing :—

Now we've got a beautiful maid,
A beautiful maid, a beautiful maid ;
Now we've got a beautiful maid
To help us wi' the dancin'.

The same routine is followed until the mother and her daughters become absorbed in the other party.

One frequently played appears to be a variation of a widespread and ancient one, known in most places as "Here's a poor widow from Babylon." In Kirkbean it takes the following form:—One of the girls sits or stands alone, and another, representing the widow, with her children on either side, alternately advances and retires, the whole singing:—

Here's a poor widow from Sandy land,
 With all her children in her hand;
 One can knit and one can sew,
 And one can make the lily-white row;
 One can sit by the fire and spin,
 Please take one of my daughters in,
 Please take one of my daughters in.

The solitary girl takes one of the children, without naming her, however, as seems to be the ordinary way, and the others sing:—

Now poor (Maggie) she is gone,
 Without a farthing in her hand,
 Not so much as a guinea gold ring.

The "widow" then shakes hands with the daughter she has handed over, the song going on:—

Good-bye (Maggie), good-bye,
 Good-bye (Maggie), good-bye.

Rosy Apple.

The movements in this are the same as those in "My Wee Cheety Pussy" except that at regular intervals the children vary the striking of hands together by lowering them to a little above the knee and striking their pinafores.

Rosy apple, lemon pear,
 A bunch of roses she shall wear,
 Gold and silver by her side,
 I know who's her bride (pride?);
 Take her by the lily-white hand,
 Lead her to the altar,
 Give her kisses, one, two, three,
 For she's a prince's daughter.

In the next one the children stand opposite each other striking the palms of their hands together, at regular intervals clasping hands with their *vis à vis* and raising and lowering their arms :—

Hot cross buns, hot cross buns,
 One a penny, two a penny, hot cross buns ;
 If you have no daughters give them to your sons,
 If you have none of these little elves,
 Then you may eat them yourselves.

Jemima.

In the following a number of girls stand in a row, and one, representing Jemima, conceals herself behind. Another comes forward and says :—

I've come to see Jemima,
 Jemima, Jemima,
 I've come to see Jemima,
 And how is she to-day ?

The others reply :—

She's up the stair washing,
 Washing, washing,
 She's up the stair washing,
 You can't see her to-day.

The lover says :—

Very well, ladies,
 Ladies, ladies,
 Very well, ladies,
 I'll call another day.

It is unnecessary to repeat the lover's words or the replies in full. The next time he calls Jemima is up the stair *Starching*, the next *Ironing*, the following time *Dressing*. A change takes place when in reply to the usual inquiry the lover is told—

She was comin' doon wi' a basin
 An' she fell an' broke her big tae,
 You can't see her to-day.

The next time when he returns the news is given with great glee—

She's dead, she's dead,
 She's dead, she's dead.

The lover then says :—

What shall we dress her in?
 Dress her in, dress her in,
 What shall we dress her in?
 Dress her in blue.

The others say :—

Blue for the sailors,
 The sailors, the sailors,
 Blue for the sailors,
 And that won't do.

Red is then suggested, but rejected with the reply that "Red is for the soldiers," &c. Black is the next, but that is said to be "for the mourners." White is then suggested, and this meets with approval from the others, who say :—

White for the dead people,
 Dead people, dead people,
 White for the dead people,
 And that shall do.

The one who represents Jemima then runs away, the one who succeeds in catching her taking her place.

This seems to be a version of one which appears in "Popular Rhymes of Scotland" as "Janet Jo," the characters in which are a father, mother, Janet and a lover. In this Janet lies on her back behind the scenes, and the lover comes forward singing :—

I'm come to court Janet jo, &c.

And the reply is—

She's up the stair washin', &c.
 Ye canna see her the day.

In this version she is afterwards bleaching, drying, and ironing clothes. At last it is :—

Janet jo's dead and gane,
 Dead and gane, dead and gane,
 Janet jo's dead and gane,
 She'll never come hame.

She is carried off to be buried, the others weeping. Sometimes she revives. This version, said by Chambers to be current in Kirkcudbrightshire, I can hear nothing of.

The following has apparently more sound than sense, and I cannot make out what the words mean :—

If you want a seeking William
 Take a soldier to the cross.
 There you'll see a noble lady
 Riding on a big white horse.
 Tra la la la la
 Tra la la la la

In this one the children form a circle and sing the first four lines. At the chorus they go into the centre and, one taking the next for a partner, gallop round singing

Tra la la la la.
 Tra la la la la.

In the succeeding one the children form a circle, going round as they sing the words. At the words "she sank" all sink to their knees :—

Three times round went the old gallant ship,
 And three times round went she,
 Three times round went the old gallant ship,
 And she sank to the bottom of the sea.

Immediately after sinking to their knees they rise again, the last to do so being condemned to stand in the centre and to tell the name of the boy she likes best. She begins by saying—

What'll ye give to tell his name,
 Tell his name, tell his name?
 What'll ye give to tell his name,
 And round about merry ma tansy?

The others say—

I'll give a gold watch to tell his name,
 To tell his name. to tell his name. &c.

The centre one says—

Perhaps G is his first letter, &c.

The others guess the name of the boy, and if they are not correct the one in the centre gives the second letter of the Christian name (using the same words otherwise), and so on until the name is discovered.

The Farmer.

One known as "The Farmer" is rather a merry game. The children form a circle, one standing in the centre being the farmer. The others dance round him singing:—

The farmer's in his den,
The farmer's in his den,
Oh! I'm a dearie, oh!
The farmer's in his den.

The central figure then takes one of the others into the middle, and the others revolve round, singing:—

The farmer takes a wife,
The farmer takes a wife.
Oh! I'm a dearie, oh!
The farmer takes a wife.

The "wife" then chooses another, and the words,

The wife takes a child,

are sung with the usual refrain. The next introduction is—

The child takes a nurse.

Then—

The nurse takes a dog.

The stage of the game is then concluded by all clapping the dog on the head and singing:—

We all clap the dog,
We all clap the dog.
Oh! I'm a dearie, oh!
We all clap the dog.

Should the game be continued the one who was the dog takes the position of the farmer.

The next is incomplete, as I have been unable to learn all the words. Three of the players advance towards the remainder, who stand in a row. The latter say to the three—

Will you have some bread and wine,
Bread and wine, bread and wine?
Will you have some bread and wine,
On this fine and frosty morning?

The three accept the hospitable offer, saying—

Yes, we'll have some bread and wine, &c.

But the others say—

Bread and wine you shall not get, &c.

Then we'll tell the policemen, &c.

The three sing—

Do you see yon battlefield, &c.

The others retort—

What care we for the battlefield, &c.

The whole ends with a general boxing match, in fun, of course.

Red Apples.

This is sung to a rather agreeable tune. A girl is placed in the centre of a ring formed by the others holding hands. They move round keeping time to the tune and singing the following words. It will be observed that the last words are hardly in keeping with the other lines :—

Red apples! red apples! by night and by day.

There stands a valley, a valley away.

There stands poor (Maggie) with a knife in her hand,

You dare not touch her, or else she'll go mad ;

Her cheeks were like roses, but now they're like snow.

Oh! (Maggie), oh (Maggie), you're dying I know.

We'll wash her in milk and we'll dress her in silk,

And we'll write down her name with a gold pen and ink.

Tee-o-mi-tanzy-oh (Maggie) likes her brandy, oh.

In this game the children sit on their knees a little apart so as to allow of the one chosen for the purpose going between. This girl in her progress winds in and out between the others while these sing—

Round about the village,

Round about the village,

Round about the village,

As you have done before.

In and out the windows,

In and out the windows, &c.

At the next line the girl who passes along stops at the words, "stand and face." The line is—

Stand and face your lover.

The one chosen rises to her feet and follows the other, while the following words are sung—

Follow her to London, &c.

The following are the words used in the familiar game of "I sent a letter to my love":—

I sent a letter to my love,
 And by the way I dropped it.
 I dropped it once, I dropped it twice,
 I dropped it three times over.
 Blaw oot the can'le, blaw oot the can'le,
 Shut your eyes and look at the skies,
 An' don't see where the hanky lies.
 All look behind you,
 All look behind you.

In the following the children stand in line, all but one who kneels, and then stands at the words, "stand up." At the conclusion of the words the one chosen during their progress takes the place of her selector:—

Kneel down on the carpet, you must kneel,
 Grass grows, grass grows on yon field,
 Stand up, stand up upon your feet,
 And show me the girl you love so sweet.
 Now they are married, I wish them joy.
 First was a girl and second was a boy.
 Seven years after, seven years to come,
 Just give a kiss and then be done.

Water, Water, Wallflower.

This is a very familiar one in the district. It seems almost superfluous to describe it. The children form a ring moving round to the words—

Water, water, wallflower,
 Growing up so high,
 We are all maidens,

And we must all die,
 Excepting (Polly Perkins),
 She's the only one,
 She can dance and she can sing and she can play the organ.
 Fie, fie, fie, for shame,
 Turn your back to the wall again.

The one named turns her back upon the centre, and the game proceeds until all are in the same position.

Here is a rhyme in which the characters appear to be in a jovial mood :—

The morn's the fair an' a'll be there,
 An' a'll hae on my curly hair,
 A'll meet my (lass or lad) at the fit o' the stair,
 An' a'll gie (her or him) a glass and a wee drap mair.

Down in yon Meadow.

Down in yon meadow where the green grass grows,
 Where (Maggie Tamson) bleaches her clothes.
 She sang, and she sang, and she sang so sweet,
 She saw a bonnie laddie across the street,
 He cuddled her, he kissed her, and bocht her a ring,
 A feather for the kirkin'—a peacock's wing.
 Up the streets and down the streets, the windows full of glass.
 Is'nt (Maggie Tamson) a braw young lass?
 Is'nt (Jamie Johnstone) as braw as she?
 And when they do get married I hope they will agree.
 Agree, agree, agree, and when they do get married I hope they
 will agree.
 Six pair o' blankets, six pair o' shoes,
 Half a yard o' moleskin to men' Jamie's breeks.

The following appears to be the same as in "Popular Rhymes of Scotland" with the exception of the first verse, in which "Blackberry bush" is substituted for "Mullberry bush." The girls join hands in a circle and sing as they move round :—

Here we go round the blackberry bush,
 The blackberry bush, the blackberry bush,
 Here we go round the blackberry bush,
 And round the merry ma tanzie.

In the next verse they walk singly along, mimicking an affected lady, and sing—

This is the way the ladies walk, &c.

At the last line they again join hands and repeat "Here we go round the blackberry bush," &c. The other verses are—

This is the way the gentlemen walk, &c.

This is the way we wash the clothes,

and several other things of a similar nature.

Nuts in May.

In this game the children are arranged in two rows facing each other. One girl is chosen from each side. We shall call these Maggie Black and Annie White. These at the words, "A'll send Annie White to take her away," try which shall draw the other over a handkerchief laid between them. The loser is taken to the side to which the winner belongs, and so on *ad fin.*

Here we come gathering nuts in May,

Nuts in May, nuts in May ;

Here we come gathering nuts in May,

On a cold and frosty morning.

Whose nuts will you gather away ? &c.

Gather Maggie Black's nuts away, &c.

Who will you send to take her away ? &c.

A'll send Annie White to take her away, &c.

In selecting those who take the leading part at first in these games, a favourite way is by means of the following rhyme. The children each put a finger in a cap, and one repeats the words, touching the fingers as she speaks :—

Me and the minister's wife cast oot,

Guess ye what it was about ?

Black fish, white trout,

Eerie, orrie, ye're oot.

Sometimes the last one left in after the rhyme has been repeated several times is the chosen one, sometimes the one to whom the words, "ye're oot," comes in the first round.

I may close with a rhyme in use by the boys. They sometimes dance on a coffin-shaped rock in the bed of the stream in the

beautifully wooded glen known as Kirkbean Gill. This rock is known as the "Deil's Coffin." In the rocks further down are some water-worn holes called the "Deil's Pots and Pans," but nothing takes place there so far as I can learn and no tradition is attached to these. I suppose it is by way of insult to his Satanic majesty that the following is sung as the urchins dance on his "coffin":—

Some say the deil's deed, the deil's deed, the deil's deed,
 Some say the deil's deed, an' buri't in Kirkcaldy.
 Some say he'll rise again, rise again, rise again,
 Some say he'll rise again an' dance the Hielan' Laddie.

II.—*The Old Clock of Kirkcudbright.* By Mr JOHN M'KIE.

This quaint horological machine, whose working parts were originally all of malleable iron, exhibits excellent workmanship in the forging of its wheels and in the cutting of their teeth, but when it was made minutes were not held to be of such account as they are in the present day; consequently it had no minute hand—one to indicate the hours being then considered sufficient. It had two dials—one facing east, and the other north—that could be seen from any part of High Street, which at that time comprehended the whole town. There is no authentic record when or where it was made. There is a tradition that it came from Hollaud, and may, in all likelihood, have been presented to the burgh by William Maclellan, the first Provost, an ancestor of the Lords Kirkcudbright. The first authentic notice of the town clock, or, as it was then quaintly styled, the "knok," is to be found in the earliest existing records of the Town Council, and is dated 1576, wherein, after a narrative of the election of magistrates and office-bearers, it is set forth that one, John Hall, is appointed keeper of the "knok," and subsequently he and others continue to be made custodiers of the old timepiece from year to year. The following excerpt from the Council minutes shows the existence of a curious regulation, namely, that every burgh was bound to maintain and uphold a town clock; and from the same excerpt it will be seen that, in 1642, the question was not one of erecting a new clock, but of transferring the old one to a new steeple.

“Att Kirkcudbright, the ffourt day of January, the yeir of God JmVIC, ffourtie twa years (1642). The qlk day the Proveist, Baillies and Counsell of the Burgh of Kirkcudbryt, with advyse and consent of the remanent burgess and communitie of the said burgh. Having takin to thair serious consideracon the los and want of thair ‘knok’ throw the falt of ane steiple and bel hous to put thair knok and bellis in (the auld tolbuith qlk of befor keeipit thair knok and bel being now ruinous and decaiyit), and of haveing takin to thair consideraun the necessitie of ane steiple and bel hous to keip their knok and bel, qlk is ane speciall ornament belanging to every burgh; and qlk they are bund be the antient lawes of the burrows of this kingdome to mantein and uphault and lykewayes they takeing to thair serious consideraun the decay of thair comon guid and that it is superspendit upon the comon effaires of this burgh. Thairfoir the said Proveist, Baillies and Counsell of the said burgh with advyse and consent of the remanent burgess and comunitie of the said burgh. Have all in ane voice cheirfullie and voluntarily offered theimself is to be stentit in their guidis for buying of ane piece of grund qr it may be maist and best convenientlie had for biggin of the said bell hous and steiple and for furnishing of materialls and paying of workmen to big the saym and for that effect they by yir pnts do nominate and appoynt certain members of the Counsell, or the maist pairt of theme to convene wt the magrats of the said burgh qu soevir they should be requyrt for setting of the foresaid stent. Quha being conveynt and haveing acceptit the fairsaid charge upon them. Have all in ane voyce (qa war pret) maid and set down the stent efter. Spcit to be payit by the haill burgess and inhabitants to the said burgh to William Halliday and Geo. Callander or any ane of thame. Collectors appoyntit for uplifting of the said stent and qa ar obleigt to be comptable thairfoir to the Proveist, Baillies and Counsell of the said burgh in manir efter mentionat.”

The steeple was shortly afterwards built, and the “knok” and bells placed therein, where its single hand continued to point out the fleeting hours till 1723, in which year a serious fire occurred in the steeple, by which much damage was done to the clock and bells. In those days there was no watch or clock maker resident in Kirkcudbright, and the clock was sent to Ringford, to a blacksmith named Law, who was noted for his ability in the art

of cleaning clocks and watches. It lay in the Ringford smithy for six months before being thoroughly overhauled. It was then restored to its old quarters, and for more than a hundred years continued to be the only standard by which the time in the district was regulated; but after the two-handed clock was put into the parish church, the old timekeeper came to be looked upon with less reverence, and its occasional erratic movements became more noticeable, which had previously passed undetected, but were now brought into prominence by the steadier action of its new neighbour. It, however, kept moving on with wonderful regularity under the doctoring care of several tradesmen, among others, F. Walker, A. Millar, W. Law, and J. M'Skimming, until this the diamond jubilee of Her Most Gracious Majesty, when Provost Cowan, much to his honour, has commissioned Mr M'Skimming to replace it with a splendid new illuminated-dial clock; and, by resolution of the Council, the "Auld Knok" now finds a fitting resting place in the Stewartry Museum.

III.—*Glencairn Folk Riddles.* By Mr JOHN CORRIE.

Publication of the short and fragmentary paper on Folk Riddles, contributed during Session 1891-92, was instrumental in making me acquainted with numerous riddles not included in my collection. These, together with several others completed from fragments previously possessed, are contained in the present supplementary paper. A few noticed by the late Mr Shaw, in his incursion into the same field, are not included; but with this exception, I believe the collection will be found to embrace almost all that are worth preserving. Numerous examples have no doubt perished. I have sought in vain, for instance, for references to the crusie, the flail, the strike-fire—all objects at one time familiar in every home. It seems probable that some at least of these might yet be recovered, and I may perhaps be allowed to suggest that any met with should be communicated to the Society for preservation.

Resuming the record of my gleanings, precedence may fittingly be given to an example which has Eve, the mother of the race, for subject:—

The fairest flower in a' the garden,
That e'er the sun shone on,

Was made a wife the first day of her life,
And died before she was born.

This novel presentation of facts can scarcely be cavilled at, for, according to a strict interpretation of terms, Eve *never was born*, and her wifely relationship was undoubtedly co-incident with the day of her birth. The example is interesting in another connection, for it recalls, and that in a very striking way, two lines in the song of "Annie Laurie." It will be remembered that the third verse of Lady John Scott's modernised version of that famous lyric commences :—

Her face it was the fairest
That e'er the sun shone on.

The resemblance here, alike in thought and expression, is extremely close, and leaves one disposed to attribute to imitation rather than to accident.

I have to thank Mr James Conchie, shoemaker, Moniaive, for the following interesting example, which is also of the Biblical type :—

In times of old, the Scripture doth record,
There lived one who never did offend the Lord,
Who spoke the truth and never did sin commit,
Yet in God's presence he shall never sit.

Ans., Balaam's ass.

My earlier gleanings contained a riddle on the prophet Jonah. Here is another, communicated by a Carsphairn lady, on the same subject :—

There was a man o' Adam's race
Which had a strange dwelling place,
'Twas neither in Heaven, earth, nor hell,
Now tell me where that man did dwell.

A comparison of the two forms is not without interest.

Of my additional examples from animated nature, perhaps the most valuable, alike from a zoological and an antiquarian point of view, is the following :—

What's as white's milk,
And as sleek's silk,
And hops like a mill shillin' ?

Ans., A magpie. I need scarcely observe that a mill "shillin" is no longer a familiar object, and in most districts the magpie is now one of the rarest of birds.

What is't that stan's oot o' the wud and eats in it? Ans., A sow eating out of its trough. This possesses an antiquarian value also, for it indicates that such articles were commonly made of wood, and not of stone or fire-clay, as at present.

We come now to an important class—the domestic. Here I am able to supplement my previous gleanings with a number of additions. The crooks, a half-forgotten fireside adjunct, figures in several of these. Thus we have:—What's a' holes and carries water? Ans., The crooks. In another example we have the crooks, together with a three-legged pot, described as follows:—

The sma' lean faither,
The big baggit mither,
And the three sma' bairns.

A little pot with wooden lid presents rather a grotesque figure:—

Hoddy-poddy, wee black body,
Three legs and a timmer hat.

What scatters a' day
And rows at e'en?

Ans., A peat fire.

Faither and mither, sister and brither,
A' lie in ae bed, and never touch ane anither.

Ans., The bars of the grate.

Here is a quaint description of the once familiar "grey-beard":—

As roon as a riddle,
As black as a coal,
A lang neck, and a pumping hole.

This is finer:—

Hip-chip-cherry, a' the men in 'Derry
Couldna climb (like) hip-chip-cherry.

Ans., The reek. I am indebted to Mr John Crinean, registrar, Moniaive, for what is perhaps one of the best examples of this class. He learned it from his mother, and in all probability it is much older:—

The bull bulled me,
 The cow calved me,
 The smith made me,
 And I grew in the wud.

Ans., The bellows. Here the component parts of bellows—the hide, the iron, and the wood—are all very ingeniously and accurately described. Some may consider the freedom of the language objectionable, but this at least can be said, it does not overstep the canons of the period to which it belongs.

It seems probable, as already indicated, that recreation was the primary aim of the riddle-maker. Many riddles possess an educative value, however, and a return to folk-riddle methods of instruction might do something in the direction of genialising present-day school life.

There was a man who had no eyes,
 And he went out to view the skies ;
 He saw a tree wi' apples on't,
 He took nae apples of't
 And he left nae apples on't.

Ans., The man had one eye, and he took one apple off a tree which had two on it at first.

Pass now to arithmetic. “ I met a man wi' a drove o' sheep. I says, ‘ Gude mornin' to you wi' your score o' sheep.’ He says, ‘ I havena a score, but if I had as many more, and half as many, and two sheep and a half, I would have a score.’ How many had he ?” Ans., 7.

In an arithmetical work by Thomas Dilworth, published towards the close of last century, I find a very similar question to this, only geese take the place of sheep, and the numbers are different.

A numerous class, less valuable perhaps from an antiquarian point of view, but nevertheless interesting, depend upon some verbal quibble or play upon words more or less cunningly hid away in the text. The following will serve as examples of this class :—

The Queen o' Sheba had a ship
 An' her daughter sailed in it.

I'm aye telling ye, but ye're no kennin'
The name o' the daughter in that ship sailin'.

Ans., Aun was the daughter's name.

There was a man rode up the toon
And yet he walked it.

Ans., Yet-he was his dog.

There was a man rode up the toon,
Great Grizzels was his name,
His saddle-lap was gilt with gold,
That's thrice I've told his name.

Ans., The word "was," which occurs three times, gives the name.

There was a king met a king in a short lane,
Coorieking, toorieking, where hae ye been?
I have been in the fields hunting the roe,
An' lend me your little dog an' I'll do so.
Call on him, call on him; what is his name?
An' I've called him thrice, call you him again.

Ans., Ann was the name of the dog.

"There was a joiner made a door and it was ower big; he took a bit off, and it was ower wee: he took anither bit off and it answered." Ans., The piece taken off at first was too small a piece, and on taking another piece off the door fitted.

Riddles of a curiously involved character are not uncommon
Here are typical examples:—

In comes two legs, carrying one leg,
Lays down one leg, on three legs,
Out goes two legs, in comes four legs,
Out goes five legs, in comes two legs,
Snatches up three legs, flings it at four legs,
And brings back one leg.

The solution is almost as intricate as the riddle; in giving it I make a free use of parenthesis for the sake of clearness. Ans., A woman (two legs) brings in a leg of mutton (one leg), places it on a stool (three legs), as she goes out (two legs) a dog (four legs) enters and runs off with mutton (five legs), woman returns (two legs), throws stool (three legs) at dog (four legs), and brings back piece of mutton (one leg).

Here is another of this class in which the riddlist effectively invokes "apt alliteration's artful aid":—

As I stood on my timper tillies,
 And looked through my wimper willies,
 I saw a muckle big bag
 In the whirly-whig-whag,
 I sent my little tig-tag
 To bring the muckle big bag
 Oot o' the whirly-whig-whag.

Ans., A woman on tiptoes looking through a window sees a cow among the turnips, and sends her little dog to bring the cow out.

Subjoined are a few others of a more general character. In some the merit as riddles may not be great, but the least meritorious in that respect not unfrequently stand highest in antiquarian value:—

What is't that's neither without nor within and it's aye on the dyke dryin'? Ans., The window.

I gaed away abune grun and I cam hame below't. Ans., A man goes to cut a sod and returns carrying the sod on his head.

What gangs away wi' the carriage, comes back wi' the carriage, is of no use to the carriage, and yet the carriage cannot do without it? Ans., The sound.

There is a wee hoose that's fu' o' meat,
 And there's neither door nor window in't.

Ans., An egg.

As wee as a mouse, as high as a house,
 And yet it canna get into the kirk door.

Ans., A star.

Doon in you meadow there lies twa swine,
 Ane's my faither's, the aither's mine;
 The mair ye gie them the mair they cry,
 The less ye gie them the quater they lie.

Ans., Two guns.

Two brothers we are, great burdens we bear,
 By which we are sorely oppressed.

Its strange to say we are full all the day,
And empty when we are at rest.

Ans., A pair of boots.

A meal-mill is described in language more vigorous than elegant :—

Ayont yon dyke, a dusty dyke,
I heard a fellow rout,
And aye he spewed, and aye he spat,
And aye he turned about.

Here is rather a gruesome example :—

There was a man in London,
Who learned his weans to read,
He was rotten before he was gotten,
And buried before he was deid.

Ans., The man was buried in a coal mine. London as the scene of a colliery explosion is certainly a novel conception. Then the information conveyed in the second line strikes one as scarcely germane, but, as some one has observed, the exigencies of rhyme are great.

As a rule, prose is despised by the riddle-maker, but this, like most rules, has its exceptions. Instance the following :—As I went ower yon muir I met a wee boy who was roaring and greeting. I asked him what was wrang wi' him, and he said his faither had died seven years before he was born, and he got bread and cheese at his burial. Ans., The boy's father was a dyer. This example is interesting, because of its reference to the once familiar dole of bread and cheese at funerals. The custom is now obsolete in Glencairn. I am told that the last occasion on which it was observed was the funeral of Sir Robert Laurie of Maxwellton, in 1848.

My last example with a solution has the national emblem for subject, an interesting addition, for which my acknowledgments are due to Mrs M'Gill, Moniaive, a native of Carsphairn :—

Nine taps, nine tails,
Nineteen score o' nails,
Ae elbow, ae fit,
What a gruesome beast was it !

Ans., The Scottish thistle.

In conclusion, I have a riddle for which no solution is forthcoming. If any of the members can make good this defect may I beg to be favoured with the answer :—

A blind man saw a hare,
 A dumb man cried “ Where ? ”
 A legless man ran and caught it,
 And a naked man put it in his pocket.

This is said to be a “ catch ” riddle, to which no answer can be given.

IV.—*The Battle of Sark.* By Mr GEORGE NEILSON.

The county of Dumfries has seen a fair share of fighting in its day, yet never within the clearly defined historic period has it furnished the site for a really first-class battle. That of Sark was one of the most considerable ever fought on Dumfriesshire soil. Unfortunately, the record of it is confused in the last degree ; its very date is with difficulty to be determined ; and the most circumstantial account of it comes from Hector Boece, a historian regarding whom the main problem always is how much of him one is safe to believe. The worst of it is that there appears to be no evidence from English sources to clear away the obscurities on this side of the Solway.

The Asloan MS., written soon after 1460, contains a series of memoranda of public events, in narrating which chronological sequence is too often disregarded, although its authority is reckoned of the highest. Next, after an entry dated “ the yer of God J^miii^cxlviij., the xxv. day of Februar,” occurs the following invaluable passage on page 18 of the print of the chronicle :—

“ That samyn yer, the xxiii. day of October, was the battell of Lochmabene Stane, within the perrische of Sanct Patrick. Quhar Hew of Douglas, erll of Ormond, was chiftane on the Scottis syde, and with him schir Jhon Wallace of Cragy, the lord of Jhonstoun, the lord Somervellis son and air, David Stewart of Castell Myll, the schireff of Air, with uthir syndry gentillis of the westland, and thair men was callit four thousand. And on the Ynglis syde the younger Persye, schir Jhon of Pennyntoune, schir Jhon Herntoun war chiftanis, and with thaim sex thousand of Ynglis men, quhar thar chiftanis war tane and fifteen hundred men with thaim slane, drownit five hundred. And on the Scottis syde xxvi.

slane and tane, but na man of reputacioun war tane nor slane, but schir Jhon Wallace deit efter that he come hame throu misgovernance."

The late Dr George Burnett, Lyon King of Arms, in his preface to volume vi. of the Exchequer Rolls (p. lx.), quotes from Law's MS. a passage regarding a battle of Lochmaben in October, 1458, which he suggests "seems to imply that on the 23rd of that month there was an unsuccessful invasion in the Douglas interest, and 600 English slain and 1500 captured." He, however, hints that it is probably an incorrect transcription from some earlier chronicle. The passage in question as printed runs thus:—

1458, xxij. Octobris. Bellum de Lowchmaban commissum est, ubi Scoti superiorem partem habuerunt et capitaneus castris Anglus junior . . . captus est. Lesi sunt Angli in illo bello vi^c. Anglorum. Acta sunt hec per Douglasses.

A year or two before his death I called on Dr Burnett to consult him about this extract, and to ascertain where Laws MS. was. He then told me that in printing a line of type had dropped out, thus explaining the fact of his preface giving fuller information than the citation. The MS., it proved, was one belonging to Edinburgh University; but as it has been amissing now for several years, I have not been able to look at it. It seems, however, to be practically certain that the allusion was not to an invasion by the Douglases, but to the battle of Sark, and that wherever the error crept in, whether by dropping out an x or otherwise, the date of the episode has been misrepresented by nine or ten years. For "Lowchmaban" it is easy to read Lochmabenstane, the name given with so much appôiteness by the Asloan MS.

Variety is pleasing perhaps in most things, but not in dates. One prefers uniformity for chronological purposes. Here is yet another account:—

"A.D. MCCCXLV. bellum de Sark ubi Scoti victores exstiterunt multis Anglicis captivatis."

This we owe to a continuator of Bower (ii. 515), and it is repeated with only verbal changes in the *Extracta e variis Cronicis* (p. 238).

Later historians throw no excess of illumination on the chronological crux thus presented. John Major, worthy man, had never heard of the battle. Hector Boece, however, had, and his flamboyant but well corroborated and—as I see no reason to doubt—

substantially truthful account of it has been the chief source of information for all writers subsequent. Boece (edition of 1574, p. 371) relegates the truce which followed the "recent battle" to the year 1450. Buchanan (xi., 29-31) declares that this truce was in 1448. Leslie dates the battle itself explicitly 1450. Holinshed and Pittscottie, closely following Boece, are indefinite as to the year of the battle. So there is a rather pretty problem of historical arithmetic to decide between 1445, 1448, 1449, and 1450, to leave 1458 out of count altogether. The state of the evidence could not well be worse: three possibly contemporary testimonies with three scarcely reconcilable verdicts—Bower's continuation speaks for 1445; Law's MS. for 1458; the Asloan MS. leaves open to debate whether it means 1448 or 1449. Interpreted by the letter it is for 1448, because the year at that time was usually computed as ending on 24th March. On the other hand, when we remember that the 25th February, 1448, was really 1449 by the modern style, and note that the sequence is a notice of an event in February, 144⁸/₉, followed by notice of an event in October of the same year, it becomes natural to think (apart from occasional undoubted confusions in the computation of the ecclesiastical and the public year) that the reference to October may, much preferably, be read to mean October, 1449.

A factor in the case is the great conference of borderers held under William, Earl of Douglas, at Lincluden on 18th December, 1448, when the code of tactics and military regulations was adjusted for the defence of the West March. Was it after or before the battle of Sark that it occurred to Earl William thus to assemble in council the experienced warriors of the West Border?

An important Dumfries episode calls also for a definitive assignment of its place in the series of events associated with the story of the battle. The Asloan MS. version of the matter runs thus:—

The yer of God J^miiiij^cxljx.—The birnyng of Dunbar be young Persie and Sir Robert Ogile in the month of May, and that samyn yer Drumfres was brynt be the erll of Salisbery in the moneth of Junij.

Boece, whose evidence here, as in the battle of Sark, is specially important because all the subsequent historians gained their information from him alone, states (p. 367) that in 1448 hostilities were renewed on the expiry of the truce, and that in the course of them "the town of Dumfries was shamefully plundered by the Earl of

Salisbury and consumed with flame," a fortune shared by Dunbar, after which a truce of seven years was arranged. In the municipal records there is no corroboration of the burning. The burgh's annual ferme to the crown fixed under feu charter at £20 1s was duly accounted for during all the years from 1445 until 1451 without any deduction for waste or disturbances, so that in the one quarter where assistance might have been expected we appeal in vain.

Interpreted as I have proposed—that is, reading October, 1449, as the sense of the date-reference to the battle of Sark—the Asloan MS. gives it to us in the same order as Boece, following the burning of Dumfries, the burning in June, 1449, the battle in October ensuing. A collation of these events and dates, with the official records of the relations between Scotland and England, shews that they fit in very exactly—indeed, that they explain adequately the various events in the *Fwdera* relative to negotiations for truce during 1449. This will be apparent from the present brief tabular statement of the chief events. The writs about the various truces during that troubled year are given in their entirety in the *Fwdera* under the dates they bear, but I have added citations, for convenience, of Mr Bain's indispensable Calendar. The entries in italics are from the Asloan MS., pp. 27 and 18.

1444, May 18.—Proclamation of 10 years' truce (Bain iv., 1167).

1448, Decem. 18.—Lincluden conference (Acts Parl. Scot. i., 714).

[The truce must prior to 10 May, 1449, have been broken.]

1449, May.—Percy and Ogle burn Dunbar.

1449, May 10.—James II. appoints commissioners to negotiate a truce (*Bain iv.*, 1213).

June.—Salisbury burns Dumfries.

June 3.—Douglas burns Alnwick.

July 10.—Truce concluded at Winchester, to begin on 10th August and endure till 20th Sep. (*Ib.* 1213).

July 18.—Douglas burns Warkworth.

Aug. 10.—Truce begins (*Ib.* 1213).

Sep. 18.—Truce renewed till 19th Novem. (*Ib.* 1216).

[This must have been interrupted by hostilities.]

Oct. 23.—Battle of Sark.

Nov. 3.—James II. appoints commissioners to negotiate a truce (*Ib.* 1220).

Nov. 5.—Truce concluded at Durham (*Ib.* 1222).

1450, Jan. 28.—Sir John Wallace of Craigie still alive (Reg. Passelet, 82), although dead before 15th May, 1450 (Exchequer Rolls v., 394-5).

After this test the reasonableness, if not the accuracy, of the Asloan MS. as now interpreted can scarcely be disputed, and it is time to turn from chronology to the battle itself. It has been described with such admirable clearness, fulness, and vigour by our own M·Dowall that in going over it again the chief purpose to be served is to point out divergences in the authorities and to emphasise aspects not dealt with by the industrious and eloquent historian of Dumfries.

The Lincluden conference we can now see as a sign of the times. War was expected, and the western border was being put in a posture of defence in case of invasion. This was December, 1448; there was war in the spring; in May, 1449, Percy burnt Dunbar; early in June Douglas retaliated by burning Alnwick; that same month the enemy came to the west march, and all the beacons from Trailtrow hill to Corsincon failed to summon a power in time to secure Dumfries from fire. In July Douglas retaliated once more, singeing the whiskers of the Percy lion by burning Warkworth. So the cruel game of tit for tat went on, and one is almost forced to infer that this antagonism between Douglas and Percy was a main reason of the difficulty in making truces and the still greater difficulty of keeping them when made. In England, as in Scotland, there was, as Hall said, much "domesticall division within the realme," and Percy under Henry VI. was almost as absolute a potentate as Douglas under James II. Despite the truce of 18th September, Percy was evidently bent upon revenge in the West for the injuries he had suffered in the East. Accordingly in October an inroad into the West March was planned.

The expedition was led by Percy. The Asloan MS. names only the younger Percy, grandson of the famous Hotspur. Boece, however, names also the elder Percy, Earl of Northumberland, as himself present in the battle. With the Percies were Sir John Haryngton and Sir John Pennington, as well as—according to Boece—an officer of great experience trained in the wars of France, whom, on account of his long beard, the Scots termed in derision Magnus with the Red Mane.*

The English force is stated by the Asloan MS. at 6000 men, Boece characteristically vouching the higher figure of 40,000.

* There was, however, in the 14th century a Cumberland family called Redmane. Bain iii., 911, 1464, Rotuli Scotæ i., 658.

The Scottish force under Hugh Douglas, Earl of Ormond, numbered 4000 in horse and foot, which can by no means be considered a large muster. The presence of Sir John Wallace of Craigie, the Master of Somerville, and the Sheriff of Ayr, however, is a probable indication that some hint had got abroad of the intended expedition, and that there had been at least time for some hasty preparation. "Sundry gentles of the westland" are mentioned by the Asloan MS.; Boece is more express in his allusion to "Maxwell and Johnstone with a choice body of Scottish youth," words rendered by Buchanan as "Maxwell and Johnstone with their clansmen." There seems, therefore, no good ground for Hume of Godscroft's aspersion upon the county, that Maxwell and Johnstone's company consisted of "many inland gentlemen saith the manuscript, because they had no great confidence in their own Annandale men, who were more set upon spoil than victory." (House of Douglas [1743], p. 329.) Stewart of Castlemilk is the only other local chief named.

Ormond learned from his scouts, as Pitscottie—here as elsewhere faithfully if freely Scotticising Boece—words it with accustomed vigour, "that the Inglismen war cum in Annerdail and had transported their armie over the water of Sulway and had stented their palliones on the water of Sark." Still more definite was the localisation in the Asloan MS., which dubs the engagement the battle of Lochmabenstane. They had thus encamped close to the Scottish end of the ancient ford of Solway, from which the estuary took its name. They lay there over night, and early next morning set out to foray and plunder. They "harried and slew quhom evir they fand." On the approach of the Scots, who probably came upon them somewhat unexpectedly, they were recalled by trumpet, falling back upon their camp, where they were marshalled in battle order.

The Lochmabenstane—in Gretna parish, which includes the ancient parish of Rainpatrick, misnamed St. Patrick in the Asloan MS.—still stands wind swept on the Solway shore where the waters of Kirtle and Sark unite, a solitary granite boulder, the last survivor of a great stone circle. For several centuries it was a famed place for border meetings, warden courts, and the like. Amongst the least known of all the ancient monuments of Dumfriesshire, it is perhaps without a parallel in the multiplicity of its historic memories. It is a standing memorial of the old days of

division and strife. By that lonely stone the Englishmen stood in battle array. It may have been an excellent place for their encampment, but was ill fitted as fighting ground. Did the tide ebb or flow, were the waters of the Solway otherwise than at full ebb, it is obvious that the spot selected by Percy to give battle—whether by deliberate choice or in consequence of some surprise—was particularly unsafe. With the Kirtle on his left flank, the Sark on his right, and the Sark and the Solway itself at his rear, he had the odds tremendously against him in the event of a reverse. It is perhaps not unfair to postulate that the Scots had in some measure surprised him; but even in that view it was surely bad generalship to pitch camp on such a dangerous spot.

Redmane took command of the right wing or vanguard. Pennington, or Openeron as he is sometimes styled, had the rear-guard, with a contingent of Welshmen. Percy himself had the middle ward. There were many archers in the English ranks. On the other side “the Scottismen,” says Pitscottie, “placed thamsselfis verie craftielie.” Sir John Wallace of Craigie in Ayrshire was on the right wing. Herbert, Lord Maxwell of Carlaverock, and Sir Adam Johnstone of Lochwood, with their tribesmen, not yet divided by deadly feud, were in the left wing. Ormond himself had the middle ward.

Ormond was in the midst of a few cheering words to his men when the combat began in earnest with a hail of bolts and arrows upon the Scots so deadly that the vanguard staggered beneath it and was on the point of flight. But Wallace, worthy of the name he bore, with a brief and strenuous appeal nerved the hearts of his detachment with the consciousness of a good cause and a great hope of victory. “His men,” says Pitscottie, “war so inraged and rushed so furiouslie upoun thair enemies with aixes, spearis, and halbertis, and maid so great slauchter at the first to-cuming that they pat the Inglismen cleane aback from thair standard and compelled thame at the last to tak the flyght.” Redmane, determined to retrieve the impending disaster, dashed forward, too daringly, says Boece, to assail Wallace, but, hemmed in by the files of Scots, he was slain himself. A great triumph shout rose amongst the Scots that he had fallen; it echoed, carrying dismay as it went, through the English ranks. “Thair cam sick fear and dreadour upoun thame that they might not long susteane the preas of the Scottismen bot gave backs.” The Scots followed up their

gain and pressed hard upon the broken foe. History has more than once had somewhat to say of the long spears of Nithsdale and Annandale. Here they played a distinguished part. Buchanan tells that the enemy was discomfited by the long spears of the Scots wielded both by horse and foot—long spears for which Buchanan had ample warrant in Boece. Many were slain in the thick of battle; more in the flight. Then was seen the disadvantage of the place which Percy, unused to Solway warfare, had selected for his battle-line. The tide had risen, so that the English were in a very real sense between the devil and the deep sea. The water, as Pitscottie, after Boece as usual, quaintly records, “boldinit with the filling of the sea, caused many to lose their lyves and perisch in the watteris. Utheris, sieand this, doubted quhidder they would fight and die with honour or live with schame, and preferring the on to the other, were cruellie slaine apoun the water bankis.”

The fight was very bitter—“foughten with great crueltie.” On the defeated side the Asloan MS. states the slain at 1500 and the drowned at 500; Law’s MS. that the dead were 600 and the captives 1500; Boece and those after him that the English lost well nigh 3000, including 11 knights, besides whom were the prisoners—“a great multitude of men whom sword and tide had spared.” Pennington, captain of the Welsh, and Haryngton, as well as young Percy himself, were among the prisoners. The elder Percy, Boece says, effected his escape through the gallant devotion of his son, who helped him to horse. The Scottish loss was probably slight. According to the Asloan MS. it was only 26; according to Boece, 600. Wallace of Craigie received his death-wound, though he survived long enough to grant a deed to the Abbey of Paisley, which is the most interesting of documents for the story of the battle. The Scotch made a rich spoil in gold and silver and furnishings—“so great a booty,” says Boece, “as scarce ever happened before within the memory of man.” It was divided, he adds, amongst the soldiers, according to the law of the land, that law of custom, no doubt, of which a valuable part was written down at the Lincluden conference—“the statutis, ordnancis, and use of merchis that wes ordainit to be kepit in blak Archibald of Douglas dais and Archibald his sonnys dais in tyme of weifare.” Ormond returned in triumph to Lochmaben, where the

chief captives were lodged in the castle. So ended one of the greatest battles ever fought in Dumfriesshire.

Buchanan assures us that the Englishmen, relying upon the number and quality of their troops and the discords of the Scots, had come as secure as if they were marching not to a battle but to a triumph, so great was their self-confidence and so great their contempt of the enemy. Hume of Godscroft was equally unable to resist an opportunity for a chuckle at the English expense. Redmane, "too confident of his own sufficiency," was—as indeed Boece tells us—said to have stipulated as a reward for his services for a grant of all the lands he could win from the Scots. "A notable example," comments Godscroft, "to teach men not to be over confident in things of such uncertain event as are the wars; and, as our proverb is, 'Not to sell the bear's skin before he be slain.'"

It was a battle serving, of course, no national purpose, without so much as a respectable reason of State, probably begotten of sheer pride, sudden and fierce as a storm of April hail, without real cause, and with no result except that of probably inducing the immediate peace that followed. But from the standpoint of Dumfriesshire, as repelling an invasion, it was indeed a famous victory in a sense other than the sarcastic poet's. The glory has never been as exactly apportioned as doubtless the ransoms of the prisoners and the shares of plunder were—according to the law of the land. Godscroft is jealous for the renown of Ormond, the gallant young Douglas, destined to die by the hands of the executioner within seven years' time. The Kirkconnell MS. History of the Maxwells unblushingly claims all the laurel for Lord Maxwell, telling how the Scots were all but utterly discomfited by the host of England till "the said Lord Harbert came in with the rear guard and wan that feild by his vallor." The old Scottish historians with one voice, however, have remembered with generous praise the services rendered by the laird of Craigie.

Sir John Wallace, as we have seen, did not die on the field, but "efter that he come hame throu misgovernance." According to Boece:—"Carried home on a litter he succumbed to the fates in the third month after." *Tertio post mense*; the words prove curiously illustrative. On 28th January, 1449, old style, that is 1450, Sir John made before a notary express confession and acknowledgment that he had done divers wrongs to the monastery

of Paisley, had disturbed and troubled the monks, and had by unjust spoliation deprived them of their rents. He remembered it, he said, with sorrow, and it gave him many a pang. *Quod referens dolendo multipliciter penituit* (Reg. Passelet. 82-83). So now, on 28th January, he and his son together renounced all the claims formerly put forward under which these wrongs had been done and these rents uplifted. It is scarce possible to mistake this. It is a death-bed act, the dying man's restitution, that great prerequisite to the absolution necessary before the soul even of a victorious hero can pass into everlasting peace. We do not know what was the exact day of his death, although it is on record that he was dead before 15th May following. We can well suppose that the last hour was drawing near, the extreme unction soon to be administered, when on 28th January, 1450, just three months after 23rd October, 1449, he made this pathetic confession. Capable of being viewed in many lights—a justification of priestly right, an abuse of priestly power, an example of mediæval superstition, or a true case of a repentant conscience—it is even less dubiously historical than that splendid share in the battle of Sark which in a measure still lives on the lips of men. In the "Wallace Papers," the modest "Genealogie," dry and brief though it be, seems to linger for a moment of pride in telling how the Ayrshire family cherished as a monument and heirloom "the standard which he carried at the feight."

V.—*The Influence of Habitat on Plant Habit.* By Mr G. F. SCOTT-ELLIOT.

After a botanical expedition to Egypt, it seemed to me that it might be possible to show the dependence of Habit upon Habitat by a statistical method. I therefore, with the kind permission of Mr Carruthers, examined the Ranunculaceæ, Papaveraceæ, and Cruciferae in the British Museum, and also those in the Kew Herbarium, for which I have to thank the authorities. Unfortunately the number of specimens in which the habitat admitted of tabulation was very small; the labour of collecting is greatly increased by making notes of the habitat of each specimen, and very few consider such notes of any importance. In these 3 orders I only found 230 species in which both habit and habitat could be arranged under definite, distinct headings. The work

was suddenly interrupted, as I was urgently requested by Mr Thiselton Dyer to go to Sierra Leone, so that I was unable to finish the Compositæ which I had commenced.

The first habit of which I took note, the "rosette-type," consists of those plants in which all the leaves are radical and the stem forms no internodes whatever.

I found 33 plants belonging to this type in the 230 examined. These are shown in the first table.

TABLE 1.

ROSETTE PLANTS.

Cerastium macranthum	...	...	...	Rocks, Algiers
" scaposum	...	...	...	Rocks, Crete
" campanulatum	...	...	...	Sand, Naples
Iberis, 19*	...	...	...	Dry places
Lychnis alpina	...	...	...	Rocks ?
Thlaspi, 6, 8, 10, 20, 21, 23...	...	...	...	Rocks
Sisymbrium, 32	...	...	...	Desert
Arabis, 6, 10, 11, 12, 13	...	...	...	Rocks
Cardamine, 13, 14, 15	...	...	...	Rocks, Alps
Alyssum, 5, 6, 7	...	...	...	Athens
Diplotaxis, 3, 5, 6†	...	...	...	Exposed places
" 10	...	...	...	Sandy waysides
" 11	...	...	...	Seaside
" 13	...	...	...	Midian Desert
Sinapis, 10	...	...	...	Calcaire aride
Brassica, 24	...	...	...	Algeria
Lepidium, 21, 22, 23...	...	...	...	Stony mountains.

It will thus be seen that of these 33 species 16 grow on rocks, 13 in dry countries, and 4 in sandy places.

All these habitats involve more than an average amount of exposure, or in other words, the plants growing in them are subjected to more than the usual amount of transpiration; I have myself noticed the abundance of the rosette type of plant in such places, *e.g.*, as the "barrancos" of the Canary Islands, on the dry sandy shores of South-Eastern Madagascar, at the junction

* The numbers are species in Nyman's *Conspectus*.

† The rosette form in these 3 occurs only in exposed habitats.

of the Sahara and the alluvium of the Nile; Lindmann has also pointed out that it is very common at Cadiz (1), Meigen found this type prevalent in the Chilian Desert (2), &c.

But when we find a plant becoming a rosette in a habitat of great exposure only and *not* taking on this habit when it is not subjected to great transpiration, then it is better evidence of the effect of habitat.

I found that *Diplotaxis* 3, 5, 6, and *Thlaspi* 3, 12, 13, 14, 15, 16, 19, all have internodes in sheltered places but become rosettes in exposed habitats. Wiesner was able to form internodes in the Shepherd's Purse, *Capsella* by growing the plant in moist air, but this was not possible with the Dandelion (3, 4). This is what we should expect if the habit is at once a result of habitat, but may become fixed by heredity if long enough continued.

In order to see the effect of rocks more clearly I re-examined the orders named to find how many other species were noted as growing on rocks. There were 14 so described. (See table 2.)

TABLE II.

OTHER PLANTS GROWING ON "ROCKS."

<i>Farsetia</i> , 1, 2, 3	...	...	...	...	Very woolly
<i>Sinapis</i> , 4	...	...	...	...	More hairy
<i>Fumaria</i> , 27	...	...	...	...	Fleshy leaves
<i>Iberis</i> , 18	...	...	...	...	Fleshy leaves
<i>Euromodendron</i>	...	...	...	...	Ericoid shrub
<i>Matthiola</i> , 7	...	...	...	...	Very woody
<i>Turritis</i>	}	...	...	...	{Not specially
<i>Arabis</i> , 1, 2, 3, 4, 5		

The *Turritis* and *Arabis* spp. are probably not xerophytes, but all the others show the characteristic modifications of a dry climate *v.* Tschirch (5), Volkens (6), Henslow (7), &c.

I also tabulated the number of woolly or very hairy plants, and found that 21 out of the 230 species could be fairly included.

As shown in Table 4, 9 grow in such dry countries as Greece, Syria, Spain, and Algiers, 4 are true desert forms, 6 prefer rocks or stony places, one is a seaside form, and the last is an Alpine species of which I have no further details.

TABLE III.

HAIRY AND WOOLLY PLANTS.

Ranunculus, 6 (variety)	...	...	Deserts
Delphinium, 14...	...	...	"
,, 7 ...	...	...	Greece
,, nanum	...	...	Stony places
Matthiola, 5	...	...	Deserts
Vella	...	...	Mont. Calc, Spain
Farsetia, 1, 2, 3	...	...	Dry rocks
Aubrietia	...	...	Arid places, Syria
Alyssum, 5, 6, 7	...	...	Athens
,, 8	...	...	Fragments calcaireaux
Sisymbrium, 32...	...	...	Deserts
Malcolmia, 9, 10	...	...	Spain, Algiers
,, 11	...	...	Maritime sands
Cerastium latifolium	...	...	Alpine
,, tomentosum	...	...	Mountains, Greece
,, pedunculatum	...	...	" "

Now Volkens (6), Lindman (1), Areschoug (8), Henslow (7), and others have shown that hairy and woolly plants are more abundant in the dryer parts of the Mediterranean, South Africa, Australia, and South America.

Moreover, within one genus one can often find that the moist habitat species have lost their hairs whilst the dry habitat forms have retained them. This has been shown by St Alder for the British species of *Myosotis* and *Veronica* (9), and for *Oxalis* in Chili by Meigen (2 t). But as hairs are commonly used by plants for at least 8 different purposes it is not surprising that there are many exceptions.

The variation within the limits of one species according to habitat are more convincing. On this point Linnæus says, "hirsutiem plantæ sæpius exuunt a loco vel cultura" (10). A very good example is the common *Polygonum amphibium*. Buckman (11), Battandier (12), Henslow (7) give an account of five different species which vary in this respect. To these I would add the cases of *Ranunculus* (11) and *Roemeria* (1), which are more hairy than usual in dry and sunny places. Min. Vesque and Viet (13) have also found that when plants are sown sparsely

the development of hairs is favoured ; this is an indirect confirmation of the result of exposure. The researches of Wolny (14).

A recent paper by Keller (15) ends with the conclusion that a hair-covering, or the rudiment of one, exists in almost all plants ; this is the case with, for example, the young leaves of the ivy, Aucuba, Magnolia, &c. If this is true, the hairy coat if useless will vanish with maturity, but if of some advantage it will be preserved. One might almost trace the stages of fixation ; for, in Polygonum amphibium, the hair-covering varies with the exposure of the individual plant ; in Daucus carota it may be gradually reduced by cultivation ; but, in the common garden plant, Cerastium tomentosum, the down persists even in the moisture of the British Islands.

Amongst the 230 species I found 9 which were either of the very thorny type of Sonchus spinosus or of that represented by Zilla myagroides. All these, as one would expect, *vide* Linnæus (19), Stapf (16), Lubbock (17), Lothelier (18), Mittmann (19), &c., are from dry and arid places. There is also some direct evidence, for Rolfe states that pruning increases the number of spines (20), and Henslow found that Ononis lost its spines when cultivated in moist conditions.

TABLE IV.

AFTER THE SONCHUS SPINOSUS AND ZILLA TYPE.

Lepidium, 15	...	...	...	Palentine
Matthiola, 11	...	...	...	Greece and arid countries
Oudneya	...	...	...	Algerian Desert
Farsetia linearis	...	...	...	Egyptian Desert
„ Aegyptiaca	...	...	...	Egyptian Desert
Sisymbrium, 17	...	...	...	Australia
Zilla	...	...	...	Egyptian Desert
Delphinium, 10	...	...	...	Waste places, Dardanelles
„ anthoideum	...	...	...	Sandy, dry places

Another type of plant very common in South Africa has no very good example in this country ; it may be called the Aptosimum type. It is a low-growing densely branched tiny shrub, often not more than a few inches in height, and forms a sort of matted cushion well adapted to arid conditions.

Belonging to this type, I found 7 species amongst the number examined.

TABLE V.

AFTER THE APTOSIMUM TYPE.

Sisymbrium, 20, 21	...	...	...	Spain, Syria
Alyssum, 26, 27	...	...	...	Sunny places, Orient
Matthiola acauis	...	...	...	Deserts. Egypt
„ humilis...	...	...	...	„ „
Fumaria, 20	...	...	...	Greece

There were also 15 species in the 230 examined with leaves distinctly smaller than usual. In some cases the leaves were entirely absent, and the plant had rigid, leafless, often grooved or furrowed branches like the Retama.

These are given in Table 6.

TABLE VI.

SMALL LEAVES OR RETAMA-LIKE.

Delphinium, 14	...	...	...	Deserts
„ nanum	...	...	...	Stony places
„ Balansæ	...	...	...	Deserts
„ virgatum	...	...	...	Sandy waysides
„ 9	...	...	...	Deserts
Lepidium, 15	...	...	...	Palestine
Farsetia linearis	...	...	...	Egypt
„ œgyptiaca	...	...	...	„
Cardamine, 12	...	...	...	Plaines marécageuses
Sisymbrium, 3	...	...	...	Syria
„ 9, 11	...	...	...	Spain
„ 25	...	...	..	Arabia, Palestine
Iberis, 23	...	...	...	Calcareous soil

As we should expect from the conclusions of Tschirch (5), Johow (21), Volkens (6), Lindmann (1), Meigen (2), Areschoug (8), Henslow (7), and myself (22), the majority grow in dry places.

There is an exception, for the Cardamine is said to grow in "plaines marécageuses." If this means estuarine mud, it can be understood, for seaside plants are subjected to strong transpiration, but I have not gathered the plant myself.

There is also direct evidence, for Stahl (23), Dufour (24), Sorauer (25), and myself (22) have shown that leaves are reduced in surface by exposed conditions.

I have tried to show that the general conclusions obtained in the field may be verified both by statistical comparison in the herbarium and by culture experiments so far as these have been attempted. It is not easy to see what else is required to show the dependence of habit upon habitat. Moreover, the evidence is more convincing than it appears at first sight, for each additional example is not merely another probability but it doubles the probability. To prevent misunderstanding I must state first that this work was finished before the appearance of Professor Henslow's book though I have quoted 5 of the authorities cited in that work. Most unfortunately his work denies the existence of any struggle for existence : to me it seems as if the struggle is more intense amongst desert plants than it is anywhere else.

I cannot deny that this reasoning involves the inheritance of acquired characters, but as Professor Weismann himself admits the possibility of such inheritance (26), although his followers in this country still deny it, this does not affect the results. Even if Professor Weismann still maintained the position which was insisted upon most strongly in his first publication, it seems to me that this direct evidence by many independent observers ought to prevail against speculations without any evidence at all. It is perhaps injudicious of me to introduce the name of Professor Weismann at all, for Jager seems to have been the first to speak of the continuity of the Keimplasma and Nussbaum claims priority for the idea that the Keimzellen are immortal (27).

I should not have mentioned these facts if it were not that, in the discussion following my first paper on this subject, I was told that my facts must be wrong because they did not suit Weismann's theory.

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30th July, 1897.

A Special Meeting was held for the purpose of presenting Dr Chinnock with a testimonial on his retiral from the Secretariate. On the motion of Mr John A. Moodie, Mr William J. Maxwell, V.-P., was called to the chair. Mr Maxwell made some eulogistic remarks upon the way in which Dr Chinnock had carried out his duties for over eight years, and then presented him with a purse of sovereigns, collected by the Hon. Treasurer, Mr J. A. Moodie. Mr Chinnock made a suitable reply, and then the Rev. William Andson proposed that, in consideration of his services, Dr Chinnock should be elected an honorary member, which was carried unanimously.

FIELD MEETINGS.

5th June—Kirkcudbright.

On Saturday about a dozen members visited Kirkcudbright. There they were joined by a few kindred spirits, and drove in a Highland brake from the Commercial Hotel in the direction of the Lake and Torrs heughs. The drive led by St. Mary's Isle gate and Park House, the old road to Kirkcudbright, abrogated by Lord Daer, being passed on the left. At the Look-out a fine view was got of the lighthouse on Little Ross Island, and of the spur of St. Mary's Isle, where Paul Jones landed in the course of his famous escapade. The Black-Murray Well, connected with a well-known legend involving more or less mythical incidents, only received a hurried passing glance. It is said that at this spot not only was a noted robber drowned with brandy where he expected water, but ghosts have been seen by respectable persons. The drive ended at the warning post at the commencement of the Lake Wood, from which a six or seven mile walk was undertaken. The pace had thus to be rather hurried. Shortly after entering the Lake Wood the remains of a faintly-outlined Druidical circle were noted just opposite the handsome new lifeboat house. Further on, on the left, a hill was shewn which is marked on the Ordnance Map as King William's Battery, a description, it should be said, which is received with pronounced scepticism by many inquirers. It has to be said, however, that Dr Muter, in his Statistical Account of Kirkcudbright (1794), states that King William erected a battery on Torrs to protect his fleet while it was weather-bound in the Lake. It was incidentally mentioned that the famous Willie Marshall, the centenarian Galloway gipsy, served in King William's army. The famous oyster rock, or "Long Robin," was next passed, just opposite a grove of trees planted at the instance of Lord Daer, than whom no one has left on the landscape of that side of the Stewartry more indelible traces

of his personality. A fine view of the enchantingly wooded Senwick shore was got here, with the towering hills of Gatehouse in the distance. The pleasant prospect, the calm waters of the Lake, the soft note of the sea-gull, all called for a halt that the scene might be thoroughly enjoyed. Near by is the Torrs Cave, which some of the party visited and were somewhat disappointed with on account of its shallowness.

The company then made a detour toward Balmae, passing on the way some old-fashioned lunket holes in the dykes. Through the courtesy of the Countess of Selkirk, the party were shewn round and through the beautiful and beautifully kept gardens by Mr M'Guffog, the gardener, and his principal assistant, Mr Cochrane.

The members next walked to Townhead, passing on the way Gaerbantorigum. At Townhead School the conveyance awaited them and drove back to Kirkcudbright, where they had tea in the Commercial Hotel.

The Kirkcudbright party included Mr M'Kie, R.N.; Mr Hornel, artist; Mr James Nicholson, antiquarian; and Mr William Thomson, the shoemaker botanist. The latter furnished the following notes of the botanical plants he noted on the route:—The first plants picked up were in a field at the Lake, the *Bladder Campion*, *Silene inflata*, and a specimen of the wild carrot, *Daucus*. In the Lake Wood the wild hyacinth flourished with the purple orchid. An abundance of the beautiful sea pink grew on the shore, and in the wood there were observed the Dog Mercury and a profusion of the greater *Stitchwork Stellaria*, and just on leaving the wood fine specimens of the Adder's Tongue fern were got. While at Torrs Point the botanist of the party was requested to indicate the locality of the Sea Kale, which appears in various lists of the plants of the district. He unhesitatingly replied that to his own personal knowledge there had been no such plant on Torrs shore during the last fifty years, although he understood it had once made its home in Flint Bay on that coast. Specimens of Samphire are to be got between Torrs Point and the Cove, but the excessive heat and condition of the tide prevented the botanist securing a specimen. The flora of the Torrs shore may not be considered a rich one as compared with a more sandy shore, but the cliffs are rich with the sea bladder, pinks, stone-crops, rock rose, and the striking blue milk wort. A fine specimen of the Scotch Loavage was got in the cliffs, and the common hemp

agrimony, *Eupatorium Carmabinum*. In Balmae gardens Mr M'Guffog pointed out two nice Alpine plants growing profusely on the southern exposure of the garden wall—one the *Arenaria Alpina*, and the other growing in festoons, *Linaria Cymbalaria*, or locally better known as “Wee Wandering Tailor.” On leaving the gardens fine examples of the Moonwort were picked up.

3rd July—To Burnfoot, in Eskdale.

By Mr W. DICKIE.

On the invitation of Colonel W. E. Malcolm, the society paid a visit to his residence of Burnfoot, in the parish of Westerkirk. There they had the pleasure of seeing not only the many interesting memorials of a distinguished family that are in the possession of its present honoured representative, but also treasured relics of the battle of Otterburn and of the combat of Earl Douglas and Harry Hotspur, which are in the keeping of Mr Malcolm's daughter, Mrs Palmer Douglas, of Cavers. The journey as arranged involved a circular drive of some forty-seven miles, with Annan as its base, and traversing the parishes of Annan, Middlebie, Langholm, Westerkirk, Canonbie, Half-Morton, Kirkpatrick-Fleming, and Dornock.

Starting from Annan, the first part of the drive was by the Kirtlebridge road, through a bit of pleasantly wooded country, skirting the policies of several mansions, passing the extensive and busy Corsehill freestone quarries, and on to Kirtlebridge station and the thriving village of Eaglesfield, with its cottages scattered in picturesque irregularity among well-stocked gardens. Charming views opened up as the party proceeded. Burnswark on the one hand dominated a stretch of gently sloping land diversified in colour by bright green corn fields and the bare brown of turnip land, and freely dotted with timber clumps. In the foreground stretched the fine old woods about Springkell, which encircle the graves of “Fair Helen” and her lover Fleming. Away in the distance the tapering monument to Sir John Malcolm was seen like a beckoning finger crowning the Whita Hill, just over the town of Langholm. Pushing on by Waterbeck—the cosy and busy village associated with the enterprise of the Messrs Carlyle—the valley of

the Kirtle and its tributary streams was ascended, first by easily winding stages, amid fields from which the population of distant Dundee draws its daily milk supply. Disused lime quarries at several points indicate the nature of the geological formation. As the road winds past West Linnbridgeford and the hamlet of Laurie's Close, we get among purely pastoral regions, bleak and treeless, and the ascent becomes so toilsome that the vehicles are lightened. A short halt is called at the little moorland inn named Callister Hall, that sits on the dividing line of the watershed, some seven hundred feet above sea level; and here we look back over a beautiful panorama of hill and dale and stream that is closed with the Solway's silver streak and Criffel, its sentinel hill. Thence at a smart pace we run down the Wauchope valley, tracing first the course of its upper tributaries, the Bigholm and the Logan burns; and a spin of six miles brings us to the town of Langholm, where the Wauchope joins the Esk. But first we make a halt at Wauchope old churchyard, which is still one of the burial-places for Langholm, and view in its immediate vicinity the site of the ancient castle of Wauchope. The Rev. Mr Buchanan, the parish minister, Mr Scott of Arkinholm, and Mr Hyslop, chairman of the Langholm Parish Council, here awaited the party and pointed out the scanty remains of masonry which mark the foundations of the castle, the line of the moat where it can still be traced, and the remnant of an abutment for the drawbridge. The castle wall has been built on the precipitous bank of the Wauchope, that is at this point a rugged ravine. At the other side the entrenchments are now intersected by the public road. The history of the stronghold is almost an entire blank; but it is said to have been the seat of the Lindsays, who were a formidable family on the borders in the fourteenth century, as we may infer from a reference to them in the ballad of "Chevy Chase."

The Gordons gay, in English blude
 They wat their hose and shoon;
 The Lindsays flew like fire about
 Till all the fray was done.

A Lindsay was also associated with Bruce and Kirkpatrick in the slaughter of Comyn at Dumfries. Among the *débris* with which the ground is cumbered there was picked up some time ago a metal hasp curiously worked in serpent pattern, which was purchased from the finder for the national museum of antiquities in

Edinburgh. A little further along the banks of the stream, and just at the foot of the manse garden, is another piece of ancient masonry, which has obviously been part of the abutment of a bridge. It has been a narrow structure, about ten feet in breadth, the north and south sides being still well defined. There are also some of the surface paving stones still in position. It lies on the line of a Roman road, and this naturally leads to the conjecture that it may have been constructed by the legionaries and the craftsmen who accompanied them. This, however, is not a necessary inference, as it may be the work of later generations who used the Roman way, and the narrowness of the structure gives some colour to this hypothesis.

Driving through the new town of Langholm, past the Academy, and skirting the ducal demesne, the horses had another bit of stiff collar work as they threaded their way among the moorland that overhangs the upper valley of the Esk, among which is Craigeleuch, the residence of General Sir John Ewart. Soon afterwards Burnfoot mansion came into view, nestling cosily among a wealth of umbrageous trees in a little circular plain in a cup of the hills by the side of the streamlet, "the Burn," from which it has received its name. Colonel Malcolm here awaited his visitors, accompanied by his son-in-law, Captain Palmer Douglas of Cavers, Mrs Palmer Douglas, and several other relatives. He extended to them a cordial welcome; and after a short walk in the grounds and a peep into the conservatories, they were conducted to a marquee, in which the people of the parish, old and young, had been fêted on the previous day in honour of the royal diamond jubilee. Here a substantial luncheon was served. Before rising from the table Mr Murray, Dumfries, voiced the thanks of the company to Colonel Malcolm for his kindness in inviting them to his charming residence and for the generous hospitality extended to them. Colonel Malcolm assured them that it afforded him great pleasure to receive the visit, and remarked on the good to be derived from a study of the works of God in nature and from antiquarian pursuits, recalling the saying that there is nothing in the present which has not its roots in the past.

Adjourning to the museum, which forms an annex to the mansion-house, the visitors had pointed out to them many of the more interesting objects in the extensive and valuable collection.

Colonel Malcolm's father, Admiral Sir Pulteney Malcolm, G.C.B., was one of four brothers who by high service to the State individually won the honour of knighthood, and who collectively became known as "the four knights of Eskdale." As captain of H.M.S. "Donegal," he took a Spanish three-decker immediately after the battle of Trafalgar. It was in the same ship in which the Duke of Wellington (then Sir Arthur Wellesley) was conveyed to Lisbon to assume the command of the Peninsular army on the death of Sir John Moore, and Captain Malcolm received from him the gift of a volume, an Indian register, which is here preserved. The fly-leaf bears the inscription:—"Capt. Malcolm, Donegal, from Sir A. Wellesley. August, 1809." For naval services in the West Indies Sir Pulteney received the thanks of both Houses of Parliament. He was also Admiral of the fleet which had charge of the island of St. Helena while it was the place of Napoleon's exile; and his diary, which is soon to be published, may be expected to throw fresh light on Napoleon's life during his period of captivity. Among other mementos of the fallen Emperor there are here a lock of his hair, a piece of cloth from his coat, and a coloured portrait-sketch. Sir Pulteney is commemorated in Langholm by a statue, the work of the Dumfries sculptor, Mr David Dunbar. Sir John, third in point of age of the knightly quartet, was distinguished as a diplomatist, representing this country repeatedly as Minister-plenipotentiary at the Court of Persia; as a soldier and a statesman; as an historian of Persia and India; and as an Oriental linguist. In India he held the position of Governor of Bombay. His work as one of the founders of our Eastern Empire called forth a warm eulogium from Canning in the House of Commons; and is commemorated by a statue in the "statesman's aisle" of Westminster Abbey, where it stands by the side of Lord Beaconsfield's. It is also to the memory of Sir John that the monument has been erected on Whita Hill in his native Eskdale. Among the relics in Burnfoot museum associated with his name is the official seal which he used at the Persian Court. It is a massive piece of silver, somewhat bell-shaped, and quite the size of a brass pound-weight such as you find on a grocer's counter. There are also in the museum memorials of Sir James, who served with Nelson and Howe, and of Sir Charles, a naval officer, whose most illustrious service was given to India. The collection includes

numerous handsome examples of Indian and Persian arms and articles illustrative of native habits ; and the staircase is covered with skins of lions, tigers, leopards, and zebras, trophies of the chase accumulated during residence in Eastern lands. A choice collection of Eastern antiquities includes a brick from Babylon, with cuneiform inscription in seven lines, setting forth the name and titles of one of the Kings Nebuchadnezzar ; an Assyrian marble, with figures in relief ; Egyptian and Indian carved work. Native antiquities also are represented, among one of the objects being a fine example of the old British targe ; and there are numerous zoological specimens and a good collection of minerals.

An unexpected treat was afforded to the party by the sight of the Otterburn relics from Cavers, Captain and Mrs Palmer Douglas having very kindly brought over the treasured heirlooms for their inspection. First in natural sequence we ought to mention the gauntlets. The story attaching to these is that Earl James Douglas, having in 1388 made a raid across the border, penetrated as far into Northumberland as the town of Newcastle, and before its castle walls he hurled a personal defiance at Earl Percy, who was in command of the garrison.

“ If thou’rt the lord of this castel,
Come down and fight wi’ me,
For e’er I cross the Border fells
The tane o’ us shall dee.”

He took a long spear in his hand,
Shod with the metal free,
And forth to meet the Douglas then
He rode richt furiouslie.

But oh, how pale his lady look’d
Frae aff the castle wa’,
When down before the Scottish spear
She saw proud Percy fa’.

Thus sings the ancient minstrel in the voluminous stanzas of “Chevy Chase.” This Earl Percy was the Hotspur whom Shakespeare makes Henry IV. describe, with envious praise, as

A son who is the theme of honour’s tongue ;
Amongst a grove the very straightest plant.

When he came down to encounter the Douglas in single combat he carried on his lance his lady’s favour, after the chivalrous

fashion of the time. This favour was in the form of a pair of lady's gauntlets, on which the white lion, the Percy cognizance, was several times outlined in pearls, and which were richly fringed with filigree work in gold. When he was borne to earth the Douglas carried off this trophy. Tradition represents the victor as boasting to the Percy that he would carry it home to his castle of Dalkeith, but intimating that he would place it for three nights in front of his tent to give him an opportunity of recovering it if he could by force of arms. We know that Percy did not succeed; for here are the identical gauntlets, remarkably well preserved, still in possession of the Douglas family, the rows of pearls intact, the silk lining still retaining its pink hue, although the outward material is necessarily much faded. The Scots were certainly pursued, and the battle of Otterburn, among the Cheviot hills, was the sequel. Douglas, according to the balladist, had presage of its issue.

“But I ha'e dreamed a dreary dream.

Ayont the Isle of Skye

I saw a dead man win a fight,

And I think that man was I.”

He fell in battle; but his friends obeyed his behest to “hide me by the bracken bush,” and carry his standard still in the thick of the fight, rallying his men with the victorious cry—“A Douglas! A Douglas!” The standard-bearer was Archibald Douglas, ancestor of the family of Cavers, who became hereditary Sheriffs of Teviotdale, and the standard, together with the gauntlets, remains in their possession to this day. It is a green flag thirteen feet long, of the tapering pennon shape, having a lion emblazoned in the centre of the field, together with the heart and the three stars of the Douglas arms. The Norman-French legend, in bold lettering—“Jamais arryere,” “Never behind”—is the mediæval equivalent of the modern Douglas motto, “Forward.” The flag is in somewhat frail condition and requires to be handled with great care. One rent in it had been mended by Sir Walter Scott when on a visit to Cavers, and the white stitches which he had been induced to put in it further enhanced the interest in the precious relic.

Descending to the dining-room, the visitors had an opportunity of seeing the family portraits. These include two by Raeburn—George Malcolm, who farmed Burnfoot before it had

been purchased by the family, and his wife, Margaret Pasley of the Craig, an Eskdale property, sister of Sir James Pasley, a distinguished naval officer. These were the parents of the four knights of Eskdale, and of six other sons and seven daughters besides; consequently the grandparents of Colonel Malcolm. The four knights figure, of course, in the portrait gallery, as do also another brother (Gilbert), who was an English clergyman, and two sisters—Agnes and Mina, the latter of whom Colonel Malcolm characterised as the genius of the women of the family. The Hon. William Elphinstone, Colonel Malcolm's maternal grandfather, and Sir George Elphinstone (Lord Keith) are also represented by portraits; and there is a portrait painting of the Court of Persia, in which Sir John Malcolm is a prominent figure.

Bidding adieu to their most kindly host, the party resumed the journey, proceeding this time towards Langholm through the beautiful policies of Langholm Lodge, the seat of the Duke of Buccleuch. The drive along the Esk to Canonbie presents a remarkable wealth and variety of sylvan beauty, and pretty peeps of river scenery, and takes us past Johnnie Armstrong's old tower of Gilnockie. At the Cross Keys Inn tea awaited the company. Thus refreshed they entered on the last stage of the journey—a fifteen mile drive across country to Annan, passing the hamlet of Glenziers, the larger village of Chapelknowe, and after a run through Solway Moss emerging on a tract of rich arable land, with the old tower and modern mansion of Stapleton as one of the features of the landscape.

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AND

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OF THE

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Natural History and Antiquarian Society

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PROCEEDINGS AND TRANSACTIONS
OF THE
DUMFRIESSHIRE AND GALLOWAY
NATURAL HISTORY & ANTIQUARIAN SOCIETY.

SESSION 1897-98.

22nd October, 1897.

ANNUAL MEETING.

MR ROBERT MURRAY, V.P., in the Chair.

New Members.—Mr James Clark, M.A., rector, Dumfries Academy; Rev. Wallace M'Cubbin, Wendover; Rev. Joseph Hunter, M.A., F.S.A. Scot., Cockburnspath, Dunbar; Mr J. M'Gavin Sloan, editor, *Dumfries Courier and Herald*; Mr Miles Leighton; Provost Glover; and Mr Hope Bell of Morningston.

Donations and Exchanges.—The following were laid on the table:—Fourteenth and Fifteenth Annual Reports of the Bureau of Ethnology, U.S.A.; Report of Smithsonian Institute for 1895; Year-Book of U.S. Department of Agriculture for 1896; Proceedings of Davenport Academy of Natural Sciences, Vol. VI., 1895-6; Transactions of the N.Y. Academy of Sciences, January, 1897; Proceedings of Academy of Natural Sciences of Philadelphia, Part III., 1896, and Part I., 1897; Journal of the Elisha Mitchell Scientific Society for 1896, Parts I. and II.; Proceedings of Canadian Institute, February, 1897; U.S. Department of Agriculture, Farmer's Bulletin, No. 54; Some Common Birds in their relation to Agriculture, by F. E. Beal, assistant ornithologist; Proceedings of the Natural Science Association of Staten Islands, Vol. VI., Nos. 5, 6, 7, and 8; Ulster Journal of Archæology, Vol. III., Part 4; Proceedings of Belfast Naturalists' Field Club for 1896-97; Report of the Marlborough College Natural History Society for 1896-97;

Stirling Natural History and Archæological Society's Transactions, 1896-97; Transactions of Manchester Microscopical Society for 1896; Korean Interviews by Edward S. Morse (presented by the author); Papers from the Proceedings of the Society of Antiquarians of Scotland on Excavations at Birrens and Roman Roads in Dumfriesshire, by Dr James Macdonald; Bulletin of the Geological Institution of the University of Upsala, Vol. III., Part I., 1896, No. 5. Dr Martin, Holywood, presented papers by Sir William Dawson on the Great Ice Age, *Eozno Canadense*, and a number of other subjects.

SECRETARY'S REPORT.

The Interim Secretary (Dr J. Maxwell Ross) then read the Annual Report. At last annual meeting the membership was 185, 17 being honorary. Since then two members have died and seven new members have been elected. The present membership is thus 190, of whom 17 are honorary. The Society has sustained a severe loss in the deaths of Mr James Shaw, Tynron, and Mr William Galloway, Whithorn. The former was an enthusiastic and highly respected member of over thirty years standing, the latter an honorary member, well known as an antiquarian, and more especially for his researches at Whithorn. Both were valued contributors to the Transactions. The active services of two office-bearers have also been lost through the removal of Mr Philip Sulley and Dr Chinnock from Dumfries. Mr Sulley was an enthusiastic antiquarian, and filled the post of vice-president with much acceptance. Dr Chinnock was for several years secretary, and on his retirement was unanimously and cordially elected an honorary member, besides being presented with a tangible recognition of the Society's appreciation of his labours.

Eight monthly and two field meetings were held. One of the monthly meetings was an open one, the paper for that evening being of the nature of a lecture by Mr Richard Bell of Castle O'er on the keeping and breeding of the Ostrich and Emu in Dumfriesshire. Including this paper, twenty-one were submitted to the Society, of which four pertained to natural history, one to meteorology, two to folk-lore, and fourteen were historical or antiquarian. Four specimens were exhibited, being two celts, found at Kells, Southwick; a stone supposed to be a bullet-mould, found at Woodside, Kirkbean; a stone hammer, found in Glencairn; and a Massachusetts shilling of date 1746. Presen-

tations of three Dumfries broadsheets of 1863 65, and volume of Transactions for 1876-1880, were made by Mr J. G. H. Starke of Troqueer Holm.

The Field Meetings were to Kirkcudbright and Burnfoot, Langholm. At the latter members enjoyed the hospitality of Mr Malcolm, and had afterwards an opportunity of examining the many interesting specimens in his private museum.

TREASURER'S REPORT.

The Treasurer (Mr J. A. Moodie) read his Annual Report, from the 1st October, 1896, to the 30th September, 1897:—

CHARGE.

Subscriptions from 154 Members at 5s each	...	£38	5	0	
Do. ,, 8 ,, 2s 6d ,,	...	1	0	0	
					£39 5 0
Entrance Fees from 13 New Members	...		1	12	6
Life Subscription from Mr Samuel Smith, M.P....	...		2	2	0
Arrears of Subscriptions paid	...		1	10	0
Copies of Transactions sold...	...		2	3	0
Interest on Bank Account	...		0	3	1
Balance due to Treasurer	...	£15	11	8	
Less Balance in Savings Bank	...	1	7	0	
					14 4 8
					<u>£61 0 3</u>

DISCHARGE.

Balance due to Treasurer at close of last Account..	£2	11	3		
Less Balance in Savings Bank...	1	3	7		
				£1 7 8	
Paid Salary of Keeper of Rooms and additional Allowance for Heating Rooms during winter months	...		2	12	6
Paid for Stationery, Printing, &c....	...		1	8	3
Paid for Periodicals and Books	...		2	11	3
Paid for Coals and Gas	...		0	12	6
Paid Fire Insurance Premium	...		0	4	6
Paid for Repairs to Building	...		0	16	4
Paid Expenses of calling Meetings as follows:—					
Post Cards	...	£4	0	0	
Addressing same	...	1	0	0	
Printing same	...	1	4	0	
					6 4 0
Paid Expenses of publishing Transactions for last year, as follows:—					
Dumfries Standard for printing Transactions	...	£29	13	6	
					<u>£15 17 0</u>
Carry forward	...	£29	13	6	

ANNUAL MEETING.

	<small>PRINTED BY J. BIRRENS</small>				
Brought forward ...	...	...	£29 13 6	£15 17 0	
T. & R. Annan & Sons, Photographers, Glasgow, for Photographs of Stones from Excavations at Birrens ...			3 10 6		
George Waterston & Sons, Lithographers, Edinburgh, for Plates of Birrens ...			3 8 6		
George Waterston & Sons, Lithographers, for Plates of Kenmure Burial Aisle			2 0 3		
Neill & Co., Engravers, Edinburgh ...			0 9 3		
Postages of Transactions ...			1 1 6		
				40 3 6	
Paid Secretary's Postages and Outlays ...				1 5 1	
Paid Treasurer's Postages and Outlays ...				1 7 4	
Miscellaneous Payments ...				2 7 4	
				£61 0 3	

Statement as to the Cost of Publication of "Birrens and its Antiquities."

Paid <i>Dumfries Standard</i> for printing 400 Copies, and Binding, &c. ...	...	...	£19 17 0	
Paid <i>Dumfries Standard</i> for Circulars ...			0 14 6	
Paid T. & R. Annan & Sons, Photographers, Glasgow, account for Photographs of Stones from Excavations ...			3 10 6	
Paid T. & R. Annan & Sons for Block of Plan ...			0 6 6	
Paid George Waterston & Sons, Lithographers, Edinburgh, for Plates ...			3 8 6	
				£27 17 0
<i>Less</i> Copies sold to 30th September, 1897—				
35 at 3s 6d ...			£6 2 6	
32 at 3s ...			4 16 0	
9 at 2s 11d... ..			1 6 3	
				12 4 9
Balance due to Treasurer...				£15 12 3

DUMFRIES, 31st December, 1897.—I have examined the foregoing Accounts and the Cash Book of the Society, compared them with the Vouchers, and find the Balances stated to be due to the Treasurer to be correct.

JOHN NEILSON.

ELECTION OF OFFICE-BEARERS.

The following were then elected Office-Bearers for the ensuing year:—Hon. President, Rev. Sir Emilius Laurie, Bart. of Maxwelton; Vice-Presidents, Mr James Barbour, Mr Maxwell of Terraughtie, Mr Robert Murray, and Provost Glover; Secretary, Dr J. Maxwell Ross; Treasurer, Mr John Moodie; Librarians and Curators of Museum, Rev. Mr Andson

and Mr James Lennox; Curators of Herbarium, Mr Scott-Elliot and the Misses Hannay; Members of Council, Rev. John Cairns, M.A., Mr James Davidson, F.I.C., Mr William Dickie, Mr M. Jamieson, Mr George H. Robb, M.A., Mr James S. Thomson, Rev. Robert W. Weir, Mrs Thomson, Miss Hannay, and Miss M. Carlyle Aitken. Mr Neilson was re-appointed auditor.

12th November, 1897.

Mr ROBERT MURRAY, V.P., in the Chair.

New Member.—Mr William M'Gowan, M.A., Lochmaben.

Donations and Exchanges.—The Secretary laid the following on the table:—Report of Norwich Science Gossip Club; Proceedings of Natural Science Association of Staten Island, Vol. VI., No. 10; Anales de Museo Nacional de Buenos Aires, Tonro v (Ser 2^ot 11); Report on Bats, family of Vespertilionidæ, North American Fauna, No. 13, from U.S. Department of Agriculture; Kough Vitterhets Historie och Antiquitets Akademiens Manadsblad, 1887-1893; Antiquarist Lidskrift der Sveinge.

COMMUNICATIONS.

1. *Botanical Notes for 1897.*

By Mr JAMES MACANDREW, New-Galloway.

In giving a few botanical notes for 1897, I may say that my records of new plants for this season is almost *nil*. Nevertheless, my botanical work for the summer has not, I consider, been altogether unproductive.

Kirkcudbrightshire.—A fortnight spent at Auchencairn enabled me to clear up some doubtful points in the botany of that neighbourhood. Through the kindness of Mr Mackie of Auchencairn House and Mr Robinson Douglas of Orchardton House, I had full permission to wander on their estates where I chose. In Auchencairn Bay I found *Poterium officinale*, Hook.; *Sagina maritima*, Don.; the most common restharrow was *Ononis spinosa*, Linn.; *Galium cruciatum*, Scop.; *Juncus maritimus*, Lam.; *Juncus glaucus*, Leers.; *Scirpus maritimus*, Linn. A patch of

Lily of the Valley grows among the rocks on the east side of the bay. In Redhaven Bay I gathered *Teesdalia nudicaulis*, R. Br.; *Filago minima*, Fr.; *Filago germanica*, Linn.; *Erodium cicutarium*, L'Hérit. In the Collin Burn there is abundance of *Mimulus luteus*, Linn.; on the Tennis Lawn, *Plantago media*, Linn.; and on the hilly pastures west of Auchencairn, plenty of *Briza media*, Linn., and *Habenaria viridis*, R. Br. At the back of Bay View the two rarest plants I found were *Lepturus filiformis*, Trim., and *Blysmus caricis*, Retz. *Lepturus* is in plenty along the mouth of the Collin Burn, and also along the banks of the river Urr, south of Palnackie. This *Blysmus* is very rare in Kirkcudbrightshire, though I found it last year north of the mouth of the Kirkbean Burn. Going along the west side of Auchencairn Bay and as far as Balcary Point, some very interesting plants can be gathered, as *Carex extensa*, *vulpina*, *muricata*, *disticha*, and *sylvatica*; *Milium effusum*, Linn. *Zostera marino*, Linn. About the Fish-house I gathered *Trisetum pratense*, Pers. (= *Avena flavescens*), *Doronicum pardalianches*, Linn. (an outcast or escape), *Allium scorodroprasum*, Linn., and *Rumex hydrolapathum*, Huds. Of this *Rumex* I saw only one plant here, but in South Glen Bay I was fortunate in finding it in plenty. The only station I formerly knew for this Dock was on the side of the Lovers' Walk, on the east side of Carlingwark Loch, Castle-Douglas. South of the Fish-house in Balcary grew *Datura stramonium*, Linn., and *Impatiens parviflora*, D. C. (both outcasts or escapes), and on a wall at Balcary, *Cotyledon umbilicus*, Linn. (another outcast or escape), and *Veronica persica*, Poir, *Crambe maritima*, Linn., and *Listera ovata*, R. Br. *Thalictrum flavum*, Linn., has disappeared from the east side of Auchencairn Bay, but I found it along the Barlocco shore near the cave. *Rhynchospora fusca*, Roem. and Schult., which I discovered in Auchencairn Moss in 1882, is still to be found in fair quantity about the middle of the moss. Here also *Andromeda polifolia*, Linn., is frequent. The Rev. G. Maconachie informed me that *Paris quadrifolia*, Linn., was in plenty in one spot near Dundrennan Village. There are very few rare plants on Screel Hill, but I saw Oak, Beech, and Parsley Ferns; *Lycopodium clavatum*, Linn.; *Sagina subulata*, Presl.; *Corydalis claviculata*, Pers., &c. I never anywhere else saw such an extent of both *Statice limonium*, Linn., and *Statice rariflora*, Drej., growing in company as is to be seen at the head of

Orchardton Bay. At Palnackie I gathered *Papaver dubium*, Linn., and *Senebiera coronopus*, Poir. Mr F. R. Coles once found a single plant of the latter at the mouth of the river Dee at Kirkcudbright, but was unsuccessful in finding any more when afterwards looked for. It grows about Palnackie harbour in fair quantity, and I have no doubt of its being both at Kirkcudbright and Dalbeattie harbours also. This, however, undoubtedly confirms this plant for Kirkcudbrightshire. About Rascarrel Bay I gathered *Carlina vulgaris*, Linn.; *Juncus obtusiflorus*, Erh.; *Verbascum thapsus*, Linn.; *Sagina Subulata*, Presl.; *Radiola linoides*, Roth, &c. Among other plants in the neighbourhood of Auchencairn are *Genista tinctoria*, Linn.; *Hypericum elodes*, Linn.; *Lycopus europæus*, Linn.; *Viburnum opulus*, Linn.; *Bromus giganteus*, var. *triflora*, Syme; *Ranunculus sceleratus*, Linn.; *Conium maculatum*, Linn.; *Galium mollugo*, Linn.; *Agrimonia eupatoria*, Linn., &c.

At the north end of Carlingwark Loch, Castle-Douglas, I saw *Callitriche autumnalis*, Linn.; *Potamogeton perfoliatus*, Linn.; *obtusifolius*, Mert. and Koch.; *crispus*, Linn.; *Scutellaria galericulata*, Linn.; *Conium maculatum*, Linn.; *Rumex hydrolypathum*, Huds. (the fourth station for this Dock); *Lysimachia nummularia*, Linn. (an outcast); *Nasturtium sylvestre*, R. Br.; and *palustre*, D. C.; *Glyceria aquatica*, Sm.; and *Cicuta virosa*, Linn., &c. From the neighbourhood of Castle-Douglas was sent to me for identification *Allium carinatum*, Linn., thus making at least three stations for this rare plant in the Stewartry.

At Creetown Station I gathered *Sagina apetala*, Linn., and *Arenaria serpyllifolia*, var. *glutinosa*, Koch., both new records for Kirkcudbrightshire.

True *Polygala oxyptera*, Reich., grows in abundance in Kenmure Holms, New-Galloway.

Wigtownshire.—At Portpatrick I found another station for the very rare grass *Calamagrostis epigeios*, Roth., on the side of Craigoch Burn. In the Garliestown Curling Pond grow in abundance *Carex Goodenowii*, var. *juncella*, T. M. Fries (a new record), and *Carex filiformis*, Linn. The Rev. James Gorrie, F.C. Manse, Sorbie, was fortunate in adding other two new records for Wigtownshire in *Stellaria palustris*, Retz., near Newton-Stewart, and *Dipsacus sylvestris*, Huds., in Galloway House Woods. He also found *Scabiosa arvensis*, Linn., at

Barglass. Excursionists from Glasgow found *Isoetes lacustris*, Linn., in Loch Ochiltree.

Mosses and Hepaticæ.—Chiefly through the kindness of Mr James Murray, Hamilton, and formerly of Dumfries, I have been able to add a few more mosses to my local list. Those gathered by Mr Murray are *Bryum pendulum*, Cluden Mills; *Rhynchostegium murale*, Irongray and Drumlanrig; *Fissidens exilis*, Drumlanrig; *Racomitrium protensum*, Loch Trool, and abundant in the Glenkens; *Hypnum aduncum*, sparingly by the side of Loch Ken; *Orthothecium intricatum*, very rare in Holme Glen, New-Galloway; *Hypnum molluscum*, var. *condensatum*, Crummypark Burn, New-Galloway. To these I have myself added *Racomitrium aciculare*, var. *denticulatum*, side of Loch Ken; *Orthotrichum affine*, var. *rivale*, Kenmure Holms, New-Galloway; *Thuidium recognitum*, abundant in the Glenkens and also in Screel Burn. I have also gathered *Hypnum Schreberi* in fruit (which is very rare) in Crummypark Glen, and I find *Hypnum eugyrium* in fruit frequently in the district. At Portpatrick I gathered the Hepatic *Lophozia bicrenata*.

2. On Words. By Mr A. SKIRVING, Croys.

To go deep into the history of words would involve the writing of a book on the origin of language, and for such a task I am unfit. For untutored savages few words are necessary, words increasing with the wants they are required to express. I only aim at pointing out that languages we think foreign are not so foreign after all, and the differences of the languages of nations are often not much greater than the provincial differences of the language of the same country. At the root of the difficulty that is experienced in learning a kindred tongue lies the overlooking of the interchangeable letters, some nations preferring the one and others the other. Thus I enterchanges with J, so the German says Iohann when the Englishman says John. B interchanges with V, so the German says hab and the Englishman have. F interchanges with P, so the German says schiff and the Englishman ship. G interchanges with Y, so the German says sag and the Englishman say. D interchanges with Th, so the German says heide and the Englishman heath. Then the guttural is a difficulty to the Englishman, so for buch he says book and for mack make. In each of these cases scores of words

will follow the same rule, and a little attention to these rules would save a deal of study. But, indeed, we need not go so far from home for instances, for the Scotchman says ierk or yerck when the Englishman says jerk. He calls the gable of a house the gavel. He calls a gate a yett, and a smithy a smiddy. The withy or willow rope, which preceded the use of hemp for capital punishment, he calls a wuddy, and so on. We are a very mixed people, but the lowland Scotchman is probably, on the whole, more of a Norseman than anything else. When Jamieson was compiling his Scotch Dictionary he met with a learned Icelander who said he had found four hundred Icelandic words in broad Scotch. Dumfriesshire is entitled to its share, for Worsaae, the Danish antiquarian, who visited Great Britain and Ireland half a century ago for the express purpose of tracing the settlements of the Danes, includes it along with the north of England in their territory, one of the infallible proofs being the prevalence of place names ending in by or bie, such as Lockerby, Lamonby, Denbie, Gotterby, &c., &c., the by signifying the home of the Dane, as ham, heim, or hame does that of the Saxon. Garth is another mark. The meaning of it is enclosed land. In fact, it seems to be the same as yard, with the letters interchanged. The word by may probably have some connection with the common phrase of oot bye or in bye. From the old intimacy between France and Scotland, it is not surprising that French words in a more or less corrupted state abound in broad Scotch. Old French words which now terminate in eau terminated in el, so that couteau, a knife, was coutel, and this the Scotchman makes whuttle. Hardware came mostly from Flanders. The town of Liege was famous for cutlery, so a large clasp knife was called in Scotland a Jockteleg or Jacques de Leige. Mons Meg was simply made at Mons in Flanders, though Galloway people like the fable of its local manufacture. No country blacksmith could have made such a gun. A well-known kind of shortbread in Edinburgh used to be called petticoat tails, the real name being petits gatels, or little cakes. They threw the slops over the windows with a shout of gardyloo, meaning gardez l'eau, or beware of the water. Jigot of mutton on an ashet is, as is well known, all French together. When a drunk man is said to be fou he is not full. Fou in French means mad. A queer shaver is not a barber, he is a chevre, a goat. When a mason puts up a chimney-piece he puts it on the jambs, or legs in French. A

plumber is a plombier, because he works in lead. Many other foreign words are among us in Great Britain in a corrupted state. The old Scotch sword called an Andrew Ferrara was made by Andrea, of Ferrara, in Italy. A shoemaker sometimes calls himself a cordwainer. The Moors of Cordova, like their brethren in Morocco, were famous for leather, which was called cordovan—hence cordovanner. Some words lose their meaning. A villain is not a bad character, but simply a man of low rank. A knave in old English is merely a fellow; in fact, it is the German knabe, a boy. A ruffian probably dates from the days when Moorish pirates were a terror to mariners. The pirates of the Riff coast of Barbary are still called Riffians. A befeater is simply a buffetier, or one who attends the buffet or sideboard. Punch and Judy is a corruption of Pontius Pilate, Governor of Judea, the play being a very old one. A footman was really a footman, when he ran with a pole in his hand before the old lumbering coach to be ready to assist when it upset in the almost impassable roads. One might go on for ever on such a subject. We are daily speaking Greek and Latin and know it not. These have long been the languages of learning and science, and now are applied to every new invention from a telegraph to a bicycle or a motor car. Our very advertisements are of excelsior soaps and eureka boots. A few centuries can make a language almost unintelligible, as anyone will find who reads Barbour's "Bruce" or Chaucer's "Canterbury Pilgrims." But every new invader leaves his mark, and it is interesting to know who has been there, Briton, Roman, Saxon, or Norseman, not to speak of the Gaelic-speaking wild Scots of Galloway whose place names sound familiar to any Highlander at the present day. Galloway, too, abounds in Macs, many of them added on to the names of English who had settled among them, such as M'George, M'William, &c., which contrast curiously with the native M'Lellans, M'Cullochs, M'Cubbins, M'Guffogs, M'Turks, and M'Gowans. The Norseman is much less in evidence than in Dumfriesshire, though a good many hills are called fells, and along the coast we have a good many unmistakable Norse names, as might be expected, when they held the whole west coast, including the coasts of Ireland and the Isle of Man. Mr Worsaae finds the Mac added on to Norse names, giving as instances M'Kittrick, the son of Hittrick, and M'Manus, the son of Magnus. If there is anything that strikes a stranger in the

anguage of the modern Galloway man it is his contractions. A thing on the top of the house is "i' tap i' hoose"; or at the back of the dyke, "i' back i' dyke." On this side of any place is "athist," and to go to bed is "gae lie." There may be some words not in use in other districts. The branches of a tree are "grains," and smaller ones "rice." A "stake and rice fence" is a fence of posts with branches wattled between them. There used to be old people who called gooseberries grossets. The word "eveet" (French evite) is sometimes used for avoid. A man or beast of weak constitution and easily knocked up is said to be "cashy," no doubt from the French cassé. The word horrid is made to do as much as the young lady's awful. Crops are "horrid geud," and lasses "horrid bonny." Strangers are sometimes called "fremit folk." In one thing most Scotchmen agree. They have a rooted dislike to the letter L. Wall is wa', call is ca', boll is bow, roll is row, and even salve is sa'. The Frenchman rather shirks the same letter too, but both he and the Scotchman rejoice in R, which the Englishman rather dislikes. The question of the hard C and the soft one makes some difference in languages, though the hard C has of late been getting the best of it with schoolmen. The French chevalier and the Spanish cavalier are one and the same, both meaning a man on horseback, who was generally a greater man than one on foot. A Celt is not a selt, he is a kelt; and a cist is not sist, it is a kist. The German avoids all confusion by taking to K. His Emperor is not Seezer, but Kaiser. In some cases, too, the letter S is pronounced sh. Many of the Germans prefer this form of it, and in Gaelic it is the same, such a word as shee, a fairy, being sith.

3. *Note on the occurrence of Limestone Nodules containing
Cementstone Fossils, near Moffat.*

By MR J. T. JOHNSTONE, Moffat.

In the spring of 1877, when excavating for sand at Ellerslie Villa, then in course of erection, I observed certain small nodules of a dark brown colour and of a semi-pasty consistence in the deposit pierced during the excavation. On carefully extracting some of these nodules I observed that casts of fossils were quite apparent in some of them. These, after being dried, were seen

by Mr Peach and Mr Macconachie, of the Geological Survey of Scotland, who pronounced them to be decomposed limestones.

A doubt having since arisen as to the exact nature of the deposit in which these nodules were found, it was deemed advisable to make fresh excavations last autumn to set the matter at rest. The point in dispute was whether it might be a true glacial deposit or merely the Permian breccia decomposing in situ, which is abundant in the locality. [See essay Geology of Dumfriesshire in Mr Scott-Elliot's *Flora of the County*, page xxxv.]

In this neighbourhood the Permian breccias and sandstones are the prevailing rocks underlying the till on the east side of the valley, and sections are seen in all the tributaries of the Annan on that side. These beds are also exposed on several places on the adjoining hillsides. On the west side of the valley near Moffat no exposures of this formation have been noted except one patch in a small burn nearly opposite the centre of the town. The formation extends southwards along the east side of the valley for a distance of seven miles from Moffat. In the Lockerbie basin, which is disconnected from that of Moffat, it reaches a greater development. This breccia has not the appearance of having been much disturbed. In some of the sections it is lying nearly horizontal, in others at a very small angle, and in the cutting at the back of the Hydropathic establishment the inclination is about 20 degrees. The pebbles embedded in the breccia are composed mainly of Silurian grits and greywackes, like those occurring so abundantly in the neighbourhood of Moffat. Fragments of black shale are also to be seen in it. The pebbles are of various sizes, and are generally sub-angular. The nearest visible exposure of this breccia is about 250 yards distant from the locality yielding the fossiliferous pebbles. No notes were made regarding the original excavations, but writing from memory I might state that the excavation would be about 8 feet long, 4 feet wide, and 3 feet deep, but the original surface had been previously excavated to a depth of 3 feet. The nodules were found lying near the bottom, and would be in the proportion of three to the superficial yard. The new sections were made on the 26th and 27th November, 1896, and were taken at different places, but in immediate proximity to the original place.

No. 1 cutting was 5 feet long, 7 feet deep, and 2 feet wide.

This cutting was made in a field which had its original surface undisturbed, hence the extra depth of cutting. After the surface soil was taken off, the whole cutting was made through a sandy till, striated stones being found from the surface down to the very bottom of cutting. These striated stones were lying with their long axis parallel to the valley with a dip downwards of 10 degrees. Small portions of the material excavated could be recognised as being fragments of the breccia, but no limestone nodules were found in this cutting.

No. 2 cutting was 3 feet long, 2 feet 6 inches deep, and 2 feet 6 inches wide. This cutting had the advantage of having been previously excavated and removed to a depth of 3 feet from the level of its original surface, and hence the small depth of the excavations as compared with No. 1. The stones in this cutting were all striated as in No. 1 section, the description of which will apply equally to No. 2. In the latter cutting we observed two nodules, one in the very bottom and one in the side. One of the striated stones measured 10 inches in length and 5 across. The nodules themselves varied in size from a hen's egg to blocks about 5 inches by 3 inches. None of the cuttings was deep enough to reach the rock, but the evidence of the striated stones may be held as proving that the material in which they occur is a glacial deposit, although the material of which it is composed is principally derived from the destruction of the permian sandstones and breccias.

I have examined the breccia where exposures of it are seen, notably at the site of the Hydropathic establishment, but have never detected any limestone nodules in it. Since the first discovery of these nodules I have examined nearly all the excavations that have been made for building purposes or otherwise in the immediate neighbourhood, and have found these nodules in nearly everyone of them from Ellerslie Villa down to where the till on this section of the Annan vale tails out at the Moffat Academy, a distance of nearly half a mile in length by about 100 yards wide. In excavations observed south from the Academy no nodules have been observed, although the material excavated has been a red sandy till likewise. Mr Peach informs me that the fossils occurring in these nodules are *Camerophoria crumena* and *Naticopsis plicistria*, forms which are characteristic of the lower marine lands of the cementstone series of the south of Scotland.

4. A short note by Mr HYSLOP, Langholm, was read, giving reasons for the belief that the remains of an old bridge across the Wauchope, near Langholm Manse, is of Roman origin.

10th December, 1897.

Provost GLOVER in the Chair.

New Members.—Dr Alexander Dall MacDonald ; Mr James Blacklock, solicitor ; Lord Balvaird (life member).

Exhibits.

1. The Secretary showed for Mr George Irving, Corbridge-on-Tyne, two sealing-wax impressions (1) of an Onyx Intaglio of Roman date, found at Corbridge, and now in possession of Mr T. Blandford, of that place ; and (2) of a Cornelian, found at South Shields, and now in possession of Mr Robert Blair, secretary to the Newcastle Society of Antiquarians—also of Roman date.

2. Mr Moodie, the hon. treasurer, exhibited a singularly interesting sasine, the property of Mr Murray of Murraythwaite, in which it is stated that Andrew Wilkin, bailie of the burgh of Annan, granted heritable possession to an ancestor of Mr Murray of the 40 shilling lands of Ednemland. Mr Moodie pointed out that the fact of a bailie being mentioned in the sasine showed that Annan was a royal burgh before 1539, the date of the old document being 16th July, 1532. The oldest existing charter of the burgh of Annan, he stated, was that granted in 1539, in the reign of James V.; and Mr Moodie quoted from a paper on "Old Annan," contained in the Society's *Transactions* for 1894-95, by Mr George Neilson, of Glasgow, evidence corroborative of that given by Mr Murray's sasine in support of the tradition that Annan had been a burgh long prior to 1539, James V. merely restoring a lost honour to the town at that date. Mr Neilson stated in his paper that he had never known of any provost or bailie of Annan being mentioned before the 17th century. Mr Murray's sasine also possessed, said Mr Moodie, an element of human interest in the names of persons who are mentioned

therein. There is, first, his (Mr Murray's) ancestor, John Murray of Morewhat, who is infeft in the 40s lands of Ednmland. Then there is the name of the first known bailie of Annan, Andrew Wilkin. The names of the witnesses—six in number—are of great interest as showing that the names of worthy burghers three centuries ago are the same familiar names of later times. They are John Carruthers of Holmend, Archibald Carruthers, William Irving, Herbert Irving, Edward Irving, and Nicholas Richardson. Very interesting is it that the name Edward Irving is three centuries later made famous by being borne by one of Annan's most famous sons. Then there is the name of the writer of the sasine, Thomas Connelsonne (another form of M'Connell), a Notary Public and a priest of the Diocese of Glasgow. Before the Reformation all notaries were priests or monks, and were appointed to the office of "Notar" by ecclesiastical authority. Before the Reformation also the year of the Pontificate of the reigning Pope was inserted, in place of the year of the reign of the Sovereign of the Realm, as was afterwards enacted. Accordingly this sasine was executed in the ninth year of the Pontificate of Clement VII., "by the divine providence Pope."

The following are a Transcript and Translation of the Sasine referred to, kindly done by Mr George Neilson, who is widely recognised as an expert in the translation of ancient MSS. :—

I. Transcript.

<i>The Land of</i>	In dei nomine amen per hoc presens publicum
<i>Moriquht</i>	instrumentum cunctis pateat evidenter et sit
<i>Sesing of</i>	notum quod anno incarnationis Domini mill-
<i>xl. s. Land.</i>	esimo quingentesimo xxxij ^{do} . mensis vero Julij
	die xvj ^{mo} . indictione quinta pontificatusque sanc-
	tissimi in Christo patris et domini nostri Domini Clementis
	divina providencia pape septimi anno nono In mei notarij publici
	et testium subscriptorum presentia personaliter constitutus
	Andrea Wilkin ballivus pro tempore burgi de Annand accessis
	ad quadraginta solidatas terrarum Johannis Murray de Morethuat
	vocatas Ednmlandis jacentes infra territorium dicti burgi et
	ibidem ipse ballivus virtute sui officij ballivatus statum
	hereditarium* possessionem corporalem et sasinam omnium et

* The MS. has "hereditariam," which is contrary to the usual construction.

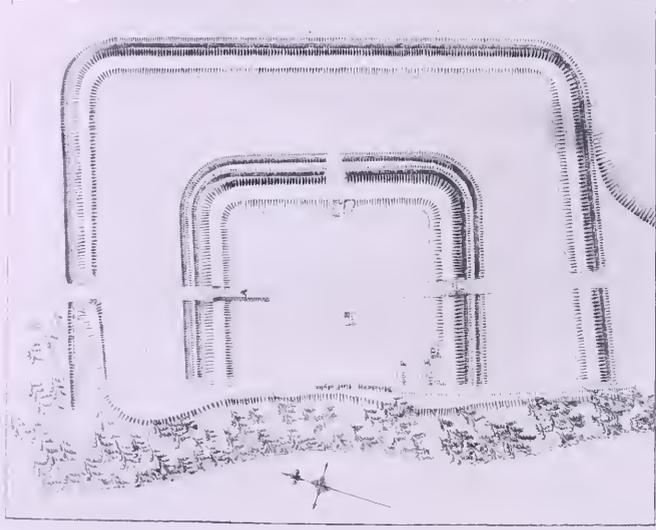
singuloorum predictarum quadraginta solidatarum terrarum de Ednemlandis cum singulis suis bondis et pertinenciis ac cum tenementis earundem per donacionem et deliberacionem terre et lapidis ut moris est in burgo prefato Johanni Murray de Morethuat heredibus suis et assignatis tradidit contulit et deliberavit in feodo et hereditate in perpetuum Super quibus omnibus et singulis premissis actis factis gestis et recitatis ipse Johannes Murray de Morethuat a me notario publico subscripto sibi fieri petiit publicum instrumentum Acta erant hec super fundum dictarum terrarum et tenementorum eorundem hora quasi prima post meridiem presentibus ibidem Johanne Carrutheris de Holmendis Archibaldo Carrutheris Willelmo Irving Harberto Irving Eduardo Irving et Nicholao Richartsonne testibus ad premissa vocatis et specialiter rogatis.

Et ego Thomas Connelsonne presbiter Glasguensis diocesis publius auctoritatibus apostolica et imperiali notarius quia premissis omnibus et singulis dum sic ut premittitur ferent dicerentur et agerentur unacum prenomminatis testibus presens personaliter interfeci eaque omnia et singula premissa sic fieri seivi vidi et audivi ac in notam cepi unde hoc presens publicum instrumentum manu mea scriptum confeci et publicavi signoque et nomine meis solitis et consuetis signavi in fidem premissorum rogatus et requisitus.

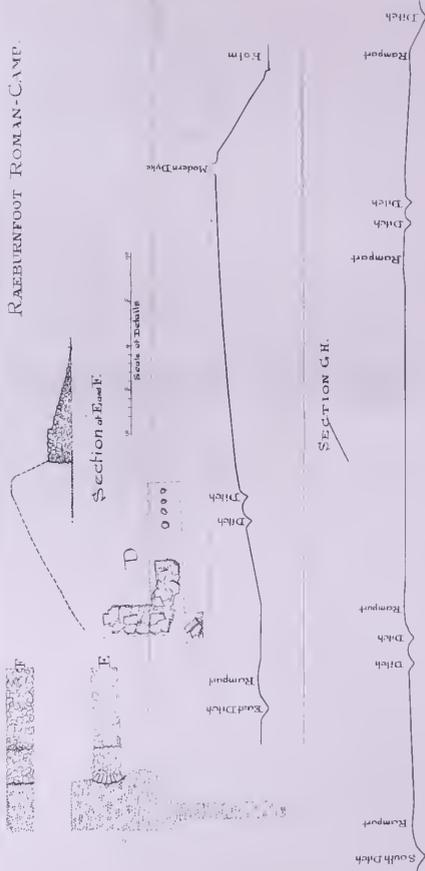
II. Translation.

The Land of Moriquhat In the name of God Amen By this present public instrument be it made obvious and known
Sesing of to all that in the year of the Incarnation of the
xl. s. Land. Lord one thousand five hundred and xxxii on the xvith day of July, in the fifth indiction, and in the ninth year of the pontificate of the most holy father in Christ our Lord the Lord Clement the Seventh by the divine providence Pope: In presence of me Notary Public and the witnesses underwritten, personally present Andrew Wilkin, bailie for the time of the burgh of Annand, proceeded to the fortyshilling lands of John Murray of Morethuat called Ednemlandis lying within the territory of the said burgh; and there the said bailie by virtue of his office of bailie gave granted and delivered heritable state corporal possession and seisin of all and sundry the foresaid fortyshilling lands of Ednemlandis with their several bounds and pertinents and with the tenements thereof by

RAEBURNFOOT ROMAN-CAMP.
ESKDALENUR.



RAEBURNFOOT ROMAN-CAMP.



SECTION J.K.



the giving and delivering of earth and stone, as use is in burgh, to the foresaid John Murray of Morethuat his heirs and assignees in fee and heritage forever: Upon which all and sundry the premises acted done performed and recited the said John Murray of Morethuat from me Notary Public underwritten asked a public instrument to be made for him: These things were done on the ground of the said lands and tenements of the same about the first hour afternoon. Present there John Carrutheris of Holmendis Archibald Carrutheris William Irving Herbert Irving Edward Irving and Nicholas Richartsonne witnesses to the premises called and specially required.

And I Thomas Connelsonne priest of the Glasgow diocese Notary Public by apostolic and imperial authority because I was personally present together with the aforementioned witnesses in all and sundry the premises whilst as above set forth they were so done said and performed and because I knew saw and heard all and sundry these things so done I took a note from which I have made this present public instrument written with my hand and have published it and signed it with my sign and name used and wont in attestation of the premises as I was asked and required.

Note.—Mr Neilson sends an interesting note relative to the Notary mentioned in the Charter. He says—"The Notary, Thomas Connelsonne, appears as one of the Notaries to a Deed of Protest at Dumfries on 22nd November, 1535, printed in the *Registrum Episcopatus Glasguensis*, p. 550. In 1532 he was designed as Capellanus ac Notarius publicus (*Registrum Magni Sigilli*—III.—1513-1546, Charter 1198), but I cannot at present say where he was Chaplain. He witnessed a Charter at Dumfries on 30th July, 1546 (*Reg. Mag. Sig.*, at supra No. 3284)."

3. Mr James Barbour showed two old church tokens presented to the Society by Mrs Dick, Eskdalemuir, and marked "S. K.," initials which might stand for "Skelmorlie Kirk."

COMMUNICATION.

1. *Excavations at Raeburnfoot, Eskdalemuir.*

By MR JAMES BARBOUR.

The important historical results obtained by excavations carried out at Birrens Roman Station, Middlebie, in the year 1895, by the Society of Antiquaries of Scotland, naturally stimulated similar research in the district. At a field meeting of this Society held in September the same year at the before-mentioned station,

Dr Macdonald referred to Raeburnfoot Camp, Eskdale, as described by its discoverer in the *New Statistical Account of Scotland*, as having not a few of the characteristics of a Roman Camp or Fort, and the *Transactions* of the Society, 1895-96, page 172, show that at a field meeting held on 30th May, 1896, at Eskdalemuir, the Camp was visited and examined. The experts present were of opinion that the probability was in favour of its having been a Roman Camp; but, in the absence of any positive evidence such as would be furnished by excavations and the discovery of relics of Roman occupation, they hesitated to decide the matter absolutely.

Thereafter the Council of the Society resolved, so soon as their funds would permit, to endeavour to overtake exploratory works sufficient to allow of a more definite opinion being arrived at.

The treasurer's report submitted at the opening of the present session being unfavourable to the prospect of carrying out the contemplated work, Mr Murray, V.P., obtained the sanction of the Council to raise a small sum for the purpose by subscription; and a committee was appointed to make the necessary arrangements and see to the excavations being carried through, the outlay to be limited to £10. Mr Beattie of Davington; Mr Murray, V.P.; Mr James Lennox, F.S.A., librarian; Dr Maxwell Ross, hon. secretary; and myself were the committee. The fund required was promptly obtained, and the consent of the proprietor and the tenant of the land on which the Camp is situated being readily granted, operations were commenced at the Camp on Monday, 1st November last.

The Camp before operations began.

The Camp is shown, but only in outline, on the Ordnance Survey Map. It is situated in an angle at the junction of the Raeburn with the Esk, and occupies a sort of antlier, rising from an irregular basin surrounded by hills. The river Esk, now at some distance, formerly skirted its base on the west, and the Raeburn, also a little way off, after touching the south-east corner, flowed to the Esk in a south-westerly direction, leaving a small triangular tongue of land projecting at the south end of the Camp.

The Camp rises abruptly 40 feet above the level of the holm intervening between it and the Esk, on the west, and falls eastwards with a rounded section until it reaches low marshy ground.

The tongue of projecting land at the south also springs from the level of the holm with a steep ascent, and the ground continues rising gently northwards to the centre of the Camp, and falls thence in the same way to the north end, where an abrupt depression isolates the Camp from a hill which begins to rise at the side above it.

Approximately the altitude above sea level is 650 feet, and although lying low as compared with the surrounding hills, the position of the Camp is a commanding one, from which the valley of the Esk and considerable stretches of hill country, including the approaches of the Camp, are visible.

The plan is an oblong, but not quite rectangular, for the north-east shoulder is high, and the south end slants downwards towards the west. The chief peculiarity it exhibits is an inner enclosure on the west side, and midway between the north end and the south. It resembles a fort, and this term will for convenience be used in making reference to it. The direction of the major axis of the Camp is N.N.W.

The fortifications, which consist of earth-works, have suffered greatly by disturbance, but their lines nevertheless are yet mostly traceable. The precipitous natural bank protected the west side. The outer defences on the other three sides were a single rampart and a ditch. The rampart at the north end, owing to the depression of the ground outside, shows an upstanding front. It is well defined along the east side, and, although almost levelled at the south end, its site remains sufficiently distinct. The ditch is still open at the north end, although not of full depth. Along the east side there is now no trace of it, and at the south its site is marked only by a slight depression of the surface and the growth of rushes.

No indications exist of east or west gateways, but depressions in the rampart at the north and south mark where the entrances were at these points.

The defences of the central fort seem to have been more elaborate, for there are indications showing that it had been enclosed on three of its sides with a rampart and two ditches, while the fourth side rested on the precipitous west bank, which had probably, as regards the fort, been crowned with an artificial rampart; of this, however, no very certain trace is left. On the east and partly on the north its rampart and ditches are obli-

terated. Elsewhere the ditches are marked by surface depressions, and the rampart by slightly elevated mounds.

History of the Camp.

Of the history of the Camp not much can be said. It seems to have remained unknown until discovered by Dr Brown, late minister of the parish. In the *New Statistical Account of Scotland*, Dr Brown, referring to it, says—"In my former account I mentioned Castle O'er or Overbie as a supposed Roman Camp, communicating with Middlebie and Netherbie. I am now convinced it is of Saxon origin, and that the true Roman Camp of Overbie is on the farm of Raeburnfoot, about a mile above the church. It is situated on a tongue of land between the houses of Raeburnfoot and the Esk, inclining gently towards the east, and about 40 feet above the level of the river. I stumbled upon it accidentally in the summer of 1810, and am inclined to believe that I have been fortunate enough to discover the true Roman Station in the head of Eskdale." After a full description, with dimensions of the Camp as taken by actual measurement at the time, Dr Brown observes—"The above Camp remained from 1810, when it was first discovered, till a few years ago, just as I have described it, and was visited by many, but I regret to add that it is now much injured by the proprietor having allowed it to be ploughed up in order to obtain a few crops previous to its being laid down in pasture."

Dr Brown speaks of injury arising only through the use of the plough, but evidently the pick and spade had likewise been in requisition, and on more occasions than one. The fact of the Camp being unobserved and unknown is proof that, long before 1810, it had been much defaced. Dr Brown's account shows that the ditch along the east side had already at that time been filled up, and of the east defences of the fort then, as now, no trace was visible. The other ditches now closed were probably filled up after 1810; but at what time, or times, the ramparts were reduced there is nothing to show.

It may be well to appreciate the injury spoken to by Dr Brown. Preparation for a rotation of crops is implied, and the land would therefore be turned over at least five times, and repeatedly dressed on the surface. Having regard to the circumstance that the soil is not generally of greater depth than is usually reached by the plough, it will be readily realised how

completely any vestiges escaping previous spoliations would, in this process, be uprooted and destroyed. The area has been drained also; and as stones are not easily got in the district, any material of this description the Camp might yield would be too serviceable to be allowed to remain there.

The Exploratory Works and their Results.

The objects in view in carrying on the excavations were to ascertain more fully and accurately than had hitherto been possible the plan and dimensions of the Camp; to discover the nature of the fortifications, and other structural parts; and to obtain relics and other evidences of occupation. The last were sought for only in excavations made for other purposes.

As before stated, the works were commenced on 1st November last. Three workmen were employed, who proceeded, as directed, to open the ground at numerous points where investigations seemed desirable, and as the weather was exceptionally favourable, not an hour being lost on that account, and the workmen were diligent, rapid progress was made with the operations.

An almost continuous trench was cut from the north end of the Camp to the south end, near the west side, which revealed the position and profile of the several ditches crossed, and the structure, and approximately the widths of the ramparts; and the same ditches and ramparts were again sectioned at a point further east. These ditches, it was found, had been filled with peat-moss transported from the exterior of the Camp, and consequently they were well defined and easily followed. The east defences of the Camp were likewise sectioned, and the ditch, which had been filled up, was discovered without difficulty owing to its position alongside the rampart. The filling, in this case, had been done with earth of another kind, distinguishing the work as probably an earlier operation. The east ditches of the central fort, of which no trace remained in 1810, were difficult to discover. After a number of cuttings had been made in search of them, one only could be found, and it appeared as if, on account of the steepness of the ground there, the two might be drawn together on either side and merge into one. The point was too important to be left in doubt, and the workmen were instructed to follow the well-defined ditches of the north side round to the east side by cutting cross trenches at short intervals. In this way the second ditch was discovered; and while the earth with which it and the one alongside had been filled resembled the

undisturbed till of the sides, black soil found at the bottom gave certain evidence of the trench being formerly open and of filling in. Excavations were likewise carried out with the view of disclosing the gateways and streets and remains of such buildings and other structures as existed.

At the end of the week the committee visited the spot, when, after consultation, it was agreed that as the aims in view had in a fair measure been accomplished, and it did not appear likely that a continuation of the search would result in any important discovery, the excavations should be brought to a close and the work of restoring the ground be proceeded with. This course was followed accordingly; and the filling of the trenches and restoring the sward, together with a little further excavations afterwards thought desirable, occupied another week, and completed the operations.

Information, not unimportant, concerning the structure and plan of the Camp and its occupation was obtained, and with the aid of the accompanying drawings I will now set out the details.

The ditches are almost V-shaped, but the sides appear to be slightly convex in some cases. The outer one, extending on three sides of the Camp, measures 15 feet in width and 5 feet in depth. Those of the central fort are each 10 feet wide and $3\frac{1}{2}$ deep, and 16 to 18 feet apart between the centres of one and the other. The mound separating them is of a rounded section.

The outer rampart, which was probably about 30 feet in width at the base, appears, as far as can be judged of by the remains, to have been built of the soil taken out of the ditch with the addition of other similar earth, applied without method. The rampart of the fort, the width of which at the base appears to have been about 35 feet, is differently constructed. It exhibits stratification, the layers being earth and clay; the latter is plentiful, and it enters largely into the composition of the structure.

Regarding the gateways, it did not seem probable, considering the height and steepness of the natural bank forming the west side of the Camp, that one would exist there, and no remains of such were discovered.

Dr Brown describes the position of what he took to be the east gateway. On search being made at the spot indicated nothing corroborative of its existence there could be discovered; and several other places opened on this side gave similar results.

The central fort was probably provided with a gateway on the east side, as will appear later on.

The south gateway shows a roadway of gravel level with the Camp, but nothing remains to mark its width. The one at the north is similar, but the gravel surfacing is wanting, and was probably dug up in order to improve the gradient, this being the only cart entrance to the area of the Camp.

At the south entrance of the central fort a good deal of cobble pavement surfacing is found, but in a disturbed state, and several larger stones, disposed as if intended for edging, remain; the width of the gateway is uncertain. This description applies likewise to the corresponding gateway at the north.

Only the one street or roadway has been discovered. It extends in a straight line or nearly from the north end of the Camp to the south end, passing through the four gateways described. It is surfaced with gravel; the width is uncertain.

During the search no certain vestiges of buildings were disclosed, but several pieces of stonework, more or less regularly disposed, presented themselves, which it will be proper to notice. Of this kind is a fragment of a drain, which extends southwards from the north gateway of the central fort along the west margin of the street, about 60 feet in length, at the point marked A on the accompanying plan. The interior opening is 8 inches wide and 10 high. The sub-soil forms the bottom, the sides are composed of undressed whinstone, of which also are the covers. Having regard to the width of the opening bridged, the latter are of unusual dimensions, being from 24 to 30 inches long. They are placed across the drain so as to fit closely together, and the top of the work, which is level with the street, has the appearance of a broad and well-set edging.

A number of stones met with near the centre of the fort at B on the plan, showing an approach to order, seem to be the remains of a structure of some kind, possibly a building.

At the east side of the fort, where the tail of the rampart would be, and nearly midway from north to south, marked C on the plan, a structural piece of work remains. It is composed of roundish whinstones, something like 6 to 9 inches in diameter, and clay, put together in such a way as to have some resemblance to a mass of concrete. The outline is irregular, but the surface is straight like a floor, and hard. It measures about 10 feet from north to south, by 14 from east to west, and the substance

is 2 feet thick or more. Immediately to the north is a breadth of spread stones, and to the west are fragments of cobble paving; also a few stones put together like a fragment of walling about a yard long and 9 inches in height, curved inwards on plan.

The spread stones are suggestive of a roadway, and it seems likely that the east gateway of the fort stood here, in which case the main structure described might have been a platform for the reception of an engine to be used in defence of the gate. "In time of war," says Hyginus, as quoted by General Roy, "care should be taken that proper steps or ascents are made to the ramparts, and that platforms are constructed for the engines near the gates."

Another fragment of stonework lies under the tail of the south rampart of the fort, near the west side, at D on the plan. It is arranged in the form of the letter L reversed, and consists of a single layer of flat stones fitted together; and opposite the centre of the lower limb, eastwards, are four comparatively small stones, placed in a row, and at almost equal distances.

I have mentioned that no very certain evidence of a west rampart exists, but structural remains on that side at the south-west corner of the fort, marked E and F on the plan, favour the idea that the plan as regards the fort originally embraced such a rampart. A return, facing the west, was found, but no trace of its continuation northwards. The construction of the return is peculiar. A cobble pavement foundation underlies the piece of rampart, which is built partly of earth and partly stone. The rear portion is composed of a mass of stones and clay like the material of the platform before described. It is $2\frac{1}{2}$ feet high at the west side and level, 4 feet wide like a path, and at the east side of the path is a stage or step, whence the stonework slopes eastwards to the level of the fort. The front, which is of earth, was probably carried higher than the level of the pathway as a breastwork. The stonework agrees with the steps or ascents which Hyginus says should be made to the ramparts. The cobble pavement is found not only under the west return but also under the south rampart; how far it extends, however, has not been ascertained. Whin, undressed, is the only description of stone met with.

Regarding the further elucidation of the plan, few well-defined lines available for tracing it with accuracy exist. The centres of the ditches, where the two sides almost meet at the bottom, are,

however, sufficiently exact for the purpose, and have, after ascertaining the widths of the ditches and ramparts as nearly as possible, been adopted for the skeleton lines on which to construct the plan.

On the west bank, as a base, the Camp projects eastwards in the form of the letter D with the loop flattened; and within this, on the same base, is the central fort, forming a smaller but similar loop. The margin of the Camp not covered by the fort is of equal breadth on three sides—the north, south, and east; and the north-east and south-east corners of both lines of defence are rounded off, so as the ramparts and ditches in each case follow one another in concentric curves.

The four gates are opposite one another, and the street, which extends in a straight line from north to south, passing through them, would, supposing there was a west rampart as conjectured, divide the fort equally in two.

The following are the principal dimensions:—Including the ramparts and ditches the length of the Camp measures 605 feet at the east side, and 625 at the west; the average is 615 feet. The width cannot be ascertained very closely, but approximately it would measure about 400 feet. The Camp, including the fortifications, extends to over $5\frac{1}{2}$ acres, and the interior area, including the fort, contains rather less than 4 acres. The interior of the fort itself measures 220 feet by about 185, and contains an acre nearly.

The relics found in the excavations are comparatively few, but in judging of their importance in this respect regard must be had to the limited extent of the operations as well as to the probable disappearance of nearly everything of the kind, consequent on the cultivation of the soil. They are chiefly fragments of pottery. The ware is of the same character as that got at Birrens, and Dr Anderson, to whom specimens were submitted, considers it to be of Romano-British type. It consists of a number of pieces of thick, coarse yellowish ware, the fragments of vessels of large size, one being part of the handle of such a vessel; a great many small fragments of a finer and thinner ware of light yellow colour and light weight; and a few pieces of fine, thin bluish-grey ware, parts of a vessel with a turned over and moulded brim of good design. More expressive than these larger fragments is a handful shivers, an inch in size and under, picked out of the soil. They are suggestive of how much must have

been lost by breaking up and disintegration. Charcoal in small pieces is widely distributed, and some pieces of glass and iron were found. I should not omit to mention that part of a socket-stone lay near the south gateway of the fort.

Having stated the facts appearing on the surface, and discovered in the course of the excavations, I will, in conclusion, briefly notice their significance.

The Camp presents several points of resemblance to the Roman Station of Birrens. Like Birrens, it occupies a bluff rising in a hollow part of the country, and skirted on two of its sides by running streams. The interior dimensions correspond—it may be accidentally, but more likely of design. The given number of men to be encamped would doubtless govern the space to be embraced within the fortifications, and its form would be determined by the manner in which it was customary they should be disposed. The structural details have much in common also; and, although probably only a coincidence, it is yet worth mention that this Camp and Birrens incline to the same point of the compass, N.N.W., and conform to the Vitruvian rule for guarding against noxious winds.

The plan is geometrical and symmetrical, suggestive of strict discipline and adherence to established rule. In this way the small tongue of land at the south end, which is high and defensible and level with the Camp, is, for the purpose of regularity, cut off by ditch and rampart; and for the same reason the east ditch and rampart, instead of following the higher ground, have been carried across a low marshy place in a straight line. The rounding off of the corners is a characteristic common to all works of the kind.

From what has been said the Camp will be readily recognised as of Roman origin; and the proofs of occupation, although not numerous, are yet, the conditions being taken into account, sufficient.

It is not a station like Birrens, but a Camp of inferior importance—another interesting memento, nevertheless, of the footsteps of the Romans in the county of Dumfries.

I should add that the thanks of the Society are due to the proprietor of Raeburnfoot for the ready permission granted for the examination of the Camp, and particularly to Mr Cartner, the tenant, who gave freely every facility and assistance in his power. The Rev. Mr Dick and Mrs Dick also gave active help.

In proposing a very special vote of thanks to Mr Barbour, Provost Glover made eloquent allusion to his (Mr Barbour's) long service to the community in the field of antiquarian studies, describing him as a thorough-paced conservative—not in a political sense—but in the sense of bringing to light and conserving all of good that might be captured from the hand of oblivion.

Mr Murray, George Street, in seconding, related the story of Mr Barbour's week at Raeburnfoot, and declared the identity of the Camp as Roman to have been proved beyond any possible doubt, speaking with approval of Dr Macdonald's confidence in Mr Barbour's judgment, and of his expression, in the last of the Rhind lectures, of willingness to accept Mr Barbour's evidence and inferences.

At Mr Murray's suggestion, the thanks of the Society were also voted with much enthusiasm to Mr Cartner, of Moodlaw; Mr Beattie, of Davington; the Rev. Mr Dick; and to the proprietor of the land at Raeburnfoot for generous assistance in carrying out the excavations.

Mr W. Dickie supported the motion, laying emphasis upon the week of valuable professional time which Mr Barbour had most generously given up to this enterprise.

The resolution was passed with acclamation, the meeting being large and representative.

In responding, Mr Barbour mentioned that he had submitted the paper to Dr Macdonald, who, in returning it, expressed general concurrence with the views it set out.

Rev. Mr Cairns interpolated with a query as to the position of the other side, but Mr Murray assured him that no argument had yet been adduced anywise calculated to invalidate Mr Barbour's hypothesis.

2. Recent Antiquarian Operations and Finds in Upper Nithsdale.

By Mr J. R. WILSON, Sanquhar.

I. Operations.

The desire to perpetuate interesting relics of the past is becoming deeply rooted in the minds of the community. Within recent years active steps have taken place, and the purpose of this paper is partly to draw together and give a brief account of

these operations, and also to indicate that more work of this nature lies ready to be entered upon.

The late Mr Donaldson, minister of Kirkconnel, was chiefly instrumental in causing a substantial freestone cross to be erected on Glenwharry Hill at the traditional grave of St. Connel, the patron saint of the church. A rude block of freestone formerly marked the place, but in erecting a wire fence on the Ayrshire boundary it was broken into pieces by the fencers for socket stones for iron straining posts. St. Connel flourished early in the seventh century, and has in this district left several place-names to commemorate his name and work, such as "Kirkconnel" in Tynron, the site of St. Connel's chapel on the farm of Kirkcudbright, in Glencairn; "Connelpark" in New Cumnock, "Connelbush" and "Connelbuie" in Sanquhar, and the name of the parish and church in Kirkconnel.

Mr Donaldson was also the moving spirit in placing in the south wall of the church at Kirkconnel an elegant slab in memory of the Rev. Peter Rae, minister of the parish, clerk to the Presbytery of Penpont, and the historian of the rebellion of 1715. He was translated in 1737 from Kirkbride, an extinct parish in Nithsdale now embraced in the parishes of Durisdeer and Sanquhar, and was a person of note in his day. In turn Mr Donaldson's classic and manly face, which many of you will remember, has been represented inside the church where he laboured so long by the erection of a marble medallion by his devoted parishioners and friends. And very recently the present minister of the parish, Mr MacVicker, has placed in the church a massive font stone, bearing some ancient ornamentation and mouldings. For a long period it formed the side of a "lunkie hole" in the northern boundary wall of the glebe, and no doubt many a poor sheep had derived immediate benefit from it as a "rubbing stone." In the cavity of the font there has been placed a beautiful silver basin for use at baptisms in the church, with the names of all the ministers of the parish from Peter Rae's time inscribed thereon. The Scriptural injunction against removing the ancient landmarks which our fathers had set up may have been set at defiance by removing this stone to the church, but as we know time changes all things both in form and use.

At Sanquhar kindred work has been going on for some years. The foundations of the old church of Sanquhar have been built

up to the level of the ground so far as not covered by the present building, and covered with picked freestone. This was done by the Marquess of Bute with consent of the heritors. The old church was of great antiquity, and had several altars and figures of freestone within its walls. One of these figures, traditionally known as the "Bishop of Sanquhar," was removed to Friars' Carse about the end of last century by the celebrated antiquarian, Captain Riddel, and long lay in the railed enclosure adjoining the Hermitage there. I exhibit two photographs of the figure taken from different views as it lay in the enclosure. It has now been restored to its former habitation by the Marquess, and placed on an elegant slab of Dumfriesshire red sandstone, set on pillars with ornamental wrought iron railing around the open sides. An inscription on the plinth narrates its history, and states that it was placed there by the Marquess as 14th Baron Crichton of Sanquhar, in 1897.

The figure is believed to commemorate William Crichton, who was Rector of Sanquhar in the reign of James V., and if this assumption is correct it would further embellish the church and gives additional interest to the figure to place in the west wall the slab at Blackaddie (the old manse of Sanquhar) with black letter inscription commemorating his erection of the manse. It may, however, be suggested that the slab at Blackaddie may have been removed from the church when the figure was picked up by Riddel and built into the manse for preservation.

Captain Riddel raided the whole district for antiquities. The font stone of Morton Old Church is at Friars' Carse, correctly labelled, and I believe a movement is on foot to have it restored to the present church of Morton.

The most extensive work of the nature in this district is in progress at Sanquhar Castle. Works of restoration and preservation are being rapidly pushed forward, and the members of this society could not do better than visit in the coming summer the ancient residence of the Crichtons and take notes for themselves. I would have given a full description of the work at present accomplished, had it not been that the *Dumfries Standard* a few weeks ago gave an accurate account of all that has been so well done under Lord Bute's directions.

It must also be mentioned that Morton Castle, in the parish of Morton, has been dealt with by the Duke of Buccleuch by way of pointing and filling up of gaps so as to preserve the

existing remains. The work has been executed with great care by Mr Gibson, who has also the work at Sanquhar Castle in hand, and the stately ruins should now be proof against time's destroying finger for a long period of years.

II. Finds.

I will now give some account of the various finds in the district which have come under my notice. The loan exhibition in Sanquhar a few years ago revealed many objects of interest not before heard of except by the possessors of them. At that time I was unsuccessful in seeing a large bronze sword or spear found in the course of drainage operations in a meadow on Kirkland farm, Kirkconnel. It got into the hands of some children, who soon broke it into pieces and destroyed its interest. This beautiful whetstone was got about the same time on the farm of Carco, Kirkconnel, in a drain at a depth of two feet. It resembles the one figured in the catalogue of the National Museum of Scotland on page 51, found near the Cathedral of Lisnore, but is more entire. Here is another whetstone found on Carcomains, Kirkconnel, but more modern in appearance. Very likely this is one of the "rags" used in the days when clenched back reaping hooks were in use. However, there is one in the museum in Thornhill very like it in size and general appearance which was found at the lake-dwelling on Sanquhar moor. Another from the bed of the Nith at Sanquhar is a natural flake which has seen service as a whetstone.

A beautiful celt or stone axe was exhibited at Sanquhar by the late Mr Brown, Bennan. Lately I got it from his son, Mr Stephen Brown, and it is now in the museum at Thornhill. I exhibit two photographs of it, one of which shows it to have been slightly adze-shaped. The ticket attached to it in the museum bears that it was found at Bennan; weight, 3 lbs. 6 oz.; length, 9 inches; breadth, $3\frac{1}{2}$ inches. Its use when I got it was most degenerate—for striking matches upon.

A very fine bronze axe is in the possession of Mr Hewitson, Auchenbainzie, and was found on his lands. It is ornamented with oblique lines radiating from the rib to each side, and is in excellent preservation. Captain Steuart, Castle-Gilmour, has in his possession a stone axe or hammer found on the adjoining farm of Auchentaggart. It is about eight inches in length, and

perforated at the hammer end. It is of a type common to Nithsdale.

Last year when some repairs were being executed at Eliock there was found by a mason in the centre of one of the walls a nice specimen of celt or axe perfectly entire. It is about three inches in length, and appears to be formed of a flinty-like material. The same mason shortly after found a hammer-shaped axe in digging the foundation of a house at Moor, in the parish of Carsphairn.

At the loan exhibition in Sanquhar a very beautiful bead was exhibited by Miss Weir, Kirkconnel, and labelled as an "Adder Stone." It was of dark glass ornamented with white oblique lines, and she stated that it had long been in the possession of her family, who looked upon it as an omen, that while they had it they would never be in want. Of the same type was the bead obtained by the late Mr Shaw, Tynron, at Cairneycroft, in that parish. As to these being adder stones and formed according to the myth or legend known to all, there is no proof either in written record or in natural or scientific laws. It is well established that they have been personal ornaments, and have been frequently found associated with ancient burials in cairns and mounds. I remember when a boy seeing a so-called "Adder Stone" in the possession of a female servant, who delighted in recounting the exploded myth. She was nonplussed when we told her it was calm-stone from Crossgelloch, the same as we used every day at school for slate pencils. The article was a common whorl made to be fitted on to the wooden spindle so as to increase and maintain the rotatory motion given to it by the twirl from the finger and thumb in spinning from the distaff. They are very common, and have been found in or around every ancient habitation. Here is a rude one found recently in my own garden. If we credit the song of "the Gaberlunzie Man," they seem to have been hawked about the country for sale. He in persuading the daughter of the guidwife to share his fortune, says :

"Wi' caulk and keel I'll win your bread,
And spin'les and whorles for them wha need,
Whilk is a gentle trade indeed
To carry the Gaberlunzie on."

Mr Borland, Auchencairn, and Mr Smith, Townhead, Closeburn, have both made considerable finds in recent years. The

former enumerates four stone whorls of different types, and two dressed flat circular stones. He believes the latter to have been used as stone weights, and we know that stones of various shapes were often used as weights throughout the whole district, and some of the larger stone weights are in use still at several farms in Nithsdale. Mr Borland and Mr Sulley spent considerable time in investigating the cairns and tumuli in Closeburn parish, and the result of their operations was duly communicated to the Dumfries newspapers at the time, and attracted considerable meritorious notice from antiquarians. Mr Smith discovered several stones of an ovoid form of the type shewn at page 53 of the catalogue of the National Museum. This is one I picked up on the side of the Nith at Sanquhar in a "children's house" on the Washing-Green. You will observe it is slightly hollowed on both sides, which indicates that it has been used as a hammer-stone, the cavities being supposed to give a better hold for the fingers and thumb.

At Potholm in Eskdale I recently saw water-worn cup-like stones found in the Esk in use in a stable as pots for oil used in cleaning harness. This is certainly taking advantage of the caprices of water as a potter. Almost a similar case occurs at Old Kelloside, Kirkconnel, where a large water-worn block of whinstone of basin-like shape has been used as a pig trough.

I have often looked for something unique on the sweys in farm kitchens, but not until a few days ago did I find anything of interest. Here is a crook, bearing at the lower end, on which pots and pans are suspended, a zigzag extended device, while round the circle of the loop are incised lines. It may not be ancient, but certainly the maker has had in his mind ornamentation of a kindred nature. I remember seeing at Auchencloigh, Ochiltree, the spindle of a distaff in black oak similarly ornamented.

It may not be out of place to record that about twenty years ago a farm labourer was employed to remove some stumps of wood from a meadow on the farm of Kelloside, Kirkconnel, in order to clear the surface for a mowing machine. He removed a large number of stakes, about three feet in length and six inches in diameter. They had evidently been placed upright in a trench and secured by wattles driven through mortice holes about one foot from the bottom of each stake, and the earth packed around them. In the mossy ground the stakes were quite fresh, but in

following the circle of the stockade into the hard ground no vestige of the wood remained. The area embraced in the stockade would be about half an acre, and at one time when the Nith ran at a higher level the stockade may have been partly surrounded on the lower side with water. The stakes in appearance and morticing were exactly similar to those in the stockade around the lake dwelling in Sanquhar moor.

Besides recovering the minute book of the Sanquhar Lodge of Freemasons, dating from 1738, and the second charter of the lodge, dated 1778, I have lately got from Canada the minute book of the incorporated trades of Sanquhar, beginning in 1726.

In examining the progress of the titles of a house in Sanquhar I found a charter in law Latin by John, Earl of Mortone, Lord of Dalkeith, and of the Barony of Mortone, in favour of Robert of Dawzele and Florentine of Douglas, his spouse, of the lands of Belliboucht in the Barony of Mortone and Sheriffdom of Dumfries, dated at the Earl's Castle of Dalkeith, 8th October, 1493. These lands afterwards passed into the hands of Douglas of Coshogle, and from him to Douglas of Drumlanrig. They form part of the farm of Burn in Morton parish, and embrace the prominent hill on which you see at a great distance the remains of the "Picts' or Deil's Dyke." This is a photograph of the charter by Mr Fingland, of Thornhill, and I produce a synopsis kindly obtained for me by Mr Alexander Anderson of the Edinburgh University Library.

These facts exhaust in some degree my knowledge of the antiquities in Upper Nithsdale which have been dealt with or found during the last few years, and I hope they have been of some interest to you. It is gratifying that there exists an increasing liking for preserving local antiquities, and the example set will, I am sure, lead to still more being done in the future to preserve not only the antiquities of the district but also the history and the traditions of the past. The antiquities of Nithsdale are far from being exhausted, and a rich harvest is in store for those who have time and inclination to investigate its lake dwellings and stockades, territorial division dykes, drove roads, moats, cairns, camps, and tumuli.

Cordial thanks were voted to Mr Wilson on the motion of the Rev. W. Andson, seconded by Mr James Barbour.

14th January, 1898.

Mr JAMES BARBOUR, V.P., in the Chair.

New Members.—Mr D. M'Jerrow, town-clerk, Lockerbie ; Mr Walter Scott, Redcastle, Dalbeattie.

Donations and Exchanges.—Sixteenth Annual Report of Bureau of Ethnology ; Smithsonian Reports, 1893 and 1894 ; Proceedings of the Academy of Natural Sciences of Philadelphia, Part II., 1897 ; Proceedings of Natural Science Association of Staten Island.

Exhibit.—Mrs Brown, Barnkin of Craigs, showed a stone with a figure of Esculapius cut on it. The authorities at the British Museum had given the opinion that its age would be about 250 B.C., and that it was pure Greek. Mrs Brown also showed two other stones, a sardonyx and an emerald, both obtained in Syria.

COMMUNICATIONS.

1. *Natural History Notes.*

By Mr W. J. MAXWELL, Terregles Banks.

Having dwelt all my life in this part, except about five years, and having always been fond of natural history, some of my observations on that subject may interest those of like tastes, though I fear many of them are not new. During my boyhood I collected butterflies and moths in a small way, and have ever since taken much interest in that branch of animal life, although my knowledge is small indeed compared to that of an older member of this society, Mr Lennon. Many changes have taken place among the butterflies. According to my recollection the Peacock butterfly was one of the commonest till about 1860, when it vanished suddenly and completely. I am afraid the Orange Tip has also disappeared of late years or become very rare. On the other hand, the Clouded Yellow butterfly, a rare prize in my collecting days, appeared in large numbers about 1875 and the immediately following years. During the last few years, it appears to me, butterflies of all kinds have become scarcer. One of the pleasures to me of a trip abroad is to meet again the beautiful insects I knew here of old and also to see rarer species, which I then longed to capture, such as the

Camberwell Beauty, the Apollo butterfly, and the Purple Emperor seen in hundreds in the sunny glades of the Black Forest. Some of the mountain slopes of Dauphiny, blue with wild Lavender, struck me as especially rich in butterflies, many of them being species quite new to me. The mountains and valleys of Dauphiny offer a grand field for the botanist, the flora seeming even richer than that of Switzerland. At Bouquéron, near Grénoble, I noticed two or three of the species of butterfly known in Britain as the Rare Swallow-tail (*Papilio Podalirius*) flitting about the double scarlet flowers of the pomegranate bushes, and so tame that one lit on my straw hat and remained while I removed it and held it in my hand.

Bird life is sadly wanting in many parts of France and Germany I have visited. In some parts of Switzerland the copses still ring with the nightingale's song, but in the endless woods of the Black Forest, which one would expect to be full of life, one may walk from morning to night and never hear the chirp of a bird nor see the flicker of a wing. All was silent thus to me, though others whose hearing takes in acute insect sounds complained of the din of the tree crickets. In this country we are more fortunate, but some old acquaintances have left us. Most people of about my age or older must remember the magpie as a very common bird here. I have seen as many as six in a row on the fence of the field in front of my house. The keepers have killed them out, as they are now exterminating the hawks of all kinds—a deplorable fact. I am convinced this is not necessary for the preservation of game. Some two and twenty years ago the buzzard was pretty common, as also the peregrine, the sparrow hawk, and the kestrel; and I think game was as plentiful then as now. I remember four or five buzzards being killed on one grouse moor in the Stewartry, one of the best, and that moor was as well stocked with grouse before as since. Hawks and magpies are no doubt somewhat destructive to game, but a small number of them, such as used to exist when they were let alone, would do far less injury than the hordes of rats with which the country is now overrun, thanks to the destruction of stoats and weasels, or than the rooks which are allowed to increase and multiply almost unchecked. The rook is a most destructive enemy not of game only but of all the smaller birds. Now that the nobler birds of prey are banished, the rooks make a very good attempt at filling their place, so far as other occupa-

tions permit. They have their agricultural pursuits. At the proper season the young turnips have to be pulled up and the roots inspected for grub and wire-worm; tithe of the grain and potato crop must be secured; and those places where the enemy has sown the tares have to be visited early in the morning, before he is out with his gun. But besides all this the rook finds time to attend to the chicken and duckling department, and successfully acts the part of a low-class predatory bird. I have seen them destroy a whole family of starlings, dragging the young birds from the nest one by one, and tearing them limb from limb before the eyes of their shrieking parents. Quite lately I saw no less than four at a time fly over my fields, each carrying a hen egg in its beak. In the interests of game-preserving, and farming as well, more should be done to reduce the number of the rooks.

The hedgehog is another much persecuted animal, and though destructive to game I think he deserves better treatment for the good he does by destroying slugs, which I have known to develop into a serious pest on some farms. Slugs are the usual food of the hedgehog, eggs and game being only occasional luxuries. A year or two ago I saw a hedgehog family flitting, which is more, I think, than most people can say. The nest having been exposed by the cutting of some long grass near my house, the young were removed one by one to some brushwood about a hundred yards off. In some cases the young were coaxed to follow the parent hedgehog, whose anxiety was very visible. The others had to be carried, the mother holding them in her mouth by the loose skin of the region of the stomach, which is free from prickles.

If let alone, I think it would not be long before our lost birds of prey would reappear. Very uncommon species often appear suddenly, where any unusual abundance of their favourite food is to be found. For example, the vole plague brought the short-eared owl. After the decline of the voles the woods about Terregles were full of these owls, noticeable by their habit of flying by day. Many years ago I remember a similar invasion of king-fishers when the Cargen was temporarily diverted from its course for deepening operations, the small fry left in pools in the bed of the stream being the attraction. The plague of goose-berry caterpillars brought that shy bird, the cuckoo, to my garden in considerable numbers. The severe frost a few years ago was thought to have killed or banished all the herons from this

district. Doubtless many starved to death, but the following winter I put up no less than nine one afternoon from the Kirkland meadow, Terregles. Observations at Heligoland show that many birds not generally regarded as migratory, such as hawks, crows, &c., do cross the sea in immense numbers, and probably even very rare species are constantly passing over our district unknown to the keenest observer. Favourable conditions would make them stay. The black-headed gull has now ceased to nest at Collochán, Terregles. Some years ago they bred there in hundreds on the floating islands and in the reeds round the edge of the loch. The gales of late years have driven these islands to the sides, and it is thought by some that the risk of attacks from the land has thus caused the gulls to quit. Another cause has been suggested to me. There are a good many coots on the loch, and they have developed a taste for eggs. The tenant of Collochán tells me that he has often seen them eating the eggs of the gulls, and that he caught them robbing a turkey's nest some way from the loch. It is good news to hear that the jay is being seen at many places in Dumfriesshire, probably the result of Sir Herbert Maxwell's importation of several into Western Galloway. I heard of one being seen by some friends of mine about three miles from Dumfries in Troqueer parish. From the description there is no doubt in my mind that the bird seen was a jay.

A fact about fish culture may be interesting. The late Captain Maxwell introduced a few roach and dace fry into the ponds at Terregles some fifteen years ago, with the idea that they would be food for the trout with which the ponds are stocked. After the lapse of ten or twelve years, however, it was found that the roach had increased amazingly, in place of having been eaten as was meant. They devoured all the food put in for the trout, and to get rid of them the water was run off, so that they were easily caught. Upwards of half a ton of roach were taken out, packed in huge tubs and baskets from the laundry, and carted round the parish for distribution. Being caught at the right season they were good eating, though rather bony, and for three days the whole parish of Terregles smelt of fried fish. I kept some alive, and put them into the moat at Carlaverock Castle and Collochán Loch, and some other places not suitable for trout.

I have for some years kept as a pet an animal not often seen in this country, a Chinese mongoose. It is a thoroughly domesticated animal, and enjoys complete liberty, spending the

whole day in the garden in summer looking for toads and bumble bees, which are favourite delicacies, but always coming home to sleep in the house at night. It is gentle with human beings, but jealous and spiteful with dogs and cats, which it regards as rivals whose attempts to occupy positions on the hearthrug must be resisted at all hazards. In India, I understand, the mongoose is often kept about houses to kill snakes and rats, &c., but they are seldom quite gentle. My own, which came from China, is as tame as a cat. Some years ago there was a large importation of so-called mummy cats from Egypt. As every one knows, the Egyptians had a great respect for cats, embalmed them, and made cases for their mummies, which are exact images of the domestic pussy cat of our own day, but the only specimen I saw of these mummy cats imported to Liverpool was not a cat but a mongoose. There are several different species of mongoose at the London Zoological Gardens, but being shut up in cages, of course little is seen of their interesting ways. I have had many queer pets in my time, a weasel and a racoon among others, and would like well to mention some of the unexpected talents and peculiarities which they revealed when thoroughly familiar with their surroundings, but I fear I have already taken up too much time and must conclude my remarks.

Mr Rutherford of Jardington said this was just such a paper as should come before a natural history society, being a record of personal observations. He confirmed from his own observation Mr Maxwell's notes regarding the butterflies. With regard to the crows, he questioned whether it would be wise to destroy them. They did mischief certainly, but it was as nothing in comparison with the good which they did. They were of incalculable service in destroying grub. They were always at work, always seeking and always finding. Living on the banks of a river he had every opportunity of observing the king-fisher. In some seasons he would see half-a-dozen day after day, one after another; then they disappeared for a time, and they had them now just as plentiful as when he came to Jardington. He had exceeding pleasure in moving a hearty vote of thanks to Mr Maxwell for his very valuable, concise paper, and a paper containing observations which he had made himself instead of collecting his information from books. He considered it a model paper.

Rev. Mr Andson seconded the vote of thanks. He had, he said, had a conversation with Mr Day, bird-stuffer, from whom he learned that two rare birds, the Spotted Craik and the Grey Phalarope, had come into his hands this season—the former found at Carnsalloch, the latter (a migrating bird, about the size of a thrush) at Barneleuch in Irongray. He had also received two jays, and the king-fisher he saw often along the river banks.

The vote was conveyed in complimentary terms by the Chairman (Mr Barbour). Mr Maxwell, in acknowledging it, made reference to the great destruction of eggs of the nightingale in England by bird collectors. In one district of Norfolk he had heard of some persons collecting as many as two or three hundred. If it was possible to exterminate a bird which was only a summer visitor, the nightingale would have been exterminated long ago by the egg collectors.

2. *The Meteorology of Dumfries for 1897.*

By Rev. WM. ANDSON.

Barometrical Observations.—The highest reading of the barometer in 1897 occurred on the 20th and 22nd November, when it rose to 30·650 inches. The lowest was on the 3rd March, when it fell to 28·745 inches, giving an annual range of 1·905 inch. Besides the month of March there were other two months in which readings under 29 inches were recorded, viz., once in the end of November and four times in December. The months in which the lowest means of barometrical pressure occurred were March, August, and December, ranging from 29·500 inches in March to 29·744 inches in December; and these were the months in which cyclones were most prevalent, and which were marked by the heaviest rainfalls. The last week of December in particular was characterised by a succession of cyclonic storms and an abnormally heavy rainfall, which caused the flooding of the river Nith and of the low-lying lands along its banks to an extent seldom experienced. On the 27th the gauge at the New Bridge showed a mean depth of nine feet, and on the 30th of eleven feet, while the Whitesands and the Dock Park were flooded with water, which surrounded the Hoddum Castle Inn and extended some way up the foot of the Vennel and Nith Place. The months which had the highest

Report of Meteorological Observations taken at Dumfries during the year 1897.

Lat., 55° 4' N.; Long., 3° 33' W.; Elevation above sea level, 60 ft.; Distance from sea, 9 miles.

Months.	BAROMETER.				SELF-REGISTERING THERMOMETER. In Shade, 4 ft. above grass.						RAINFALL.				HYGROMETER.			
	Highest in Month.	Lowest in Month.	Monthly Range.	Mean for Month.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean Maximum.	Mean Minimum.	Mean Temperature of Month.	Highest in 24 Hours.	Amount for Month.	Days on which it fell.	Mean Dry.	Mean Wet.	Temperature of Dew-point.	Relative Humidity. (Sat=100)	
Jan.	30.396	29.253	1.143	29.925	49.2	15.8	33.4	39.1	29.3	34.4	0.29	1.39	14	35.7	34.3	32.1	86	
Feb.	30.513	29.263	1.250	29.979	55	25.2	29.8	45.7	36.3	41	0.68	2.93	21	40.4	39.1	37.4	90	
March	30.073	28.745	1.328	29.500	55.3	24.3	31	48	36.5	42.3	0.68	5.51	26	40.7	39	36.9	86	
April	30.325	29.224	1.101	29.832	63	25.2	37.8	52	35.4	43.7	0.68	3.08	15	43.1	40.2	36.8	77	
May	30.505	29.261	1.241	29.986	71	32.3	38.7	59.3	40.1	49.8	0.72	1.95	16	49.3	45.2	40.8	72	
June	30.248	29.287	0.961	29.996	79	38.6	40.4	65.8	49.6	57.7	0.81	2.86	17	56	52.8	49.8	79	
July	30.470	29.536	0.934	30.044	86	43	43	70.5	50.9	60.7	0.32	1.56	12	60	55.9	52.3	76	
August	30.273	29.313	0.960	29.708	85.6	41.7	43.9	69.6	53.2	61.4	0.61	5.75	25	60.2	57	54.1	80	
Sept.	30.570	29.326	1.244	29.926	74.2	34.7	39.5	61.7	44.2	53	0.60	3.43	17	51.6	49.3	47.1	84	
Oct.	30.613	29.296	1.317	30.117	66	25	41	58.2	41.9	50	0.67	2.36	12	48.2	46.4	44.6	87	
Nov.	30.650	28.895	1.755	30.123	61.7	26.7	35	50.1	40.4	45.3	0.85	3.60	18	44.6	43.3	42	90	
Dec.	30.633	28.761	1.872	29.744	53	21.5	31.5	44.4	34.1	39.2	1.29	8.39	22	40.7	39.2	37.2	88	
Year	30.650	28.745	1.905	29.906	86	15.8	70.2	55.4	40.9	48.2	1.29	42.81	215	47.5	45.1	42.6	83	

WINDS—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Var.
17	24	61½	33½	54	81½	47½	32	14

mean pressure—above 30 inches—were July, October, and November, and in these the weather was more settled; while in May and September it was also favourable on the whole. The mean barometrical pressure for the year was 29·906 inches, which is just about the average of the last ten years.

Temperature.—The highest single day temperature of the year, as shown by the sheltered thermometer in shade, 4 feet above the grass, was recorded on 15th July, when it rose to 86 deg. The lowest was on the 18th January, when it fell to 15·8 deg., thus giving an annual range of 70·2 deg. The warmest month was August, with a mean temperature of 61·4 deg.; but July fell very little short of it with a mean of 60·7 deg. These months were both above the average of the last ten years by 2 to 3½ deg. There were seven months in which the mean temperature was in excess of the normal, viz., February by 2·5 deg., March by 1·3 deg., July by 2·1 deg., August by 3·6 deg., October by 3·1 deg., November by 3 deg., and December by 1·4 deg., the aggregate excess amounting to 15 deg. On the other months the means were below the average, January having a deficiency of 2·9 deg., April of 2·3 deg., May of 2·7 deg., June of 0·2 deg., September of 1·6 deg.; aggregate deficiency, 9·7 deg. As might be expected from this comparison, the mean temperature of the year taken as a whole was above the mean, viz., 48·2 deg., as compared with an average of 47·5 deg. There were 60 nights on which the temperature fell to and below the freezing point, viz., 21 in January, with an aggregate of 113 degs. of frost; 7 in February, with an aggregate of 18·7 deg.; 7 in March, with an aggregate of 13·2 deg.; 8 in April, with an aggregate of 26·2 deg.; 2 in October, with an aggregate of 12·2 deg.; 4 in November, with an aggregate of 10·9 deg.; and 11 in December, with an aggregate of 54·3 deg. Total, 60 nights, with an aggregate of 248 degs. of frost. As this statement shows, January was by much the coldest month. March was a stormy month, with a good deal of rain and some snow, but with a temperature somewhat above the average. In April and May there was a deficiency of warmth. But in June, July, and August there was rather more than the usual number of warm and sunny days, with a maximum temperature of 70 deg. and above. There were 12 in June, 16 in July, of which 4 were from 80 deg. to 86 deg., and 11 in August, of which 4 were above 80 deg., and 2 in September. The warmest period of the year was between the

11th of July and the 10th of August, during which the mean of the maximum or highest day readings was 75 deg., and the mean of all the readings, maximum and minimum, was 64·7 deg. This was peculiarly favourable to the growth of the crops, and made the harvest earlier than with a wet March and a cold April and May it had threatened to be.

Rainfall.—The total rainfall of the year amounted to 42·81 in. Only once during the last ten years has the rainfall exceeded this amount, viz., in 1891, when it was 42·92 in. And the only other year which approached it was 1894, when it was 42·01 in. The average amount for these years was 37 in., so that the past year was in excess of the normal by 5·81 in. The wettest month was December, with a total of 8·39 in., which is fully double the average for that month, and of the 8·39 fully 5 in. fell in the last week, which was an extraordinary period of southerly and south-westerly storms, with correspondingly heavy rains. On the 26th and the 29th the amount for each day exceeded an inch and a quarter, and these were the only occasions during the year when the fall reached an inch. It is worthy of note that the amount for that week very nearly accounts for the excess of the year above the annual average. While December was the wettest month, there were other two months in which the average was considerably exceeded. These were March, with 5·51 in., as compared with an average of 2·12 in., and August, with 5·75 in., as compared with 3·92 in. After the 10th of August there was rain almost every day until the 7th September, a circumstance which interfered seriously with harvest work, and caused a considerable amount of damage to the corn crops. But the remaining part of September and October as a whole were drier than usual, and greatly favoured the ingathering of the harvest in the later districts of the country. The number of days on which rain or snow fell was 215 (rain, 205; snow, 10). The average of ten years is 177 days, and 1897 shows the largest number since observations were begun at this station. The next to it was 208 in 1894, when the annual fall was also over 42 in. Curiously enough, the driest month was January, with only 1·39 in. But May and July had each a record under 2 in., while October also was considerably under average. March had 26 days of rainfall, August 25, and December 22, while July and October had only 12, and January 14, six of which were in the

form of snow or sleet. The weather of the year was on the whole of a changeable character, and there was no protracted period of drought such as was experienced in the previous year between the 16th April and the 4th June, when less than an inch of rain fell. The driest periods were eleven days between the 8th and 24th of May, and again between the 9th July and the 3rd of August, during which only three-quarters of an inch fell. From the 18th October to the 10th November was also a dry period, with only one day on which rain fell to the amount of 0·13 in.

Hygrometer.—The mean of the dry bulb thermometer for the year was 47·5 deg. ; wet bulb, 45·1 deg. ; temperature of the dew point, 42·6 deg. ; relative humidity (saturation = 100), 83 ; which is about the average for the ten years of observation. The monthly means of humidity ranged from 72 in May to 90 in February and November.

Thunderstorms were rather more frequent than usual, but, with the exception of one on the 4th and 5th August and one in December, were not severe or protracted. Besides these there were three in June, one in July, and three in August. Hail fell eight times as far as I observed, and lunar halos were seen seven times.

Wind.—With regard to the wind directions, the south-westerly was as usual most prevalent. It blew $81\frac{1}{2}$ days out of the 365. The next most frequent was the easterly, which is down for $61\frac{1}{2}$ days ; southerly, 54 ; westerly, $47\frac{1}{2}$; south-easterly, $33\frac{1}{2}$; north-westerly, 32 ; north-easterly, 24 ; northerly, 17 ; and calm or variable, 14.

Mr Andson said he observed from the Cargen record that the number of days in which rain fell there was given as considerably less than the number in his observations ; the respective figures being 168 and 215. This was unusual, as the rainfall as a whole was heavier at Cargen than in Dumfries ; but he was disposed to think that the rain gauge in use there must be one which did not measure hundredths or thousandths of an inch. The number of days on which the amount of rainfall did not exceed one-hundredth of an inch was 34, and on 13 days it did not exceed two-hundredths of an inch. This made 47 days, which if added to 168 would bring up the number to 215. Of course this did not cause any difference in the aggregate amount of rainfall, as the very small quantities not registered separately would be

included in the next measurement. He further explained that the high humidity in November was occasioned by fog rather than by rain.

Floods on the Nith.

Mr James Lennox moved a vote of thanks to Mr Andson for his valuable paper, remarking that it was the result of a whole year of constant watching. Alluding to the floods, he mentioned that notwithstanding the continued heavy rain in the last week of December, a mark in the boathouse showed that the river Nith had on a previous occasion risen 2 feet 3 inches higher than it did on any day in December.

Mr Rutherford said he had known the water to rise higher than in December half-a-dozen times, he should say, since he went to live at Jardington. The highest flood during that period would, he thought, be about eighteen years ago.

Mrs Brown, Barnkin of Craigs—It was either 1881 or 1882, I think. I marked it on a tree higher up the valley, at a point which it had never been known to reach before.

Mr Rutherford said he had frequently seen floods higher by a foot at least than those of December. The records of the rainfall taken at Maxwelton House, by Mr Andson, and by himself were all different; but differences were easily accounted for, as heavy showers sometimes passed over one place and did not touch another. For December Mr Andson's record was 8·39 inches; his was 7·7 inches. That was the highest record of any month since he began to keep the record except February, 1894, when it was 8·37 inches.

Mr Maxwell, Terregles Banks, said while he recollected the Nith being higher on previous occasions, he thought we never had within the memory of the oldest inhabitant a period when the country as a whole was so much flooded. He never remembered, for example, so much water in the meadows at Cargen as there was this winter.

Mr Lennox said there was water in the boathouse in December for four days together, a thing which never before occurred within his memory. It generally disappeared in three hours.

Mr Watson said the Chairman (Mr Barbour) would be old enough to recollect a time when the floods on the Nith were not only longer continued but higher. The explanation given for the change was the surface drainage of the land, the water now passing off more rapidly to the river, and the river getting away

with it more quickly. He could remember a time when the Nith used to reach once or twice in the winter to about the Blue Bell in Friars' Vennel. He had seen it some distance above that point. He once saw a coal wherry grounded opposite to Burns's House in Bank Street. That would be some thirty-five years ago. He remembered, too, quite distinctly the flood referred to by Mr Lennox. He compared the rise this winter to what it was then by looking across from his house to the fisher's lodge on the other side. The flood referred to by Mr Lennox reached half way up the window of that hut. On this occasion it was below the window sill.

Comparative Rainfall.

Dr Maxwell Ross said he had a letter from the honorary president of the society, Sir Emilius Laurie, giving a record of the rainfall of the past year at Maxwelton, Glencrosh, Holm of Dalquhairn, and at Folkestone as a contrast to these. For Holm of Dalquhairn (in Carsphairn) the fall was the largest of which he had obtained any record for the year, being 67·9 in. The record for Ericstane (Moffat) was 67·85. Curiously there was a great difference in the December record of these places. At Holm of Dalquhairn it was 13·15 in.; at Ericstane, 19 in. There was a curious illustration of the differences in observations referred to by Mr Andson. Sir Emilius Laurie gave the number of wet days at Maxwelton House as 205; at Glencrosh, not far away and exactly on the same level (400 feet above sea level), it was given at 160, a difference of 45 days, which approached very closely to the difference of 47 days which Mr Andson had indicated between Dumfries and Cargen. The average rainfall at Maxwelton House for ten years was 45·5 in.; this year it was 53·01 in., being $7\frac{1}{2}$ above average. At Folkestone the rainfall differed very extraordinarily from our experience in this part of the country, the total for the year there being 25·81 in., some five inches below the average. Sir Emilius noted that there were six days on which there was over an inch of rain, and the total at Maxwelton for the last week in December was 5·75 in. He had obtained a record of the rainfall from eight stations, seven of them in the county of Dumfries and Holm of Dalquhairn just outside the county. It varied from 42 in. at Drumlanrig to 67·9 in. at Holm of Dalquhairn. At Ewes (in Eskdale) in the observation sent by Mr Lyall, the schoolmaster, there was a curious difference from

what they found at other stations. December was not the wettest month in Ewes, but August. For December it was 9·7 in. ; for August, 10·7 in.

The Weather and Disease.

Dr Ross proceeded to offer some observations on the relation between the seasonal prevalence of disease and the meteorology of the year. Although Mr Andson had noted that last year was a somewhat changeable one, it had not affected the health of the county seriously, for we had one of the lowest death-rates in the landward portion of the county which had been recorded since he had had to make up the register. It was 15·147 per thousand for the year. If they added the seven burghs (Dumfries, Annan, Lochmaben, Sanquhar, Lockerbie, Moffat, and Langholm), the death-rate of the whole county for the year amounted to 16·6 per thousand. In making the calculation, he explained, he excluded deaths which occurred in the Infirmary and in the Crichton Royal Institution of patients who had been brought from places outside the county. Although the weather was changeable, up till December there were no very marked extremes of weather. The highest death-rates were in March and April ; the lowest in September. In both March and April the excess of deaths was due to zymotic causes. With regard to infectious diseases throughout the county, we had had a very favourable year compared with some others. If we deducted measles, we had under three hundred cases reported during the year all over the county landward. There had been less scarlet fever, and on the whole less diphtheria and less typhoid fever than in past years. Scarlet fever was at its maximum in January and November, but that was due rather to local than to seasonal causes. During the past year scarlet fever had been at its maximum prevalence in the district around Dumfries ; yet during the third quarter we had a considerable number of cases of diphtheria. There were during that quarter only five or six cases of scarlet fever, but there were eighteen of diphtheria. The cases were very mild, contrasting very favourably with our experience in 1896, when there were eight deaths out of 29 cases. In connection with this prevalence of diphtheria there was a question which he ventured to suggest to observers. During the past autumn we had an exuberance of fungus growths ; at least of mushroom growth. The question arose, had the seasonal or

climatic influences which produced the exuberant growth of these fungi the same effect in producing a larger number of the smaller organisms which produce the disease that we know as diphtheria, or was the occurrence of the two things a mere coincidence? He thought there was more than a mere coincidence in it. Dr Michael Taylor, of Penrith, who was a very careful observer, published a paper a good many years ago in which he attributed diphtheria to growth of fungi in houses in which diphtheria cases occurred. He thought that writer went to an extreme in attributing it to that cause, for with greater extension of our knowledge we were unable to do so. But during the present season he had seen fungoid growths in damp houses, and he thought there was between that circumstance and the prevalence of diphtheria more than a coincidence. He did not say there was a casual connection; but the same influences might operate to cause both: the same conditions which favoured the growth of these fungi favoured also the growth of the diphtheria organism in the human subject.

Mr Lennox inquired whether, to adjust the balance, Dr Ross added the deaths of Dumfries people who might die in prisons, asylums, or infirmaries outside the county?

Dr Ross replied that he thought no Dumfries people would die in prisons—(laughter)—and the number who died in other institutions outside the county would be so small as to affect the calculations only to an infinitesimal extent. It was only where you had large institutions, such as the Crichton or the Infirmary, that the question became really important; and he explained that the deaths occurring there of all patients belonging to any part of the county were credited to their proper districts. In reply to a question by Mr Rutherford, Dr Ross said the life history of the diphtheria bacillus was not fully known; and it was a curious fact that it had been found in the throats of perfectly healthy people.

11th February, 1898.

Mr R. MURRAY, V.P., in the Chair.

New Members.—Mrs Brown, Barnkin of Craigs; Mr John Bryce Duncan of Newlands; Mr Walter Johnstone, Merchant; Rev. George Ure; Mr Alexander Taylor, Dumfries Academy.

Donations.—Nithsdale Illustrated, by Mr Peter Gray; On Primary Conditions of Tropical Production, by Mr Scott-Elliot.

Exchange.—Proceedings of Berwickshire Naturalists' Club, vol. xv., 1894-5.

COMMUNICATIONS.

1. *A Century's Changes in a Pastoral Parish.*

By Rev. THOMAS RAIN, Hutton.

So far as known to me the parish of Hutton and Corrie does not present a promising field to the researches of the antiquary. Few remains of the past such as he is interested in—old earth and stone works, old battlefields, old traditions and customs—are to be traced within it. Whatever the legends and folklore were in bygone days, they have come to be of the scantiest and most commonplace kind now. There are the remains of a small Roman encampment at Carterton; which, according to the map, would be almost bisected by a bee-line running from Birrenswark to the encampment at Raeburnfoot, Eskdalemuir, lately explored by the members of this Society. It is situated at the southern extremity of a tongue-shaped bluff of land lying between two deep burns, or cleuchs, which would form a natural protection to the east and west. The ramparts are still quite traceable, though they have been defaced in some places by the plough, which was first driven over this camp about forty years ago, when many cartloads of stones, forming no doubt the roadways, were taken out of it. A son of the tenant of Carterton at that time distinctly remembers the operation, which was necessary, he said, to prepare the way for the plough. By peeling off the turf, at some points traces of the stone facing of the inside ramparts may still be discovered. The camp is narrower at the south end than at the north, but this would be necessitated by the conformation of the ground, which is tongue-shaped, I have

said, and tapers towards the south. Its extreme length from outer rampart to outer rampart is about 120 yards, its inside length is about the half; a gap that would form the north doorway, I suppose, remains. Might a clump of rushes on the centre line inside the camp towards the north indicate the existence at the time of occupation of a well? The remainder of the ground is hard and dry.

After the Romans had disappeared Carterton seems to have attracted some attention from the church, for there still lives the tradition of a chapel having been here, evidence of which is to be found in numbers of hewn stones built into the steading, and in a field adjoining the house being called Chapel Park. The stones are of a coarse white sandstone, of which there is no quarry nor any natural traces in the vicinity, and it has been suggested to me that they could not have been brought from a point nearer than Canonbie. One of these stones, carved into what appears to be a head, surmounts the present barn door, but it has been so obliterated by the wear and tear of time that the lines of it cannot be traced. Presumably it was of an ecclesiastical character. I notice the other day that the Scottish Society of Antiquaries in their recent excavations at Ardoch have found the remains of a mediæval chapel inside the ramparts there. It is said that a castle also existed at Carterton, but of this I can offer no evidence further than the tradition. But these traditions, and the testimonies of the stones, and of the Roman camp, suggest that in bygone times Carterton was, in this upland, rather wild district, a place of some importance, a centre.

A conspicuous object to a traveller up Dryfe Valley is Hutton Moat, standing on an eminence to the right, its bold, well preserved, conical outline showing clear against the sky. The most inexperienced eye would detect at once that the hand of man had reared it, so bolt upright does it rise, like a miniature pyramid, on the green hill top. A writer has said of moats or "motes" "that they have attracted so little attention that the word is altogether ignored in the *Encyclopædia Britannica*, and that history is silent respecting their use." It has been thought by those who have given some attention to the subject that they are of two kinds—those constructed for defence, and those constructed for the administration of justice, announcing the laws to a rude people living out of doors, and putting them in

execution. The latter is more properly called moothill than moat. From the absence of any traces of defence at Hutton—trench or stonework—it probably was of the latter class; and we can picture the rude inhabitants of the valley gathering to it somewhat as Freeman in the opening chapter of his “Growth of the English Constitution” has pictured the inhabitants of Uri in Switzerland gathering to their moothill once a year to the present day, and as the people of the Isle of Man gather to their moothill also.

A more modern relic, further up Dryfe, is the tower, or castle, of the Grahams, rising sheer out of the water, of which only the stone and lime foundations, and the fosse that protected it on the landward side, remain. A notable Border exploit, related in the ballad of “Christie’s Will,” which Sir Walter Scott has included in his collection, is associated with this tower. Here in brief is the epic. In Charles I.’s reign Lord Traquair of that day had got into a lawsuit, and he discovered in the course of it that the judgment was likely to go against him. Moreover, that it would depend on the voice of the presiding judge, who, in the case of an equality of opinion among his brethren, has a casting vote. But Traquair was determined, and his resources when he found himself in the difficulty were of the true Border character. He engaged a famous Border reiver, Armstrong of Gilnockie, in the parish of Canonbie, to carry off the man of law, Lord Durie, till the trouble might be past. It was a job after Armstrong’s heart, and he accomplished it with the most creditable despatch, as one used to such doings might accomplish it. He found Lord Durie taking his afternoon ride on Leith Sands, unaccompanied by an attendant, seized him, bound him, muffled him in a cloak, and brought him quickly across country to the tower of the Grahams.

“Willie he hied to the tower o’ Græme,
 He took auld Durie on his back,
 He shot him down to the dungeon deep,
 Which garred his auld banes gae mony a crack.
 For nineteen days and nineteen nights
 Of sun or moon or midnight stern,
 Auld Durie never saw a blink,
 The lodging was so dark and dern.”

And after his liberation he never knew where he had been confined till one day, travelling in Annandale, he heard a shepherd calling “Batty” to his dog, and an old woman crying “Maudge”

to her cat; these were the only sounds that had ever reached his ear in his dungeon. So saith the legend. The event has also been made the subject of one of Wilson's "Tales of the Border," where it is treated pretty much on the lines laid down by the ballad.

The belief that there is treasure hidden near this tower—a belief that has attached itself to so many old castles, and which so readily affects the popular imagination—has not altogether died out. Perhaps it ought not to die, perhaps it is founded on fact. Treasure hiding was frequently resorted to in the "good old days," when those who possessed the treasure found themselves in trouble. However it be, a labourer in this parish told me that, in his younger days, he and other two had set about digging for Graham's treasure, when stern fate appeared in the form of the "Laird," and warned them off. Higher up among the hills, a mile to the north, more of Graham's treasure—"a sheepskinful of gold," it seems—lies under the earth. Tradition has handed down the whereabouts of this gold with a precision it has not observed in the case of that nearer home. It lies in the hillside exactly on a level with Macmaa chimney top, and a line run straight from the old tower to the said Macmaa would pass over the spot. No information could be more satisfactorily full. A native of this parish, who is not dead more than a generation ago, saw this precious spot one night three times in his dreams; on three consecutive occasions the sweet vision broke in upon him. And what could be a more distinct leading of Providence than that? Accordingly he rose early in the morning, equipped himself with a pick and spade, and went away quietly among the hills. We can imagine him digging with the breathless intensity of a man who loves gold in his heart, and who believes that he has come to its hiding-place at last. But the precious sheepskinful still sleeps under the grass. Failing the acquisition of gold by this means he took to getting it by another means that is also romantic—smuggling. He set up his still, and conducted his operations, in a cleugh or gill not far from the place where he toiled for the gold. So that this part of the parish may be said to be historic, or, if you like the word better, classic ground; the glamour of a kind of romance hangs over it. Here at least, if at no other point, human nature is known to have exhibited some of its most marked, most persistent characteristics. For what

has so persisted in man all through his history, and what so persists in him still, as his love of money? His love of woman alone can take rank beside it. Our smuggler carried samples of his "stuff" about with him in a bladder, and he sometimes boasted that he had sold of it to the best "quality" in Annandale. At all events, he got into possession of money by his sales--more money than his lawful occupation could have yielded to him. The present blacksmith here is in possession of his "worm." I have seen it, as A. K. H. B. might say, "with these eyes."

A hundred years ago there were bad times for the poor. There was not the same statutory provision for supporting them as there is now; and their staple food, oatmeal, was dear. In 1795, when there was a bad crop, "a general meeting of the Freeholders, Justices of the Peace, and Commissioners of Supply for the County was held in Dumfries, being desirous to adopt some general rule to secure a sufficient quantity of oatmeal for the support of the manufacturers and labouring classes of this county;" and the parish ministers seem to have been requested to take steps for having the objects of the meeting carried out. The minister of Hutton, Dr Nisbet, got a letter from the Clerk of the Commissioners, asking him "to convene the whole heritors and tenants within the parish to ascertain as nearly as possible the quantity of meal that will be necessary to supply the above description of people till Michaelmas next. And to ascertain further whether the heritors and tenants would be willing to raise the sum necessary to make up the deficiency, either in money or meal, in the option of the contributors." There is no record whether the suggestion of the Commissioners was carried out in this parish; but that they probably were may be inferred from the fact that in 1800 a heritors' meeting was called "to inquire into the state of the poor, and to consider the proper and necessary measures to be taken for their relief at the present time, when the indispensable article of oatmeal is come to the highest price ever known in this and other counties of Scotland." And in 1817, another dear year, the heritors expended £162 odd in buying meal and barley for the poor. "They were brought from Edinburgh and Dalkeith, the farmers in the parish having no grain to sell, and the public markets in the neighbouring villages being almost equally deficient." The meal was sold at a reduction of from 1s 6d to 2s 6d per stone, which left the Committee in a deficiency of £53,

made up by £33 of voluntary subscriptions and £20 in which "the heritors voluntarily assessed themselves." This illustrates the sort of times the labouring population of the parish was passing through at the beginning of the century. There were many dear years then, caused by bad seasons and the war; it would have been hard to find a cheap year. In 1800 oats were 39s 6d per quarter; in 1809, 36s 9d, falling for some reason in 1802 to 20s 9d, but rising again in 1808 to 33s 8d, and in 1812 to the enormous figure of 44s 1d, to be succeeded by 39s 3d in 1813. These figures are taken from the *Dumfries and Galloway Herald* of 1838. And at this time, according to the "Old Statistical Account," labourers in the parish were receiving from 1s to 1s 4d per day in summer and harvest, and 10d in winter. The yearly wage of men ran from £7 to £8, and that of women from £3 to £4. In his account book for the year 1801 the laird of Shaw enters—"To my Mother to pay the 2 house servants' wages £3." The regular poor, as distinguished from the occasional, what would now be called paupers, were likewise assisted by the heritors and by donations of money from the Kirk-session; and the principal mode of assistance seems to have been grants of oatmeal. A widow left with a family, *e.g.*, gets 50 stones of oatmeal, which, with an occasional donation from the session and the charity of her neighbours, would form her living; a male pauper, an imbecile, is boarded out for 50 stones oatmeal, with a small addition of money for clothing and the like. The money for these donations was obtained by the Kirk-session from the Sunday collections, charges for proclamations, for regular marriages of persons in their own houses, the use of the mortcloth, baptism, and from fines for irregular marriages and other delinquencies. In 1762 there is the following entry in the Session book:—"Received from Robert Mauderson in Balstack on account of Mr Barclay's (the minister) coming home to marry him as per act of Kirk Session to be paid by every couple married in their own houses 2s." In September 1760 a pair of people, A. B. and C. D., "appeared before the congregation for their irregular marriage and paid their fine, 10s." In a similar case, presumably that of poor persons, the sum is modified to 3s 4d. Another source of revenue which the Session had was as money-lenders, employing in this capacity the funds that had accumulated in the poor's box. As an illustration.—"Feb. 21, 1764. The which day the Session of Hutton lent to Mr Thomas

Kirkpatrick of Fenton £20 sterling of the poor's money, and took his bill payable to the Kirk Treasurer for the same at £4 per cent. per annum interest." The sum in the poor's box in bills and cash at this date was £34 5s 11d. A notable feature is the base coin that was found put into the collection boxes, and which the Kirk-session sold from time to time when it had accumulated. In 1751, *e.g.*, they sold 7s 6d worth at 1s 7½d, and another occasion, in 1747, "The one pound (evidently sterling) bad money that was in the poor's box, weighing six pounds and one half, was sold at 8d per pound, which comes to 4s 4d, was put into the poor's box." On another occasion there is the following entry, the date 1762:—"Total bad copper 18s 2½d. The Session appoint Mr Barclay, James Jardine, and George Bell, Elders, to dispose of the Bad Copper to the best advantage."

Coming into the present century, within the memory of persons still living, this official mode of assisting the poor was supplemented by voluntary effort, mostly, I understand, by the lower classes of the people. It was a case of the poor coming to the aid of the poor. These voluntary efforts sometimes took the form of what was called a "drinking," and at other times it would be a raffle. The word would go round that Annie Ferguson, *e.g.*, an old woman who lived in a thatched cottage at the mill, was in need of a "Drinking." Whereupon young men would set out among the farms, and collect for her doles of meal, cheese, butter, ham, and such like, which they brought to Newton Inn, their rendezvous. They met again there after handing over their spoils, and spent an hour or two in dancing and conviviality. Hence the term a "drinking." This Annie Ferguson had a peculiar gift of being able to lick motes out of people's eyes, and chaff "pickles" out of cattle's, with her tongue, and her gift in both capacities was not unfrequently made use of.

I have been led away from the Kirk-Session by consideration of the poor; but take an illustration of the Session discharging its duties as guardian of the religion and morals of the parish:—"17 Sept. 1756. The which day Samuel Reid in Nr. Borlands went down the water the length of Barnsdale and did shear some sheaves of corn before he was told his Error by a woman in the neighbourhood that came to him, and his wife Margaret Smith preparing to follow him to shear was prevented by her neigh-

hours informing her it was the Lord's day. The Session ordered their Officer to cite them to their next meeting."

It is a remarkable fact that at the beginning of this century a schoolhouse had never been built in Hutton parish. The children received what education they got, which appears to have been but little, in the church. But that building was in so ruinous a condition that the parishioners complained of its unhealthiness to the heritors, who set about remedying this condition of things. In the year 1796 there is the following entry in their minute book :—"It being complained by the inhabitants of the parish that the church, where the school is presently taught, is cold for the children and dangerous for their health, the meeting agree that a house shall be rented for one year at a rent not exceeding 15s; and it being informed that the house of David Mundal near this place (Nether Boreland) is now to let the meeting authorise the said John Halliday to agree for and take the same, and to proportion the rent in the same manner with the salary and collect it from the heritors."

It was not till two years after this that they took thought of putting up a regular schoolhouse. "Finding that no schoolhouse has ever been built at Hutton the meeting agree," it is said, "that one will be built and estimates got in so that the work may be got executed in spring. Meantime the meeting agree to put a temporary window in Mundal's house and make it water-tight." This new schoolhouse was to be 45 feet long, 15 feet wide, and was to include some accommodation for the teacher; the "timber was to be of oak or foreign," and it was "to be covered with flags from Corncockle." But unhappily for progress in educational matters when the estimates, £130 in full, came in, and were considered next July, it was found to be "considerably above what was proposed to be done," so that the plan was altered, and the tradesmen directed to estimate anew. I can find no trace of this new plan, nor of the cost of it; but that it was executed is proved by the fact that in June next year the heritors inspected the new schoolhouse, and ordered "the master's apartment to be lathed and plastered." The teacher's salary at this period was £8 6s 8d, increased from £5 a few years before, and he was appointed yearly, and removable at the will of the heritors. Corrie was better off, having been endowed in 1727 with £280 for educational purposes, and having been twice endowed since.

We cannot wonder in the circumstances described that from 1786 till 1803 no less than five teachers held office in Hutton. One of these voluntarily demitted office, and another was turned away "for closing the school three or four months during hay and harvest." His excuse for doing so was that "the salary did not give him encouragement to attend school for a longer portion of the year." It is also no wonder that delinquents before the Kirk-session, on being interrogated whether they could sign their names, often answered "no." There has been an emphatic advance from then till now. But it has been said that there is no unmixed good; and has not the growth of education by turning the people's minds on other subjects caused them to forget their old legendary lore, their fine old superstitions, their old saws, the old nursery rhymes their mothers sang to them, old world stories of fierce love and strife, and the ghost stories they told to each other by the evening fire till their flesh crept and sleep fled their pillows. There is always loss where there is gain. The scientific spirit is spreading among the very children. A child in this parish asked his aunt one day, "Who made the flowers?" "Ye must ask the minister that," she said, speaking solemnly, but his younger brother was by, and, equal to the occasion, the minister's services were not required. "Howt, man, they grow!" he cried decisively, and, one can think, with the air of a philosopher. This rationalist was about five years old—the youngest I ever knew. I doubt if a single person in this parish to-day believes in a *bona-fide* ghost. Yet not long ago I came upon a fragment of the old philosophy—who will have the courage to rise up and condemn it? An aged man heard a "rap" on his door the night before his son died—the same as Adam Bede heard while he was making the coffin, and his father was drowning in the brook—and knew what it meant. Again, his daughters heard a sudden crack in their bedroom "like the breaking of sticks," and next morning Jenny Graham, their neighbour, was dead. My old friend has cast overboard his belief in ghosts as unscientific, but he still retains his faith in "raps," for which, I am sure, all right-minded persons will thank him.

We have seen that at the beginning of the century the parishioners of Hutton and Corrie, like other people throughout Scotland I suppose, were living principally on oatmeal, and had a hard struggle to get it. At that time the oatmeal barrel held the

place of honour in and was regarded as the "treasure chest" of the poor man's dwelling; to keep it well plished was the object of his life. An acquaintance of my youth, a single woman, stalwart and independent, used to say that she sometimes would give a tramp "a piece," but she never allowed him to come between her and the barrel. It was to have always something in it that she bent her back, and straddled among the furrows, and tore through the yellow harvest, and brought the sweat on her sun-browned face through the toilsome days. Another acquaintance of mine once said, "The 'Quality' may tak' tea if they like, but workin' folk maun hae porridge." It used to be told by Carlyle that James Mill, the utilitarian philosopher, father of the more famous John, and by birth an Aberdonian, took a craving in his old days for oatmeal. This, in London, where the said James was living, was ill to obtain. It occurred to him that Carlyle, who was then also living in London, and who had a supreme contempt for Mill's philosophy, might have it, so he sent to enquire. The meal was forthcoming, with the remark, kindly but grimly made, "It's a gran' thing to see an auld man returning to the foundation o' his being."

Now the old-fashioned "treasure chest" has been pushed into the background in a great measure by the flour bag and the teapot. Fifty or sixty years ago Jess Henderson, who also ran post, brought up most of the "loaf bread" that was used on the Hutton side of the parish on her back once a week. Now it takes five bakers' vans to bring it, and the population has decreased. When "Old Macmaa," one of the famous characters of Hutton, about whom a predecessor of mine, Mr Wright, wrote a ballad, was on his last legs (it was in the twenties, and Macmaa was near a hundred), he was in the habit of getting a glass of toddy and half a slice of bread as a cordial. Sometimes he would leave a morsel of the bread, and his grandchildren would rush for it as for the rarest dainty. But it is allowable to question whether here, as in educational matters, there has not been loss as well as gain. The old school of French peasantry, I believe, are finding out that the better living and better education which their sons enjoy unsteady them at the plough; and one can understand well enough how it may be so. For man is affected fundamentally, even in his moral nature, by the amount and quality of his food supply; he is influenced probably far more than we imagine through the

palate. An American man of genius has written:—"I have been thrilled to think that I owed a mental perception to the commonly gross sense of taste (*a mental perception* mind), that I have been inspired through the palate, that some berries which I had eaten on a hillside has fed my genius." Therefore it is to be hoped that some learned member of this Society will write a paper on the philosophy of foods—we have already got the science of foods; we now want the philosophy. The subject is a vast one, and, so far as I know, it has the advantage—a great one to a writer—of being as yet untouched.

No change during the century has been more marked here—as, of course, elsewhere—than that in the means of locomotion. Less than a hundred years ago everybody in the parish walked or rode, except a favoured few, ladies mostly, who were taken about the country in covered carts. The late shoemaker, Archibald Sanders, walked twice a year over the hills to Carlisle, carrying money in his pocket to pay his leather merchant. The Rev. Mr Wright, of the Manse here, referred to already, kept such a cart, and it used to go on long journeys on the long summer days to the north of England, where his wife's relations lived. Now the multitude drives; it is the favoured few who walk. The first gig came into this parish in 1825, from Edinburgh, to Mr Graham of Shaw, and his Edinburgh friend writing to him about it says:—"I received your letter yesterday, and I have now closed a bargain for the gig complete at £50. The maker warrants it for six months, so that if anything goes wrong with it during that period let me know, and I shall be at him." When I came to the parish, twenty years ago, the era of walking had not quite closed. Shepherds and ploughmen—shepherds especially—and their families all did their journeys on foot. But now (I speak of the Huttonside of the parish) waggonettes come up for them once a week, and on fair days, and term days, and holidays, and all days, in short, on which there is a stir. Is it not an illustration in a small way of a process which some philosophers say is going on everywhere, in so many forms, yet so unthought of, called "the arrest of the body"—a step in the natural evolution of man? In connection with it one is tempted to ask, "Will human legs be as serviceable at the end of next century as they are at the end of this one?"

The peat harvest, which used to be a kind of carnival in the spring days here, has also departed. In these days the mosses

became populous with busy workers, and at the dinner hour I have been told, when "the piece" had been eaten or the milk and sowens supped, there was sometimes a good deal of "daffin'." The old Laird of Shaw, the man who bought the first gig, told a worker, Jean of Barnsdale, one day that her peats were ill shaped, whereupon Jean was at the pains to instruct him, "Theyr'e no cuissen for their shape, laird; theyr'e cuissen to burn." Coals were to be got no nearer than Annan, and it was only the lairds and better class of farmers who ever thought of burning them. Smithy coals were brought from so far away a place as Carlisle by the farmers in turn, as part payment of their accounts. Another form of payment to the blacksmith was that of giving corn—"sharping corn," as it was called—five stooks for keeping the plough irons of a pair of horses going for a year. Our present blacksmith's father had it to the last. He died 33 years ago; he was probably the last blacksmith in Scotland who received this form of payment. It is one of the innumerable illustrations, which are quickly being forgotten, of the former scarcity of money.

There has also been a great change and improvement in the farming of land. There is an old couplet that runs—

There lies in Corrichill between the wet and the dry
As much gold as Corrie parish could buy.

The author of that interesting volume "The Bard and the Belted Knight" calls attention to this, and he says the gold has been discovered. The late Mr Jardine of Corrie and his factor, Mr Glover, discovered it in the form of a rich layer of clay, and took it up, and turned it into tiles, with which they dried the land. There has, finally, been a change in the dwellings of the people, a change which may be described generally as that from thatch to slate. The cottages are for the most part well built; and inside, for order, brightness, comfort, and good taste, they stand second to none in Scotland.

As this is no antiquarian paper in the proper sense of the word, no distinct contribution to antiquarian knowledge, I may be pardoned for finishing with a bit of poetry. It touches in its great way upon what I have been touching on in my small way, change :—

Nothing can be as it has been before ;
Better, so call it, only not the same.
To draw one beauty into our heart's core,

And keep it changeless ! such our claim ;
So answered—Never more !

Simple ? Why this is the old woe o' the world ;
Tune, to whose rise and fall we live and die,
Rise with it, then ! Rejoice that man is hurled
From change to change unceasingly,
His soul's wings never furled !

Mr J. A. Moodie moved a vote of thanks to Mr Rain for his exceedingly interesting and very fresh and able paper, which bristled with good things. He thought that Mr Rain seemed to somewhat regret the disappearance of some of the surroundings, habits, and customs of the people of the beginning of the century, but the paper itself showed that the changes, especially in education, had been entirely for the benefit of the people.

Mr W. Dickie seconded the vote of thanks, and said that the high prices of oats, &c., must be regarded as exceptional, occurring as they did during the years of the great war. He related the experience of an old lady whom he knew, now over 100 years of age, who in her girlhood had purchased a stone of oatmeal for 10s 6d, and so scarce was it that she found it difficult to procure it even at that price.

Mr J. S. Thomson called attention to the statement of a church having existed within the camp at Carterton, and said it might indicate that the camp was not Roman, but Romano-British.

Dr Maxwell Ross pointed out that the church referred to by Mr Rain was mediæval, and later than the camp.

Mr Barbour stated that the church found at Ardoch, which was undoubtedly a Roman camp, was much later than the camp, being 13th century, and in all probability the camp and church at Carterton would be similarly related, the church being built on a part of the camp site. He also referred to the state of the poor and vagrancy in the early part of the century, and pointed out that many vagrants were welcomed at farm houses because of the news they brought.

The Chairman, in closing the discussion, regretted the rapid loss of tradition and folklore, due to the removals of old tenant farmers and shepherds.

2. *Description of an Underground Dwelling, commonly called a Pict's House, at Pitcur, near Cupar-Angus.*

By Rev. WM. ANDSON.

By way of introduction to this paper, I may mention the occasion which led to its being written. Last summer I went to the town of Blairgowrie, in Perthshire, during the holiday season, and spent a fortnight there. One of the ministers in the town, the Rev. Malcolm White, who takes a great interest in antiquarian research, kindly invited me to accompany him on a visit to some places in the neighbourhood where there were objects of this kind to be seen. Among other places he took me to what he called a cave-dwelling at Pitcur, about two miles or so from Cupar-Angus, and a little off the road between that town and Dundee. In order to reach the place we had to cross a turnip field, on the farther side of which there was a part slightly raised above the level of the field and covered with turf. On arriving at the spot we came upon an opening at a lower level, on entering which we found ourselves in a regularly built gallery constructed of large blocks or boulders of undressed and uncemented stone, about six feet wide at the bottom or floor and half-way up, but narrowing towards the roof, and not less than six feet high. The roof was formed by large slabs of stone laid across. The side walls were vertical for the first three feet from the floor, and then inclined inwards with a curve by the gradual overlapping of the stones towards the centre, so that the width at the top where the roofing stones were placed would not be more than about four feet. There was no regular arch. The arch seems to have been unknown to the constructors of these dwellings, but a kind of rude and imperfect arch formed in the way I have described. On the right hand wall at the entrance there was a recess cut into the stone about six or seven inches deep, and about two feet wide, and two feet or a little higher. What the design of this was my friend could not say. It could not be a fireplace, for there was no opening for smoke to escape by, and it was too small for a press or repository of any kind. My own opinion, after reading the descriptions of several similar buildings in the Proceedings of the Society of Antiquaries of Scotland, is that it must have been intended to receive the slab which closed the entrance to the gallery when it was opened for the admission of those to whom the structure belonged. But in

that case the entrance, or door as we may call it, must have been of very limited dimensions, as it usually was, indeed, in buildings of the kind, and probably concealed, being six or seven feet below the level of the ground. But there was this difference between the building at Pitcur and a good many others which have been figured and described, that the gallery was not low in height for a certain distance from the entrance, and only gradually increased as you advanced inwards, but as soon as entrance was obtained you could stand upright and walk along with a height of fully six feet. As far as I could judge, the entrance was in the south side, and the gallery extended from west, or a little to the north of west, not in a straight line towards east, but by a gentle curve towards south-east and south. This is one of the peculiarities in buildings of the kind that have been explored, that they hardly ever proceed in a straight line, but are almost invariably curved, and for the most part terminate in chambers of greater width and height than the galleries which lead to them, and in some cases have smaller chambers branching off from the sides. In the one at Pitcur, however, I did not observe any arrangement of this kind, and whether it widened out towards the extreme end could not be ascertained, as it had not been fully opened up. There was no perceptible widening as far as we were able to proceed, which would be a distance of 40 or 45 feet. There was another peculiarity of which notice should be taken. One of the large boulders on the left-hand side, which constituted part of the wall of the gallery, was found to be covered with the cup and ring markings which are not uncommon on the boulders of stone circles, or other earth-fast boulders, or on the face of rocks. These cup and ring markings, the origin and purpose of which constitute one of the unsolved problems of archæology, are of frequent occurrence in this country, and are not confined to Britain, but are found also in Scandinavia, in France, in Switzerland, and in Germany. There was no evidence to show whether the markings on the one found in the subterranean building at Pitcur had been made upon it after it was built into the structure or whether they existed upon it before it was used for this purpose. The latter, I think, is the more probable conjecture, inasmuch as there is reason to believe that the cup and ring markings are of greater antiquity than the earth houses of which the one at Pitcur is an example. Dr Anderson, of the

Society of Antiquaries of Scotland, in his book on Scotland in Pagan times, gives it as his opinion that they appear on the continent in associations which refer them to the bronze age at least, which means, of course, that they may possibly be older; while he says at the same time that they also occur in associations which show that the custom survived to the late iron age, and even in a modified form to Christian times. Old customs are often very persistent, and not unfrequently are found to survive long after their origin and design have been forgotten or lost sight of. At all events, in our modern times we seem to have been left without any clue to the purpose or significance of these cup and ring markings.

I inquired whether any relics had been found in the Pitcur gallery which would tend to show to what age or period it belonged, and for what purpose or purposes it had been used. But as far as I could ascertain the only relics found in it were some fragments of the red lustrous ware commonly called Samian, which are frequently found on the sites of Roman settlements, and the presence of which is held to indicate some degree of contact with the effects of Roman occupation. It is to be remembered, however, that the subterranean building in question had not been fully opened up. If this had been done it is not improbable, to say the least, that it might have been found, like most of the other buildings of a similar kind, to terminate in a wider chamber, and that other relics of occupation might have been discovered tending to throw light both on the period to which it belonged and on the uses to which it was put. In order, therefore, to get some fuller information on these points it is necessary to refer to other examples of similar underground buildings which have been fully explored, and to the relics which were found in them. The area in which they are found, according to Dr Anderson, of the Scottish Society, extends from Berwickshire to the Shetland Islands, but they are most numerous north of the Forth and on the eastern side of the country, as in Forfarshire, Aberdeenshire, Sutherland, and Caithness. This was the region understood to have been occupied by the Picts, and hence they are traditionally called Picts' houses, and are so named in the Ordnance Survey maps.

The name Picts seems to have come from the Romans, and is supposed to have been applied by them to the ancient inhabitants of Britain generally, as descriptive of their habit of tattooing

their bodies or of painting them with a dye extracted from wood. But in proportion as the Roman occupation led to the disuse of this practice in Southern Britain and in the southern portions of Scotland which came under its influence, it came to be applied more specially to the inhabitants beyond the northern wall which were never thoroughly conquered by the Romans. It may be questioned whether the northern tribes called themselves by this name. Indeed it does not seem the least likely that they would call themselves painted people. But it is constantly used by Latin writers in subsequent times to describe them, and in this way came to be the cognomen by which they were known. There is another explanation, however, which is not without probability. There is a book in our library—presented two or three years ago by the author, Mr D. Macritchie—called the “Testimony of Tradition,” in which he maintains that the proper name of these people is Pechts or Pchts, which means dwarfs or little men. And he traces the name of the Pentland Hills south of Edinburgh, and of the Pentland Firth, which divides the mainland from the Orkney Islands, to these people, Pentland being simply a corruption of Pecht or Pchtland. And Professor Rhys, in his book on Celtic Britain, expresses the same opinion. This suggests a different explanation of the origin of the name given to these tribes by the Romans. It may have been only a Latinised form of the name they gave themselves—Pechti or Picti. Dr Anderson, in his book on “Scotland in Pagan Times,” does not acquiesce in the propriety of the name of Picts’ houses being given to the kind of buildings we are considering on the ground that there is nothing about them to connect them with any particular race; but that they ought to be called “earth houses,” as descriptive of their peculiarity as buildings under the surface of the ground. But there is perhaps something to be said in favour of the name they have commonly received when it is remembered that they are chiefly, if not exclusively, found in the region which was known to have been occupied by the Picts.

Passing from this point, I shall now refer to the kind of remains that have been found in other buildings of the kind which have been discovered and explored, and here I take my information from Dr Anderson’s book on “Scotland in Pagan Times,” in which a good many of them are figured and described. In almost all of them there were relics of occupation in the form of calcined ashes and fragments of the bones of animals, chiefly

of the domestic kind, and in some cases of deer (evidences of cooking), and in a good many there were, in addition, querns, whorls, stone cups, coarse pottery, sometimes, but more rarely as at Pitcur, a fragment of Samian ware, and in a good many cases articles of bronze and fragments of iron, so corroded as hardly to show the purpose for which they were used. From these indications Dr Anderson infers that the period to which they belong is that of the iron age, and subsequent to the Roman occupation ; but still in Pagan times, none of them having yielded any indications of the influence of Christianity. He is of opinion also that they were adjuncts of houses on the surface of the ground, of which there is some evidence in a few cases, although for the most part these upper houses, built probably of very frail materials, have entirely disappeared through the lapse of time and the progress of cultivation. That they were occupied at times as dwellings is apparent from the remains that have been found in them, although from the lack of light and ventilation they seem little adapted for this purpose. But it by no means follows from this that they were constantly occupied, or that they were the only or permanent dwellings of the people. The most probable conclusion is that they were used as refuges or hiding places in times of danger from the invasion of foes, or from the assaults of plundering marauders in the rude and troublesome times to which they belonged, or what is not less likely, for the concealment and protection of their stores of provisions or other valuables. Dr Anderson adds that they occasionally occur in groups, as at Airlie, in Forfarshire, where there is a group of five. And there is a still more remarkable group spread over a space of a mile in diameter at Kildrummie, in Aberdeenshire. These were brought under the notice of the Society of Antiquaries in 1816 by Professor Stuart, of Aberdeen, who says that the only opening to them was between two large stones placed in a sloping direction at one end, and about 18 inches asunder. Through this narrow opening one must slide down to the depth of 5 or 6 feet, when he comes to a vault, generally about 6 feet high, 30 feet long, and 8 or 9 feet wide, and resembling in other respects the examples of similar structures. But I mention this one in particular because, as Professor Stuart goes on to say, many of them were detected by the existence close to them of a square space 10 to 15 paces each way, dug a foot or more deep, with the earth

thrown outwards, which he conjectures, rightly I think, to have been the sites of the huts of the people on the surface of the ground, while the underground places were the refuges to which they retreated in times of danger, or when circumstances were such as to render such protection or shelter necessary or desirable. Dr Anderson follows up this instance by saying that it would not be difficult to find in other parts of Scotland, and especially in Aberdeenshire, groups of similar structures, which, though not so numerous or so closely aggregated, are so distributed over wide districts as to show that the custom of constructing them was general and prevalent. Most of the known ones have been discovered accidentally by the plough striking one of the large stones which form the roof. And from this I think it may reasonably be inferred that many more exist, especially in the north-eastern districts, which have never been brought to light. But enough has been discovered to give us an interesting glimpse into the customs and habits of our remote ancestors in the Scotland of Pagan times, which I thought it was not inappropriate to bring under the notice of such a society as ours.

Another example of the name given by the Romans having become the recognised name not of a people but of a place or places, quite different from the names used by the original inhabitants, is to be found in the name of the site of a great battle fought by the Romans against the Picts and Caledonians, who combined to resist the Roman invasion of their territory in the time of Agricola. In the Agricola of Tacitus, this battle is said to have been fought *ad Montem Grampium*. But no such name seems to have been known to the natives. The mountain range, which forms the backbone, as it were, of Scotland, was known in its western part as Drumalbin, and that portion of it which stretches in a north-easterly direction towards Aberdeenshire was known as the Mont or Mount. And it was only after the revival of classical learning that the name of the Grampians began to be given to it on the authority, it is supposed, of Tacitus. And curiously enough a German scholar of comparatively recent times has questioned the accuracy of the reading of *Grampium* in Tacitus, and maintains that it ought to have been *ad montem Graupium*. The authority of Tacitus, however, has been sufficient to perpetuate the name of the Grampians to the range in question, although it was utterly unknown to the Scottish people themselves.

Mr Barbour, architect, proposed a vote of thanks to Mr Andson for his interesting paper, which was also illustrated by drawings.

Mr J. S. Thomson, in seconding the motion, expressed the opinion that too little attention had been paid to the existing remains which might throw light on the mode of life of the aboriginal inhabitants of this country, and referred to evidences of earth-dwellings belonging to a remote period which had been discovered in our own district. On one of the hills on Queensberry range there were turned up some years ago hearths and other evidences of rude building under a deposit of some three feet of earth. Then near New-Galloway station two earth-dwellings, of the bee-hive form, were discovered. There was also in Mabie Moss a spot known as the Picts' Knowe; and near Thornhill, on the farm of Burn, he was informed by Mr Robert Service, there was a mound which, if opened, might probably afford valuable information regarding the early inhabitants of the country.

Mr Andson sends us the following note with regard to the concluding paragraph of his paper: Mr Clark, rector of Dumfries Academy, informs me that the later editions of Tacitus have adopted the reading of "Montem Graupium," instead of "Montem Grampium."

11th March, 1898.

Mr JAMES BARBOUR, V.P., in the Chair.

New Members.—Mr A. Ligertwood, Kirkbean; Mr Wallace, Terreglestown.

Donations.—(1) By Dr Chinnock, a photograph of the late Mr Galloway, hon. member of the Society; (2) by Rev. Wm. Andson, Celtic Britain, by Ernest Rhys.

Exhibits.—Mrs Brown, Barnkin of Craigs, showed (*a*) two original tricolour rosettes of the French Revolution; (*b*) one paper assignat of ten sous value; (*c*) an autograph letter of the Duke of Wellington dated Nov. 3, 1810; (*d*) an autograph letter from Lord Edward Hill dated Sept. 26, 1810.

COMMUNICATIONS.

1. *The Wild Animals of Palestine.*

By MRS BROWN, Barnkin of Craigs.

The wild animals of Palestine are not of a formidable character, neither climate nor condition of the country being suitable for the most dangerous classes. Hyænas were probably the fiercest, but we oftener heard than saw them, for they are almost wholly nocturnal animals. When spending the summer months, as we always did, encamped at some distance from Jerusalem, we often at night heard that strange sound called the hyæna's laugh, and a careful watch was considered necessary over the horses, as hyænas are credited with a love of horse flesh. Wolves were oftener seen by day, but though they would have been well able to give account of themselves if driven to bay, they were not otherwise dangerous. Foxes were common, also jackals. The jackals were really useful. They used to creep into the city at night, through the water courses under the walls, and aid the troops of dogs, which infest all Turkish towns, in their most valuable work as scavengers. What the Jerusalem of those days would have been without the dogs and jackals it is appalling to contemplate. There were also porcupines, though I do not remember ever to have seen one; but we often found their quills lying about. Gazelles were fairly plentiful, and, though extremely shy, not difficult to tame. To a certain point their grace and beauty make them charming pets, but there are drawbacks. We had one which, for a short time, was an immense favourite, but after he had one day breakfasted on a large piece of one of my mother's finest damask tablecloths, and lunched on a packet of important business letters, which my father had placed on a chair while sorting, he was voted a nuisance, and sent away. While I am on the subject of gazelles, I may perhaps be allowed to stray into the frivolity of a sporting story. It is not a Baron Münchhausen, though it has a dramatic completeness worthy of that renowned raconteur. In a country where meat is of execrable quality, a gazelle was a welcome addition to the larder, but a difficult one to secure, the intense clearness of the air, almost abolishing distance, and absence of cover rendering it very difficult to get within range of animals whose senses are so extremely keen. A Roumanian man

servant of ours was very anxious to achieve the distinction of shooting a gazelle, so went out from one of our encampments to try for one. He shrewdly reflected that as it was very difficult to go to the gazelles, it might be better to wait until they came to him. He accordingly chose a convenient olive tree, climbed into it, and sat down to meditate and wait. After a while the gazelles did come, and began to pick up some scanty herbage under this very tree, but the Roumanian's meditations had ended in profound slumber. Meantime another occupant of the camp had also gone out after gazelles, a Turk, who was an excellent shot, and oftener brought one home than anyone else. He had been stalking this very herd, and when they paused under the olive tree was just getting within range. But at that critical moment the slumbering sportsman lost his balance and descended flat on his back among the gazelles he had been so anxiously awaiting. His gun remained in the tree; he consequently could not fire at the flying game, and the Turk could not, because the Roumanian was exactly in the line of fire. But the story had a sequel. The Turk retired in disgust, unobserved; the Roumanian went off in search of better luck, which he met in the shape of some arabs who had shot a gazelle. From them he bought it, and returned to the camp with the airs of a mighty nimrod, graphically describing his long wait, and the arrival of the gazelles, and his successful shot. But just as he was telling his tale the Turk appeared with his version of the story, and the unfortunate Roumanian found himself in the unpleasant position of an exposed imposter.

Reptiles.

It was the reptile and insect class which rendered life in Palestine full of interest, the reptiles especially making camp life exciting. Snakes in Palestine are not dangerous, the larger ones sometimes attained a length of 8 or 9 feet, but were harmless, as also were the smaller ones, which were more objectionable from a tendency they have to creep into beds if they can get a chance. I do not believe anyone knows how quickly he can get out of bed until he has got in to find a lively snake already in possession. We never thought in camp of getting into bed without the clothes being completely thrown back to be sure no reptile was ensconced. Scorpions were plentiful, but not very dangerous. The only case of scorpion sting I ever knew was

that of a lady being stung on the shoulder while dressing. She applied Ipecuanha powder instantly, and though her shoulder was stiff and painful for a day or two she suffered no constitutional disturbance. Scorpions had a way sometimes of getting into your slippers, but you were all right if you remembered to give them a good shake before you put them on. Centipedes were far uglier reptiles, black and yellow atrocities, often 8 to 10 inches long, and, including their countless legs, about the breadth of the blade of a small dinner knife. As to the exact nature of their venom I cannot positively speak. The Arabs declared that if one was on you, and you irritated it, it stuck all its hundred claws into you, and could only then be torn off piecemeal, unless you had patience to wait for a piece of heated metal to run along the back, when it would involuntarily draw back all its claws. But then Arab stories have to be received with caution, as the Arab always tries to tell you something he thinks will interest you, and invents something on the spot if he has nothing true on hand. Lizards abounded in Palestine from the large horney scaled ones of, I believe, the Iguana or Monitor species down to the small ones often seen in this country. Those which I think are foreign to us were geckos and chameleons. The geckos, though harmless, are objectionable, because they infest the houses, and the suckers with which their feet are provided enable them to run about on the ceilings, which always gives you the impression they are going to drop on your head. The chameleons are the most interesting of all the lizard tribe, with their marvellous power of taking the colour of any substance they are on. This is, of course, their special protection, for they are exceedingly slow in movement. The change is not instantaneous, but very complete. One which lived for a long time in a pomegranate tree in our court was bright green, or dark brown, according to whether he was among the foliage or on the trunk of the tree. But the most remarkable change I ever remember seeing was in one we found when out walking, and carried into the city tied up in a white handkerchief. When the handkerchief was opened there was the most ghastly, dirty white creature imaginable, looking as though all his blood had been sucked by a vampire.

Insects.

A great many of the insects of Palestine were those familiar to ourselves, such as spiders, beetles, &c. One of the most curious of those not common to us is what is known as the praying mantis, belonging, I believe, to the locust tribe. The way in which it partially sits up on end, and folds its forceps together, exactly like hands clasped in praying, is very curious. The genuine and dreaded locusts were occasional visitors, and when they came in full force it is no exaggeration to say the air was darkened by them. When, during the cloudless summer days of that country, we saw what looked like a long straight bank of cloud lying along the horizon we knew what was before us. The destructiveness of their visitation depended a good deal on the time of year. If they came when the corn was green it was fatal. They would settle down upon a field of rich green corn, and leave it in a few days as brown as though just ploughed. The foliage of fig trees, vines, almond trees, &c., all perished to a greater or lesser extent. The olive alone escaped. They never touched the olive leaves. They would settle down for a few days, sometimes as long as for a week, and then, as if by some preconcerted signal, suddenly rise and depart. Another small insect of the grasshopper tribe abounded. I forget, if I ever knew, its British name. We always used the Italian one "Cicala," that little grasshopper, which in very hot countries keeps up a perpetual humming noise in the trees during the heat of the day—a more drowsy sound it would be impossible to imagine. If any human being can resist the soporific influences of a comfortable hammock slung from the boughs of a thick foliaged tree, the noontide heat, and the monotonous hum of the cicalas all around, his insomnia must be of appalling character. Tarantulas we sometime saw, but not often, and I never heard of anyone being bitten by one. I believe the extent of their venomous capacity has been greatly exaggerated; that it really is not greater than that of a wasp. Flies, of course, were in swarms, and were certainly useful scavengers, but they need not be described. We know what they are. You have only to imagine every common house-fly in Dumfries multiplied by about 10,000, and you have a fair idea of what they are in Palestine. So with mosquitos. Multiply the common midge by about 20,000, his size and

ferocity by about 20, and picture him as lively indoors by night, as without, by day, in Scotland, and you have a very good notion of the mosquito. No human being, at least European, dreamed of sleeping without a net thrown completely over the bed, and carefully tucked in. Woe be to you if a single strand of the net was broken. Although a net fastened to the canopy of the bed, and thrown completely over it, was a pretty wide stretch of country for a mosquito to hunt, he would find that broken strand, and squeeze himself through the small aperture with unerring certainty. After mosquitos come a class of insects of which I positively dread to speak, although they probably score a deeper and more lasting mark on the memory of European visitors to Palestine than all the rest put together. Dismal realities, to which one has become inured in early childhood, soon get their edge blunted, and I might try your nerves too severely. I could tell you facts which would, I am sure, send you shuddering home to sleepless couches haunted by horrible nightmares. There are light and agile insects which are as an arrow that flieth by day. There are others, more dreaded of cleanly British housekeepers, which are a pestilence that walketh in darkness. I will only say that with care you may keep your houses fairly free from the intruder. Were houses there similar to ours, with wooden floors and skirting boards, wall papers, carpets, heavy hangings, &c., I believe your bones would be picked. But in our house, one of the ordinary ones, there was not, I think, a particle of woodwork beyond doors and window-frames. Roofs and floors were of stone or cement, the walls were all whitewashed, floors covered with matting, and upholstery all of light material, with little plaiting or folding. In the summer the bedsteads, all of iron, were taken down every week and laid out for a few hours in the sunlight, at the hottest part of the day. Then all joints and screws were carefully poisoned before they were put up again. In this way a fair amount of freedom from discomfort was secured, and for the rest, as with snakes, scorpions, and other similar inflictions, it is wonderful to see how soon people learn to face an evil they know to be inevitable with a very fair amount of mental tranquility.

2. *The Kindly Tenants of the Four Towns of Lochmaben.*

By Rev. J. H. THOMSON, Hightae.

The four towns of Lochmaben (said the essayist) are Hightae, the Heck, Greenhill, and Smallholm. They form a large part of the south of the parish. Their occupants are the kindlie tenants of Robert the Bruce. The tradition of the district is that their ancestors were originally the followers who kept by King Robert the Bruce during his long struggles against the English invader until after the battle of Bannockburn, and that the lands of the Four Towns were conferred upon them by him as a reward for their faithful services.

"Kindly," or "kindlie tenants," is explained by Jamieson in his dictionary as a designation given to those tenants whose ancestors have long resided on the same lands; but this explanation does not tell why "kindlie" rather than some other epithet more descriptive of their long services should not have been used. Jamieson has "kindlie" not only as an adjective but as a substantive, and his explanation is—"A man is said to have been kindlie to a farm or possession which his ancestors have held, and which he has himself long tenanted."

Since Jamieson's time it has been held that "kindlie" is allied to our Anglo-Saxon word "kin," and that it denotes a relation by consanguinity or affinity to the person that first gave the land; thus the kindlie tenants would be the far-off or the poorer relations of King Robert the Bruce. But of this relationship we have no positive evidence.

There is no manner of doubt, however, that the ancestors of the kindly tenants have held their lands from a remote period. What was the original number of the kindly tenants there are no written documents to tell. About the beginning of the century, it is said, there were upwards of seventy of them, but originally they must have been far more numerous in order to have given the effective service that the grant of the lands supposes them to have rendered. In the present day their number is not more than forty.

Sir Walter Scott, in his "Minstrelsy of the Scottish Border," first published in 1802, has a note to the ballad of the Lochmaben Harper in which he gives an account of the kindlie tenants. He had evidently taken pains to inform himself about

the matter. He gives as his main authority the MSS. of Mr Syme, Writer to the Signet, but the whole note looks like as if he had, according to his practice before writing his novels, visited and made himself well acquainted with the whole district. And it must be remembered that Sir Walter Scott was a learned lawyer. The note is therefore of special interest:—"I cannot leave the subject of Lochmaben without noticing an extraordinary and anomalous class of landed proprietors who dwell in the neighbourhood of that burgh. These are the inhabitants of four small villages, near the ancient castle, called the Four Towns of Lochmaben. They themselves are termed the King's rentallers, or kindly tenants, under which denomination each of them has a right of an allodial nature to a small piece of ground. It is said that these people are the descendants of Robert Bruce's menials, to whom he assigned, in reward of their faithful service, these portions of land, burdened only with the payment of certain quit rents and grassums, or fines upon the entry of a new tenant. The right of the rentallers is in essence a right of property, but in form only a right of lease, of which they appeal for the foundation to the rent-rolls of the lord of the castle and manor. This possession by rental, or by simple entry upon the rent-roll, was anciently a common and peculiarly sacred species of property, granted by a chief to his faithful followers, the connection of landlord and tenant being esteemed of a nature too necessary to be formal where there was honour on the one side and gratitude upon the other. But, in the case of subjects granting a right of this kind, it was held to expire with the life of the granter, unless his heir chose to renew it, and also upon the death of the rentaller himself, unless especially granted to his heirs, by which only his first was understood. Hence in modern days the kindly tenants have entirely disappeared from the land. Fortunately for the inhabitants of the Four Towns of Lochmaben, the maxim, that the King can never die, prevents their right of property from reverting to the Crown."

Sir Walter Scott says that the tradition is that the kindlie tenants are the descendants of King Robert the Bruce's menials. I have not heard of this tradition in the district, but I certainly have heard that they were the followers. And this form of the tradition is more likely to be true from the large number that there must at first have been of the kindly tenants. As might be expected, the right of the kindly tenants to occupy their lands

has been repeatedly contested. The keepers of the Castle of Lochmaben from at least the sixteenth century down to the Earl of Mansfield in 1810 have made various attempts to dispossess them of their lands or infringe upon their rights, but the rentallers by appeal to the King or by the decision of the Court of Session have ultimately succeeded in maintaining their position and privileges as the King's kindlie tenants of the Four Towns of Lochmaben.

I should now give some account of these attempts and their successful resistance. Perhaps the best way to do so is to read a part of a paper submitted to the Court of Session in the early part of last century, in which the Four Towns were defenders against Viscount Stormont:—

“The lands of Hitae, Smalholm, Heck, and Greenhill, commonly called the Four Towns of Lochmaben, in county Dumfries, being part of the property of the Crown, have been time out of mind possessed by the respondents and their ancestors, as kindly, irremovable tenants; and they have been acknowledged as such by the Crown in ancient times, and in different reigns by the Parliament itself, both in a legislative and judicative capacity, and by the former constables or keepers of his Majesty's Castle of Lochmaben, who under that title only, and not as proprietors, levied the rents of the lands in question, which were appropriated for the support of the Castle. The keepers of this Castle did early impose hardships and endeavour to levy exactions upon the tenants which gave rise to several complaints to the Crown. By a petition and complaint to King James the Sixth of Scotland, the tenants of said lands complained that, notwithstanding of their being kindly tenants and occupiers of his Majesty's farm lands, and tenandry assigned to his Majesty's house of Lochmaben, they were wracked and spoiled by thieves and extorted by the constable of the Castle of Lochmaben, &c. Whereupon his Majesty by his sign manual (12th June, 1592) ordered the keeper of the Castle of Lochmaben to desist and cease from molesting, troubling, or using of any violence against those his tenants, and to suffer and permit them peaceably to occupy their possession, as they the keepers should answer to his Majesty upon their disobedience. By another sign manual, bearing that his Majesty, understanding that his poor tenantry of his proper lands of Hitae, &c., are and had been greatly oppressed, and particularly by the constables and keepers

of the Castle of Lochmaben, and compelled to pay several duties and do services which they and their predecessors were never in use to pay or do in time past; therefore his Majesty strictly commands the constables of the said Castle, present and to come, that they in no manner of way burden or charge his said tenants and inhabitants of his said proper towns and lands to pay any duty, or do any service, further than they and their predecessors were in use to pay or do in time past."

Here there is a blank in the paper that would have held about a dozen of lines. All that remains is the opening line, which shows that it was intended to give an account of an attempt made to dispossess the kindly tenants after the restoration of King Charles II. In the Inventory of Writes pertaining to the King's kindly tenants of the Four towns left 2nd Dec., 1735, in the hands of William Johnstone, writer in Edinburgh, to defend the said tenants against a process at the instance of the magistrates of Lochmaben in the Court of Session, there is said to be "Signature by King Charles the 2nd in favours of the saids kindly tenants dated the last of June, 1664, ratifying the above signed manuals. This is superscribed by the King, and a doquet signed by his Majesty's Secretary, the Earl of Lauderdale." These "writes," as they are called, are now in the safe keeping of the Register House, Edinburgh. The paper proceeds—

"That the Earl of Annandale, keeper of the said castle, having settled the rents of the said lands in way of jointure to his lady, which, without consent of the Crown, he could not lawfully have done, she and the Viscount of Stormont, her second husband, applied to Parliament, and obtained an order or decree, decreeting the tenants to pay their rents to her (A. D., 1667)."

A new valuation was made in the lands in the county of Dumfries by the Commissioners of the land tax, whereby the respondents' interest, which had never been taxed before, was rated on account of their being kindly tenants and irremovable at one-fourth more than the appellant's, viz., at 2400 merks, and the appellant's only at 1800 merks.

From that time downward to the year 1692, the respondents and their ancestors, to prevent distress upon their lands, paid the whole land tax, and got allowance of the appellant's proportion in discharge of their rents; but from that period the appellant's father refused to make the respondents such allowance, and threatened to remove them from their possessions if they did

not submit to the payment of the whole, which at last obliged the respondents to bring their action before the Court of Session against the appellant's father to recover payment of his part of the land tax so paid by them—in the first place for declaring their immunity from paying his proportion of that tax for the future, and that they were the Crown's irremovable tenants.

Pending this suit the appellant's father brought cross action for removing the respondents from their possessions, and having it declared that they were removable at pleasure.

The respondents insisted that they were the Crown's irremovable tenants properly to the lands, that they could not be removed, and might dispone their right to extraneous persons, subject only to pay their rents to the appellant, according to ancient usage, that they had possessed immemorably, that their right has been acknowledged by the several orders from the Crown above recited, and that their ancestors and purchasers from them had been from time to time admitted and enrolled in the Court books of the appellant, and of those under whose rights he claims.

The Court of Session decreed that the appellant should relieve the respondents of his proportion of the land tax from the time this suit was commenced, but absolved him from prior payments in regard the respondents had voluntarily submitted to them. And upon the question of right (24th Nov., 1726, 1st interlocutor appealed against) the Lords by their interlocutor found that the pursuers of the said declarator (*i.e.*, the respondents' plaintiffs in the action of declarator) had such a right.

Against this interlocutor the appellant's father preferred a petition, and the respondents put in answers (27th Dec., 1726, 2nd interlocutor appealed against).

The Lords by their interlocutor found that the pursuers of the declarator have such a right in the lands that they cannot be removed, and may dispone their right to extraneous persons.

Against which interlocutor this appeal is brought, but the respondents humbly hope the same shall be affirmed for this amongst other reasons :—

1st. For that the respondents and their ancestors have enjoyed their possessions by this tenure of kindly, irremovable tenants of the Crown, time out of mind, and long before charters or feoffments were in use in Scotland.

2nd. For that their right to possess their lands without being removed has been constantly acknowledged by the Crown.

3rd. For that the respondents' ancestors and purchasers from them have always been admitted and enrolled in the Court books of the manor without the least objection to their title.

4th. For that on account of their being irremovable tenants they have been rated to the land tax, which could not have been done if they had been ordinary movable tenants.

Objection 1st.—That all rights of property in Scotland are constituted either by charter, infeoffment, or leases, at least by some title in writing, whereas the respondents have no such title under which they can claim.

Answer.—Here the appellant seems to mistake the point of law. In the earliest times proprietors of lands had no titles in writing, but their rights were known and ascertained by their possessions and enrolment in the King's Courts, or in the Courts of the other over Lords, and when the estate descended to an heir, or was transmitted to a purchaser, the title of the ancestor or author was cognosced by a jury, and the verdict of that jury gave them a full right. That although since the feudal law was fully adopted into the law of Scotland, titles have generally been constituted by writings. It affords no objection against the respondents, whose right is more ancient than that period of the law of Scotland, and there yet remain other ancient rights of the same kind, such as the udal rights in Orkney, where there are no titles in writing, but lands are by possession only transmitted from father to son; the titles of the tenants or rentallers of the Bishopric of Glasgow, of the Monastery of Paisley, and of those who hold under the keepers of the King's Castles of Dumbarton and Stirling, were of the same nature till of late; and several of the Bishop's tythes are held and enjoyed upon no other foot to this day.

Objection 2nd.—That the property of the lands in question belonged to the Lord Maxwell, and, by his forfeiture, did return to the Crown; were afterward dissolved from the Crown and granted to George, Earl of Dunbar, who surrendered the same in favour of the Earl of Annandale, from whom the appellant's title proceeds.

Answer.—It is denied that the lands in question ever belonged in property to Lord Maxwell, or that they came to the Crown by his forfeiture. They remained perpetually with the Crown, as the Crown's own property, and the respondents' ancestors continued still the Crown's kindly, irremovable tenants. The

heritable right of keeping the castle did indeed belong to Lord Maxwell's family, and by his forfeiture did return to the Crown, and was afterward granted to the Earl of Annandale, which appears by the appellant's own title. Particularly by the Lord Maxwell service as heir to the ancestors, by which he is retoured heritable keeper of the castle, but not proprietor of the lands in question.

Objection 3rd.—That the Earl of Annandale, the appellant, obtained a decree of removing against some of the tenants in question, *anno* 1613, and another decree of the same kind, *anno* 1634, which is an evidence that the tenants were not irremovable.

Answer.—These decrees were obtained in absence, and by default against some inhabitants of the town of Lochmaben, the nature of whose rights and possessions is not known. But against none of the respondents' ancestors; and as these decrees were obtained only in default, they never took any effect; and they were part of the encroachments which gave rise to the several complaints made to the Crown.

Objection 4th.—That the appellant's father obtained another decree of removing against several of the tenants, *anno* 1665, to which action they appeared by their counsel.

Answer.—This appears to have been only a collusive action brought by the Viscount of Stormont to turn the Earl of Annandale out of possession of the rents, for although at first there was an appearance of arguing for some of the tenants, yet so soon as the Earl of Annandale made himself party to the suit, the counsel, who pretended to appear for the tenants, withdrew their appearance, and desired that judgment might be given as in default; and immediately after, the Viscount, to quiet them, granted an obligation to the tenants never to remove them or their heirs, and so this decree took no further effect, and is now barred by prescription. Nor has any decree obtained in default the least effect, after the parties appear and plead upon their rights, as the respondents have now done.

Objection 5th.—That by Act of Parliament James VI. par. 11, chap. 69 (Scots Acts, p. 569), it is declared that rentals set by the King of Lands belonging to him in property, excepting feu rentals set to them and their heirs, shall be of no further effect than a naked life-rent, and that after the rentaller's death the King may dispose of their possession.

Answer.—The Act of Parliament has no relation to this case.

It concerns rentals or written leases intended to be granted by the Crown after that to rentallers without expressing heirs. These are declared to be only rights for life; but the respondents' tenures are much more ancient. The right of the heirs has been acknowledged by the Crown in the several deeds above recited, and particularly by the sign-manual, *anno* 1664, and though the appellant pretends this sign-manual was stopt in Exchequer, that does no way appear, nor could it possibly be true, seeing such a sign-manual is not a writing of that nature which required its being passed in Exchequer, but had its full effect by the King's subscription. That as late as the year 1692, when a question arose between the appellant's father and the respondents concerning their being subject to the land tax, the appellants insisted that they were irremovable tenants, and ought to be taxed on that account, whereby he acknowledged them to be such as they now plead.

Objection 6th.—That *anno* 1690 the tenants obtained an order of Parliament directing the commissioners of the land tax to take off their assessment because they were only tenants, and if that order has had no effect the respondents have themselves to blame.

Answer—The order was just notwithstanding of there being irremovable tenants, since it is not the tenants but the proprietors who are to pay the land tax. Nevertheless that order has had no effect, but the tenants have still been assessed; the appellant's father insisted they should be assessed, and he prevailed, for by that decree it is adjudged that they should bear a proportion of the land tax, according to the assessment made in *anno* 1667.

This able defence prevailed with the Court, and the case was decided in favour of the Four Towns. Since this decision their position as kindly irremovable tenants has been uncontested. In 1810 the Earl of Mansfield raised an action in the Court of Session to secure that the different tenants, when they divided their land into smaller pieces, should have each of these pieces entered in his roll book, but he did not dispute their right to divide their land and transfer its different portions to others.

Sir Walter Scott, in the close of his note already quoted from, says—"The kindly tenants of Lochmaben live, or at least lived till lately, much sequestered from their neighbours, marry among themselves according to the ancient Border custom. You meet

among their writings with such names as John Outbye, Will Inbye, White-fish, Red-fish. . . . Their lands are, in general, neatly enclosed and well cultivated, and they form a contented and industrious little community." What Sir Walter Scott here says of the sequestered state of the kindly tenants and their strange distinctive names is very much a thing of the past. At the beginning of the century handloom weaving was largely the occupation of the people, and it suited very well the possessor of a small piece of land, for in the intervals between one web and another, the plot could be cultivated, but machinery has put an end to handloom weaving, and railways and the increasing attractions of great cities have drawn away not a few of the once kindly tenants, and their portions have been readily bought at the market value by one or other of the surrounding landed proprietors, and Hightae and Greenhill and Smallholm are now much smaller villages than they were in the beginning of the century, when Sir Walter Scott wrote.

In closing I must not omit to notice a privilege of the kindlie tenants—the ease with which their portions may pass from one to another. The seller and the buyer have but to agree about the price, and the buyer pay over the price, and a visit be made to the factor requesting him to put out the seller's name and enter the buyer's name as proprietor in his roll of the kindly tenants, and on a small payment being made, I believe a shilling, the transaction is closed.

15th April, 1898.

Mr ROBERT MURRAY, V.P., in the Chair.

Donations and Exchanges.—Report of the British Association for the Advancement of Science, London, 1897; Transactions of the Edinburgh Geological Society, Vol. VII., part 3; Proceedings and Transactions of the Nova Scotian Institute of Science, Halifax, Nova Scotia, Vol. IX., part 3; the Scottish Beechs, a Theory of their Destruction, by James Cursiter.

Exhibit.—Rev. Mr Andson showed a token of Closeburn Church of date about 1721 marked C K.

COMMUNICATION.

The Church Bells of Holywood and Kirkmahoe, and the Church and Municipal Bells of Lochmaben. Part 1.

By Mr JAMES BARBOUR.

In Dumfriesshire and Galloway, as in nearly every district of Scotland, bell-lore has been neglected, and whether few or many ancient or otherwise interesting bells exist is hardly known. There is danger that valuable material may be lost through delay in promoting appreciation of the subject. In this connection the case of Newabbey may be mentioned. A short time ago a small bell occupied a cleft over the lichgate of the Abbey. The cleft is now vacant; what has become of the bell? Clergymen are generally alive to the desirableness of preserving the old bells of their churches, and it is to be hoped they will endeavour to contribute information to this Society regarding them to be put on record.

In a former communication some account was given of the bells belonging to the town of Dumfries. In the present paper it is proposed to notice those of the adjacent parishes of Holywood, Kirkmahoe, and Lochmaben. Some of these are pre-Reformation bells, others are modern. Of the latter class are the present bell of Kirkmahoe Church and the municipal bell of Lochmaben. The others, consisting of two in Holywood and Lochmaben Churches respectively, belong to the former class; and, besides, these two old bells, now lost, were in use formerly in the church of Kirkmahoe, as evidence to be submitted will show.

Before proceeding to deal with the bells singly I will refer to those of mediæval origin in group, and it will be of advantage to include the two Dumfries bells of the class, one of which, it will be remembered, is extant, but not in use, while the other continues in use in the church, after being recast twice and enlarged, the original inscription being always preserved.

Thus we have in evidence no less than eight mediæval bells in the four parishes, and the first circumstance in connection with them calling for remark relates to their distribution. Invariably the churches had two bells. How far this was the rule in Scotland I do not know, but a number of ancient churches exhibit

double bell-cotes, such as Crossraguel and Jedburgh Abbeys and Rosslyn Chapel, showing that it obtained widely.

In *A Book about Bells*, by the Rev. Geo. S. Tyack, just published, referring to England generally, it is said—"The inventories of Church goods compiled during the reign of Edward VI. prove that three bells at least were the rule even in small parish churches. Two are sometimes found, but scarcely anywhere was there one only." In the border county of Cumberland it was different. That two bells obtained in the churches there, is expressly spoken to by the late Rev. Mr Whitehead, vicar of Lanercost. Referring to the inventories of Church goods before mentioned, he says few Cumberland churches had in 1552 either more or less than two bells. Cumberland and this part of Dumfriesshire therefore show a common practice, and the rule probably prevailed widely in Scotland.

Regarding the constitution of the pairs of bells, I have not observed any reference in the books and papers I perused, and it is fortunate that in the absence of information those of Holywood and Lochmaben remain to illustrate the principles involved. A definite method is exhibited in securing the tuning of the bells to accord one with the other. In each case the bells are equal in weight and in the thickness of the metal. It is the shape apparently which accounts for the variation of the notes given out. One bell is long-waisted; the other is short in the waist. Illustration is also afforded of the practice of inscribing and otherwise marking the bells of this period. Inscribing appears to have prevailed, as only one blank occurs in the group under notice, and being one of a pair the inscription on its companion may have been intended to apply to both. The inscriptions in three instances include dates; in three instances they show that the bells were donated and who the donors were, and in a like number of cases the dedication is indicated. The Carliel bell of Dumfries bears the stamp of the founder together with his name, which, however, remains undeciphered. John Adam, whose name encircles one of the Lochmaben bells, stands out in connection with the bells under notice as the solitary ascertained representative of the mediæval bell founder.

Before leaving this part of the subject, reference may appropriately be made to an interesting charter in *The Book of Lincluden* showing the manner of ringing the bells. It was granted by the Provost and Chapter of the Collegiate Church in

favour of Cuthbert Kar of certain lands, "To hold," as it is expressed, "of the said Mr Cuthbert Kar, his heirs and assignees, in few ferme, heritably, of the granters and their successors, for the yearly rent of 6s 8d, payable to them; and also 10s yearly to the prebendars or chaplains of the said church at the two usual terms of Whitsunday and Martinmas, by equal portions, for causing the bell to be rung nightly about the eighth hour, for the space of one quarter of an hour, or thereby, vulgarly called 'the aucht houris bell,' in all time coming, with three strokes at the end, so that between each stroke there may be said a Pater Noster, Ave Maria, and Credo in Deum, for the souls of all and sundry predecessors, founders, and all others dead and living."

Hollywood Bells.

These originally belonged to the ancient Abbey of Holywood, the chancel of which remained standing in the south-east corner of the present churchyard, serving as the Parish Church until 1788, when it was taken down to furnish material for the erection of the existing fabric. The Riddle MS. contains a drawing of it, and an engraving appears in Cardonell's *Antiquities of Scotland*. A double belfry is represented surmounting the east gable, and supporting the bells, one in each bay. After transference to the new building, if tradition is to be relied on, the bells, with the then belfry surmounting the church tower, were wrecked during a storm. For a long time they have occupied the present bell-chamber, one being used as the call bell for summoning the congregation, the other, sometimes called the "dead bell," is rung at funerals.

The former is a short-waisted bell measuring $17\frac{1}{2}$ inches in diameter at the mouth and 10 at the shoulder, 14 inches in height, and $1\frac{1}{4}$ inch thick at the sound-bow; estimated weight, 1 cwt. 1 qr. 16 lbs.; note, A flat; a good bell of ordinary design, and inscribed round the shoulder. The latter bell is long-waisted, and measures $16\frac{1}{2}$ inches in diameter at the mouth and 10 at the shoulder, 15 inches in height, and $1\frac{1}{4}$ inch thick at the sound-bow; estimated weight, 1 cwt. 1 qr. 16 lbs.; note, C; the design is peculiar, showing an assemblage of five broad, flat, rounded beads under the shoulder and three similar beads over the sound-bow, which, with its elongated shape, gives the bell a quaint and ancient appearance; under the shoulder beading is a shield flanked with initial letters.

The inscription on one bell and the shield and flanking letters on the other are, in relation to their history, of the first importance. Drawings of these, supplied by Dr Claperton, of Lochmaben, without description however, appear in the Riddle MS., but as there represented the inscription is imperfect and the forms of the letters are not given with reliable accuracy. The earliest mention of the bells is contained in Sir John Sinclair's *Statistical Account of Scotland*, 1791, where it is said—“The present church has two fine bells taken out of the old building, one of which, by an inscription and date on it, appears to have been consecrated by the Abbot John Wrich in the year 1154.” This is the reading which has been accepted for upwards of a hundred years. From the first, however, it seems to have been felt to be unsatisfactory, as in an appendix to the *Statistical Account* it is suggested with reference to the Abbot's name, Wrich, that it might be a corruption of Wright. The date also cannot readily be accepted, considering that the oldest dated bell known to exist in England is marked 1296.

In proceeding to decipher the inscription the first stage was to ascertain whether any part of it had become broken or obliterated. It was found to be perfect. The letters may be described as late Lombardic capitals, and the words are separated by spaces, but without punctuation. The inscription, which is prefixed by a Maltese cross, extends quite round the bell, and for want of space probably some of the words are much contracted. To such contractions and peculiarities which some of the letters exhibit is due any difficulties in ascertaining the meaning of the inscription. Of the Abbot's surname the second letter is peculiar, being small old English, and the difference of character as compared with the other letters interfere with a ready recognition of its meaning. It is a well-formed and distinct enough “e.” The third letter at first sight appears to resemble the initial “I,” but on closer examination it is found to differ in being a little longer, and in having a cleft top. Other peculiarities occurring in the formation of the letters do not raise any difficulty. The inscription runs—
 + I WELCH ABBAS SACR[INEMORE] ME FIERI FECIT A D [MILLESIMO]
 QUI[N]GE[NTESIM]O V. (I. Welch Abbot of Holywod caused me
 to be made in the year of Our Lord [One thousand] Five Hundred
 and Five.)

The shield and flanking letters on the long-waisted bell I at first thought might be the bell-founder's stamp and initials of his

name, but after more mature consideration a different conclusion was reached. The shield is charged with a sheveron between three crosses fitchée, the Kennedy arms, and it seemed probable that the flanking letters V. K. might be the initials of William Kennedy. After search I found in the charters of the Abbey of Crossraguel, contained in the Ayrshire and Galloway Archæological Association's publication, mention of William Kennedy, who is described as Abbot of Crossraguel and perpetual commendator of the monastery of Holywood. He was elected Abbot of Crossraguel in 1520, and continued in office until his death in 1547. At what time he became commendator of Holywood is uncertain, but he held the office in 1527. This William Kennedy would appear to be the donor of the Holywood bell bearing his arms and initials.

These bells of Holywood, although not very ancient, are interesting in themselves and in their associations. The Welshes were a prominent Dumfriesshire family, of whom were the celebrated John Welsh of Ayr, and John Welsh of Irongray; also Jane Welsh of Craigenputtock. Of William Kennedy the editor of the Crossraguel Charters says:—"He had spent it (his life) well in the service of his monastery, his country, his Sovereign, and his Church; and, in an age when the lives of all the Scottish prelates were not perhaps emblems of perfection, it is notable that not a breath of slander sullied the blameless life of William Kennedy."

Councillor Lennox observed that in Dumfriesshire they were unfortunate in having practically no church antiquities. They had the Ruthwell Cross and a few bells, but these were all, and they might say, as had been said about Lochmaben, "There are no Christians in Dumfriesshire." It seemed as if the men had all been of the fighting strain. They had plenty castle remains and ancient earth works. There were plenty of bells in Kirkeudbrightshire, on the other side of the Border, and in Roxburghshire, Selkirkshire, and Berwickshire, but in Dumfriesshire the church architect was extinct. It was important to have the little which remained brought to light, and he hoped Mr Barbour would add to his research and bring notices of other bells before them. (Applause.) He moved a vote of thanks to Mr Barbour.

Rev. Mr Andson, in seconding the motion, stated that they were much obliged to Mr Barbour for his paper, and the very

curious information he had placed before them. It was to be hoped that Mr Barbour would give them the remainder of the information regarding other bells that had not been taken up that night.

The Chairman conveyed the Society's appreciation to Mr Barbour for his valuable contribution, and asked him to prosecute the subject still further at his own convenience, and favour the Society with more information.

Mr Barbour, in returning thanks, remarked that the subject was a large one, and the information regarding it was widely scattered. He would like to see many members of the Society engaged in the work, because otherwise it would not be adequately accomplished. Taking the whole of the bells of Dumfriesshire and Galloway, in all probability there would be a large number very interesting. He thought the clergymen of every parish might do much regarding the expiscation of this subject. He knew that there were many interesting bells in Dumfriesshire and Galloway, and, although some might be termed modern, they had their historical associations. In England this subject had been dealt with in a thorough manner, and many books and papers prepared on them. In the Cumberland and Westmorland Society during the past two years no less than twelve papers had been read on this subject. So far as he knew, only one district of Scotland had been taken up, and consequently he did not think the Society would be doing right to let this matter lie over.

13th May, 1898.

Rev. Mr ANDSON, V.P., in the Chair.

New Member.—Mr James Biggar, Chapelton.

Donations.—Memorials of Argyllshire and Chronicles of the Abbey of Elstow, by Mrs Brown, Barnkin of Craigs.

Exchanges.—Antiqarisk Tidskrift för Sverige xvi. 4; Kongl. Vitterhets Historie och Antiqitets Akademiens Månadsblad, 1894; Report of Marlborough College Nat. Hist. Society for 1897; Thirty-first Report of Peabody Museum, Harvard University.

Exhibits.—1. Mr T. Hope Bell of Morrinton showed a large and interesting collection of pebbles collected chiefly in Forfar-

shire and Devonshire. 2. Mr James Barbour showed a sheet of the insignia of the town of Dumfries.

COMMUNICATIONS.

1. *Echoes of the 18th Century.* By Mrs BROWN, Barnkin of Craigs.

These echoes of the 18th century are some of the spoils of an old cupboard in which lie heaped in confusion a mass of papers and letters gathered from the chambers of two lawyers—Mr William Veitch, Writer to the Signet, practising in Edinburgh early in the 18th century; and his son, Mr James Veitch, advocate, better known (at least in legal circles) as Lord Eliock, one of the most distinguished Judges of the latter part of the century. Mr William Veitch was extensively connected with the management of the forfeited estates, after the rising on behalf of the exiled Stuarts in 1715, and was thus brought into close connection with Dumfriesshire and Galloway. It is only necessary to run over the list of names of those taken prisoner, on the surrender of Preston to see how terrible was the havoc worked in this part of Scotland by the failure of that ill-managed enterprise. Among them we find—Lords Nithsdale and Kenmure, Hamilton of Baldoon, Grierson of Lagg, Riddel of Glen Riddel, Maxwell of Steilston, Maxwell of Carnsalloch, Maxwell of Munches, Maxwell of Cowhill, &c. Another name which then disappeared for ever from the list of Dumfriesshire landed proprietors was that of Lord Carnwath, who had inherited the estate of Eliock through, I believe, the marriage of an ancestor with the sister of the Admirable Crichton. Mr Wm. Veitch acted for both Lord Carnwath and his only sister, the heroic wife of Lord Kenmure. Some of their letters to him are very pathetic, telling of the ruin brought upon them by their devotion to the ill-fated House of Stuart. In 1723 Eliock became the property of Mr William Veitch, and on the 10th of September in that year Lord Carnwath writes to him as follows from London :—

Dear William,—I have now had both yours with respect to the sale of my estates, and your descret management of that affair pleases me much, and I am very thankful that you have done that favour for me. I design to leave this place as next

Saturday, and take journey for Scotland upon my own horses, so that I shall soon be in Edinburgh to support what you have done as well as I can. I hope God and a good Providence will assist me to extricate my poor family out of my great difficulties; but such is the situation of my affairs here just now as that I can neither command money nor credit to help any transaction forward, so that I am obliged to draw a bill upon you, three weeks after date (which is this day), which I was unavoidably forced to take here for defraying charges, &c., at Bath, and to carry me down to Scotland. But this I dare venture to say that now three months will make a turn in Colonel Urquhart's affairs, which will make you and me both easy as to all this. I am to be with Mr Walpole to-morrow morning, where I hope to be able to receive some satisfaction upon this subject, so shall say no more till we meet.—I am, dear Sir, your most affectionate humble servant,

CARNWATH.

Lady Kenmure, after the death of her husband on Tower Hill, in February, 1716, returned to Scotland. With the aid of friends she succeeded in buying back his estates, and set herself unflinchingly to the task of paying off the debts. In this undertaking she so thoroughly succeeded that when her eldest son came of age she was able to hand them over to him unencumbered. But it must have been a weary struggle, for the following letter to Mr Veitch is only one of many, written in a very clear and beautiful hand, telling the same sad story of perpetual difficulty and anxiety:—

Kenmure, Jany. 9, 1734.

Sir,—I have yours informing me of the balance due to Mr Jolly, which does very far exceed my reckoning, but no doubt it is all as you write, and my mistake must proceed from the arrears, which it was impossible for me to calculate. Demands come so thick upon me that I cannot for my heart tell you when I shall be able to clear the balance, but for his present relief shall do my best to pay him the odd money, being £398 13s 4d, a week or two hence, so till then beg you'll make him easy. As to Risco, I allwise told you that I am entirely to be directed by you in that affair, and I'm persuaded your motive must be good for allowing him to push it a little, likewise I know you'll prudently take it up before you see me too far defeat by him, for

that you know would give encouragement to other enemys. At long run I'll engage he'll thankfully accept of £300, if not less money; but sooner or later I do fear we must knock under. Please write me if you have any view of ending with John Gordon, of Kirkconnel, and Mr William Camp; the price of these lands, which the last got, would do me service at this juncture, when, to be free with you, I scarce know what hand to turn me to; but in all circumstances you are ever to believe me to be, Sir, your very much obliged humble sevt.,

MARY KENMURE.

Amid all her struggles and difficulties, Lady Kenmure seems to have found means to help others; for there is a deed, signed on May 21st, 1729, in which Lord Carnwath acknowledges a loan from "Mary, Viscountess of Kenmure, my sister," of £405 17s 6d. She outlived all her anxieties, however, saw many another ancient Scottish house go down in the Rising of 1745, and died, I believe, at Terregles in 1776. In that musty old cupboard I also found another short but very suggestive note to Mr Veitch from the titular Duchess of Perth:—

Drummond Castle, 12th June, 1744.

Sir,—A friend of mine in Edinburgh will deliver to you this letter, with the twenty-five pounds sterling Mr Stewart borrowed from you in my name in July last, and eleven months' annual rent. You will give the bearer Mr Stewart's receipt for the money, which I will return him when I account with him. I am much obliged to you for the lon (*sic*) of the money, who am, Sir, your servant.

JEAN PERTH.

Twenty-five pounds was a larger sum at that date than at the present day, but the inability of a woman of such rank to pay it under eleven months is very significant.

The old cupboard, however, produced something more than communications only too common in lawyers' offices. Lord Eliock was less careful in destroying his letters than might have been expected from a lawyer; consequently, more than a century after date, a curious society episode comes to light, in which he was mixed up; a somewhat remarkable specimen of social tactics in high-class Edinburgh society nearly 140 years ago. Lord

Eliock was not only a distinguished lawyer, he was also an accomplished scholar and linguist, and of such commanding appearance that Frederick the Great had been very urgent with him, when he was at the Prussian Court, to enter his famous regiment of Guards. It was on the 6th of March, 1760, he took his seat on the bench as Lord Eliock, so the romantic incident set forth in the letters I am about to read must have occurred immediately previous to that event, when he had passed his half century of life. His sister, Miss Mary Veitch, kept house for him. From Edinburgh she writes to him as follows, he being then in London :—

Edinburgh, 16th February, 1760.

Dear Jamie,—I am about to write you the oddest story, with a good deal of reluctance, but I thought myself obliged to do it, so take it as follows. No doubt you'll remember Lady Harriott Gordon, Lord Aberdeen's sister. You'll also, perhaps, remember that I told you of an old courtship between her and Mr Gordon of Whitely, which is long over, and him railing against her to everybody, particularly her own relations, writing the ill-treatment he had received from her to her mother and brother, and notwithstanding of which they are of the same degree of intimacy with him, and he is as frequently with them as ever, except her. She rails at him in her turn, and runs out of a room as he comes in. Friday night, before you set out this winter for London, she arrived from Glasgow, where she had been keeping her Christmas. She called at our house on the Saturday night, where Miss Craik was. I got none of her history that night. Miss Craik and she tried who should set the other out, but Miss Craik got the better, and Mrs Baillie and Lady Harriott went away. I tell you all this previous to the main story that you may understand it the better. There is a man of the name of Gordon, his title Hal-head, who has an estate near Huddo House. This man was born in Scotland, but has got his education somewhere in France, and has been there, and sometimes in Italy, since he was a boy—that is to say he has been 16 years abroad, and is 26 or 28 years old. He came from Nice last harvest, took London and Edinburgh on his way to the north, where his estate is, from thence he returned to Edinburgh, about the time Lady Harriott returned from Glasgow as above, at least she did not see him till some time after. He soon, I understand, became her snitor for

marriage. She so far accepted of his proposal as to tell her brother she would marry him, and desired him to write to Valleyford and acquaint her mother of it. Her brother argued with her against it, setting forth his bad state of health, it being thought he was dying in a consumption, and wasted to a skeleton. But all was to no purpose. Lady Aberdeen came to town in the greatest rage against it, just this day week, for it has been on the carpet only a fortnight. Her mother said it would be a most ridiculous marriage, the man's want of health, his having a strict entail on his estate which would not admit of anything for younger children, his having been so long abroad made him unknown to everybody, that she was well informed he was in debt, that could he have raised £200 he would not have sought her or anybody, but gone directly again to Nice to Gen. Paterson, who is his relation, and in short abused her for thinking of it. All this conversation passed before Lady Halkerton, who told me Lady Harriott's answers. In the first place she told my lady that he was a gentleman as good as themselves, that he had £500 a year, and that if he could not give her £200 a year of fortune she would be content with the interest of her own money, which is £2000, which bears interest, and £500 my Lord is obliged to give her for wedding clothes. That if he could not give a provision to younger children they would not be quality, and so could work for their bread; and if he was in a straight for a little ready money she had £200 in her pocket, which she had just got from Lord Aberdeen for bygone interest, and he should have that. As it is to be imagined, my Lady Aberdeen was exceedingly angry with her. She left Lady Halkerton's, went immediately on the Sunday to Valleyford, and the next day to Prestonhall, and has not seen her daughter or desired to see her since. In the meantime Lord Aberdeen arrives in town. She told him the same she had told her mother. He went off for London. In the meantime she wanted to employ lawyers to look into Gordon's character and entails. My Lord Aberdeen desired her, if she was for that, to employ his man Fraser, the writer, so she took him and Mr Millar, the solicitor. Mr Gordon took Mr Ferguson of Tilgour, and one Scot, a writer, so the papers are lying before these gentlemen now. During the time these transactions are going on her brother told her he had heard she had had a courtship with Mr Veitch, that had she employed him to transact a marriage with him he would have

been more ready, and besides he knew she would have had the consent of all her friends. She told him she never had a courtship with Mr Veitch, that she liked Mr Veitch much better than the man who was seeking her, and were he on the place, and would take her yet, she would marry him and not Gordon. All this was told to me by Lady Halkerton and Mrs Baillie; Mrs Baillie adding, as of herself, that she wished you was on the place, it would be in your power to put a stop to the marriage with Gordon. I told her she had many times given me such hints about Lady Harriott in former times, and that I thought it very improper to take notice of it, that Lady Harriott deserved a better match and a younger man; that for my own part I wished Lady Harriott very well, and if my brother and her had been pleased, I should have been pleased also. Mrs Baillie then expatiated on her good qualities, how well Lady Harriott loved you; that she was sure, were you here, she would instantly marry you without conditions, and let you make them yourself afterwards. I told her I had never spoke in particular with my brother with regard to Lady Harriott, and could not tell what you thought of her; but I thought you and she was not well enough acquainted to go so rashly into a marriage, and that your circumstances had not been what would have been felt suitable for the lady. This and every objection I could make, such as her coquetting and hanging on every fellow she met with. Mrs Baillie made light of it, and said it was through the innocence of her heart, and for sport, that she diverted herself with these sort of folk. This conversation only happened on Thursday. Yesterday I went to dine with Miss Preston. I came home at six at night, when Mrs Baillie was in the house almost as soon as myself, and fell immediately on the story, all of which I answered as before. But how was I surprised in about half an hour to see Lady Harriott come in, as it seems it had been concocted between them. She had not mentioned her story to me, but now she fell to it directly, insomuch that I was quite ashamed of her. She repeated all Mrs Baillie had said before, and asked if I thought you would accept of her? She would allow me to write you the story, and would put delays to the other till Wednesday week, which was the return of this post; and if you should refuse her, she would then go on with the other. Did you ever hear such a story, and how am I to put it to be civil and not tell her my mind? However, I did the best I could, and told her if

such a thing had ever been suggested before, and I had talked to you of it, I would have told her what had passed ; but as I had never had any conversation with you on that head, I could not tell what you would answer, but that I would write, to be sure. At last Mrs Baillie went away, and then she made a clean breast of it. She told me her brother had just come from a meeting of the lawyers, that they had given him their opinion in writing of what settlements Gordon's affairs would permit of, but that he was not satisfied that it was sufficient for her ; but that her and him would go to-day to Prestonhall and talk to the old Duchess and Lady Aberdeen about it. That he had somehow let Mr Millar the solicitor know of her regard to Mr Veitch, that Mr Millar had said if that could be brought about it would make him vastly happy. He was so pleased at the thought he would write to Mr Veitch himself, for that no one was more fit to recommend Lady Harriott than himself. To this her brother said she had one to write for her which would do better, meaning me. Well, I promise to write, and she goes away. This morning again she comes and tells me her brother advises I should write two copies of the letter to you, for fear of miscarriage, and desired you should be punctual to write with the return of the post, and then, as she told me, says he, " Harriott, if that does not take place, I shall immediately make out the other for you." So away she goes, and then she saw the man Gordon and wrote me a note, telling me to put off writing to you till Tuesday's post. I thought I never got such a relief, because I am determined to be off with them, will keep myself out of their sight, and if there is to be any writing to you, let them do it themselves. As it is, I had no occasion to mention the affair at all, but I have no certainty for their conduct, nor do I understand such base ways of doing. They are either mad, or think other people very foolish. This genuine account will perhaps be of use, and prepare you for a defence in case you are attacked from another quarter, and I'll write on Tuesday, when I hope to be more composed. In the meantime, I am, your affectionate sister,

MARY VEITCH.

Two days later, that is on Monday, February 18, Miss Veitch received the following remarkable effusion from Lady Harriott Gordon herself. It can hardly be said to bear out the contention

that as letter-writers our predecessors of the 18th century were greatly our superiors :—

My Dear Madam,—The many obligations I have received ever since I had the happiness of being of the number of your acquaintances makes me regret when I think of now being deprived in a short time of that usual pleasure I had in being allowed at all times to have the pleasure of being admitted whenever I did myself the pleasure of calling, and am sorry to say I did not imbrass (*sic*) it so often as my inclination would have had me, from auquardness (*sic*), being sensible of my own weakness, and not having the least prospect of its ever having my desired effect ; and am now still more at a loss than ever for words to express my gratitude and true sentiments for the late and unspeakable favour you was so kind as to make me understand you would have had the condisention (*sic*) to have mentioned to one I must own I have had an unmoved warm side to for some time past, and shall for ever regard and esteem, tho', alas, I have now no more in my power, nor never had to my knowledge, or none else should have had my hand, I must confess, but it was too delicate an affair for me to let be known, as I knew one of so good sense would have rather shun'd than made up after, and the prospect of being for ever debarrd from the pleasure of waiting of you, and of being in the horrid situation of refused, was a thing I could never once let myself think of ; but in spite of this I still hope you will allow me to wait of you err (*sic*). I leave town, and when I return, if ever, will you be so kind as do me the favour of a visit. At whatever place or time, I assure you, it will be doing me an unspeakable favour, and ever am, my dear Madam, your most obedient and obliged humble servant,

HARRIOTT GORDON.

Lord Eliock's reply to his sister's letter is unhappily not forthcoming. That he did reply is certain from a letter written by Miss Veitch a fortnight later :—

Edinburgh, March 1, 1760.

Dear Jamie,—I wrote you by last post that I had received yours of the 23rd. Though I had known your sentiments sooner, it would not have prevented me from writing as I did this day fortnight, for from all their proceedings, which was minutely as I informed you, and a great deal more, the dread of their applying to you by some other hand was not till now out of my head ;

had their been any more attacks I think I could now have been bold, but I think that I may now with some reason assure you that neither you nor I will have any further trouble. . . . On the Monday I got the letter I enclosed on the 19th, and as I grasped at that for a giving up of the project, and wrote my letter so as she would understand it so. . . . She sent her friend on the Tuesday night . . . to importune me to write, as of myself, without her knowing it; this method, I suspect, her elder friends had suggested to her, but which I positively refused. Be it as it will, the man Gordon complained to his friend, Mrs Baillie, that he could not understand their meaning that when they had seen Lord Aberdeen a few days before, they now put him off for a fortnight until letters should be wrote and answers received from Lord Aberdeen. I am informed to-morrow is the day fixed for the marriage. It is the subject of conversation to the whole town. Some people who knew the man abroad speak well of him, and he is by no means as ill-looking as was represented to me. He was pointed out to me on the street. You see I have nothing to do now but sit still and be civil when she calls, which I suppose she will do, for she is always rambling, she has been little off the streets this fortnight past. I suppose she will follow this practice elsewhere, and will be met with in all the odd corners in and about London, but that's none of my business now. . . . I forgot to tell you that two days before she went to the country this week she called, with an intention to make a long visit, and have some conversation, as I was told afterwards, but the Miss Prestons and some others were with me, and she sat near $\frac{1}{2}$ an hour, and went off, so have not seen her since. She left orders with Mrs Baillie to make me acquainted with the man, but I excused myself.—I am, dear Jamie, your affect. sister,

MARY VEITCH.

Whether the marriage with Gordon of Hallhead ever really came off does not appear. Lord Eliock certainly escaped these and any other similar snares that may have been set for him, for he died unmarried in 1793. But I think anyone looking at his portrait by Raeburn would probably come to the conclusion it was just as well for such an erratic personage as Lady Harriott Gordon that her impetuous wooing was not successful.

On the motion of Mr Jamieson, seconded by Mr Murray, Mrs Brown was accorded a hearty vote of thanks.

2. *The Church Bells of Holywood and Kirkmahoe, and the Church and Municipal Bells of Lochmaben. Part 2.*

By MR JAMES BARBOUR.

Kirkmahoe Church Bells.

The present bell occupying the church tower is inscribed on the waist, T. MEARS OF LONDON FECIT 1822. The date corresponds with the period when the church was built. It is a good bell, and may be regarded as a recast and enlargement of one more ancient which, with another forming a pair, seem to have been in use in the older church. The bell is negligently hung.

The two old bells before mentioned, as well as the present one, are referred to in the heritors' minutes relating to the rebuilding and furnishing of the church. Unfortunately the minutes, which were drawn up not at the meetings but subsequently and from recollection by the Rev. Dr Wightman, are not on all points so explicit as could be desired. In four of them reference is made to the church bells:—

21st March, 1822. The committee request Mr Newall [the architect] to get a new bell made for the church, and that he shall send the two old bells to the founder in part payment.

1st July, 1822. The meeting considering that sundry incidental expenses will be necessarily incurred in the clothing of the pulpit, the painting of the stone-work of the windows inside and out, a christening bowl and bracket, and the hanging of the old bell, agreed to an additional assessment of £30.

20th Nov. 1823. The meeting considering that the old bell is of no use came to the resolution of selling it, and Mr M'Gowan, the builder, being present, stated that he would undertake to get it sold to the bellfounder in Dumfries without any expense of consequence.

7th April, 1825. To amount of the price of the old bell sold by Mr M'Gowan by order of the meeting of heritors, £6 3s. By paid for the new bell, £37 3s 2d.

The first minute before quoted, it will be observed, mentions *two* old bells, the other minutes speak of one. It can hardly be doubted, I think, considering the explicit statement of the fact in the first-quoted minute, that there were two old bells to begin with. Subsequently it seems to have been found desirable,

instead of carrying out in full the instruction to send these up to London in part payment of the new bell, that one of them should be retained for use to call the congregation together, in the interval of completing the new church, for one of them was so retained, and to it the later minutes no doubt refer.

At the time of which we are speaking, a house in which to meet for worship was not considered so essential as it is now thought to be, and the parishioners being mostly descendants of the hill-men, field preaching yet maintained a degree of popularity in the parish. When therefore the old church was removed to make room for the new one the weekly services were continued out of doors. The churchyard was the chosen spot, and here on a neighbouring tree the old bell, in a way seemingly more essential than the church, was suspended to sound for the gathering in the usual way. I am indebted for information regarding this circumstance to Mr Dinwoodie, the heritors' clerk. Writing me in 1893, he stated that he had met an old gentleman, then in his 88th year, who had himself attended the open-air service, and remembered the bell hanging on the tree being rung at preachings and funerals.

Another local instance of suspending the church bell on a tree in similar circumstances was mentioned to me by Mr Barbour of Glendarroch. He recollected, he said, when Dalry Church was in course of rebuilding, the services were held in the churchyard, and the bell was hung on a tree for the purpose of summoning the congregation to worship.

The heritors' minutes show that a bellfounder at this time exercised his calling in Dumfries. Considering the price obtained for the bell sold to him, amounting to £6 3s, it may be estimated that the two old bells were approximately of the same dimensions as those of Holywood. The minutes give no clue to the characteristics of the bells, or whether they were inscribed. Utility, which is excellent, but not everything, is the only guiding principle present in them, and so the pair of old bells belonging to the Church of St. Quintin, of Kirkmahoe, were disposed of and lost.

Lochmaben Bells.

Lochmaben possesses the most important bells of the mediæval class extant in the district. They are larger and probably more ancient than any of the others, besides being the only twin bells. The old Gothic Church dedicated to Mary Magdalene, of which

no remains are now visible, stood within the present churchyard. From thence the bells were transferred to the new fabric on its completion in 1819. As at Holywood, one of the bells is long-waisted, and the other is short in the waist. The first measures 19 inches in diameter at the mouth and 12 at the shoulder, $20\frac{3}{4}$ in height, and 2 in thickness at the soundbow; estimated weight, 2 cwts. 1 qr.; note, G; inscribed. The latter measures 22 inches in diameter at the mouth and 12 at the shoulder, $18\frac{1}{4}$ in height, and 2 in thickness at the soundbow; estimated weight, 2 cwts. 1 qr.; note, E flat; uninscribed.

The shoulder of the long bell is inscribed + JOHANNES ADAM ME FECIT +, and over the soundbow fancifully arranged in couplets of letters at the four cardinal points of the compass is

the Angelic Salutation and dedication IA ^{AV} ○ _{AR} EM The letters are

moulded Lombardic capitals on slightly raised square plates; and it is a peculiarity that the inscriptions and the letters composing them are reversed so as to read from right to left. To account for this it may be suggested that the inscriptions had been omitted to be provided for on the "thickness" at the proper stage in preparing the mould, and as the only way of rectifying the omission the letters were impressed on the interior of the "cope," with the result of reproducing them on the bell reversed.

Both bells are peculiar as to shape. The short one shows little swell on the upper part of the waist, but the lower part sweeps outwards, forming a wide mouth, with an unusually quick and deep curve. The long bell may be regarded as notable in this respect, being probably longer in proportion to its width than any other in Britain. A bell at Mitford in Northumberland is mentioned in *A Book about Bells* as of very elongated proportions, whose height is equal to the width. Lochmaben bell surpasses this, for its height measures almost two inches in excess of the diameter at the mouth.

The marks connecting the pair are numerous. It has been seen that the bells are of equal weight, breadth of shoulder, and thickness of soundbow; the musical notes are in accord, the lip and shoulder mouldings agree, and both bells are flat on the top. The most impressive characteristic, however, common to both is the peculiar design of the cannons, showing a rope-like twist. The conclusion seems unavoidable that the bells were designed to

serve as a pair, and were cast by the same founder; and it is satisfactory and not a little surprising, considering the troubles and conflicts of the times, that the relationship should have remained undisturbed during so many centuries.

Regarding the antiquity of the bells, tradition has it that the one inscribed was presented by the Pope to King Robert the Bruce. It cannot be said that the character of the letters or the characteristics of the bell are inconsistent with this view, but another is possible. The Church of Lochmaben, as we have seen, was dedicated to Mary Magdalene; the bells to the Virgin Mary. In the fifteenth century the bailies of the burgh endowed a chapel within the Church of Lochmaben, under the tutelage of the Virgin, and it may be thought that the parallel dedication of this chapel and the bells suggest or imply a common origin.

Tradition also avers that the short-waisted bell was stolen by the townsmen from a neighbour, or the "auld enemy," but this is inconsistent with the fact that it is the companion of another which admittedly was honestly come by. What Lochmaben people seem to have done was to recover their own bell from thieves who had stolen it—a version in harmony with the teaching of the bells and creditable to the inhabitants of the ancient burgh, which, it is hoped, will be accepted in all time coming.

The Municipal bell, weighing 2 cwt., is inscribed on the waist, EX DONO NOBILISSIMI CAROLI DUCIS QUENSBERRY ET DOVER, 1757; and below WM EVANS FECIT. The note is G.

In conclusion, I have to recall a few of the more important conclusions arrived at:—Two bells were common in pre-Reformation churches here. These were assorted with a view to musical accord, and it is curious that, as regards the two pairs described, the variation of the notes in each case should be just a minor third. The method followed to attain harmony consisted in varying the proportions of the bells, making them long or short, without, however, varying the weight or the thickness of the metal.

A new and greatly altered reading of the inscription and date of the short bell of Holywood has been arrived at; and a connection has been traced between the other bell and the name of one of the commendators of the Abbey, thereby also approximating its date. It has been shown that formerly there were two ancient bells in the church of Kirkmahoe, and how they were dis-

posed of. And in regard to the church bells of Lochmaben, their characteristics and the relationship of one to the other has been amplified.

Mr Barbour was accorded a hearty vote of thanks for his interesting and instructive paper.



FIELD MEETINGS.

First Field Meeting—June 11.

The following report of the meeting is taken from the *Dumfries Standard* :—

The members of Dumfriesshire and Galloway Natural History and Antiquarian Society had their first field meeting of the summer session on Saturday, when they spent the afternoon in a round of interesting visits at Sanquhar and Elioock. A party of nineteen journeyed from Dumfries, and at Sanquhar they were joined by Mr Wilson, banker; the Rev. James Hay Scott, of the North United Presbyterian Church; the Rev. James Wood, of the Parish Church; and Mr Salmon, teacher. They proceeded first to the Parish Church, where they were shown the mason work, indicating the wall-lines of the pre-Reformation building, which have been revealed and permanently marked at the cost of the Marquis of Bute with consent of the heritors; and in the church itself the stone figure which is believed to be that of Mr William Crichton, rector of Sanquhar. A number of curious stones in the churchyard also engaged attention. There is one centenarian commemorated—William Crichton, of the same family as the famous Provost Abraham Crichton, his age being given at 103 years. On a flat and much worn stone is a single letter, the remnant of a black letter inscription; and beside it a well-sculptured hand holding some object between finger and thumb. The singular name "Gliver" also appears on the stone. Against the churchyard wall there has been set up a long slab, with the date 1674, in memory of John Broun in Gateside and Janet Dalzell his spouse; and below the names is some florid lettering, apparently their monograms. Another stone in the same neighbourhood is ornamented with a bold device of a winged head, and is dated 1738.

Part of the company proceeded from the churchyard to the Manse, where Mr Wood exhibited his extensive collection of old

Scottish communion tokens. Within a comparatively few years he has obtained some eight hundred specimens, all belonging to Established Churches. In some cases, of course, the same parish is represented by a number of specimens, as in the case of Dunscore, from which there are five. Among the oldest is a Brechin token of date 1678. There are in the collection Portmoak tokens belonging to the period when Erskine was minister of the parish; an Abernethy token of Alexander Pitcairn's time; and many others interesting from their association with particular individuals. In most instances the token is simply a piece of lead, with the name or initial of the parish, and sometimes the initials of the minister, rudely stamped upon it. The most primitive of all, from Campbeltown, is a small piece of tin with no other marking than a cross made of two simple lines indented with a chisel. For purposes of distinction apparently a liberty has sometimes been taken with the name of the parish, as in the case of Sanquhar, which on one is designated "S Q." A good number, however, bear more elaborate devices. There is, for example, the north-country parish of Grange, which has the legend "Prov. iv., 23" worked round a heart. The words of the text indicated are, "Keep thy heart with all diligence." On another, from Cumbernauld, is the familiar device of the burning bush, with the unfamiliar rendering of the accompanying motto—"Unec nec feret."

Later in the day a hurried visit was paid to Mr Scott's manse, where there is quite a remarkable collection both of coins and communion tokens. Of British coins Mr Scott has an all but complete series from the year 1603 up till the present date, all most carefully arranged in chronological order. There are perfect sets of the jubilee issue and of the 1896 issue, embracing the gold, silver, and copper pieces. Mr Scott has also very interesting cases of Papal and Oriental coins. His safe is indeed a storehouse of treasures for the student of numismatics. Of church tokens he has a thousand specimens, the oldest being of date 1661, and belonging to the parish of Scoone. The lettering is: "D.I.M. Skone token, 1661." Many of the others are doubly interesting on account of their rarity.

In passing through Sanquhar Mr Wilson pointed out the iron bar and ring at the Town Hall to which the "jougs" were attached at the time when evil-doers were exposed to public scorn wearing the iron necklet. Nearly opposite the Town Hall

is a stone with the date 1621 built into a new house, occupying the site of "the Gairland Great House," in which the unfortunate Lord Kilmarnock was confined when he was taken prisoner by the Sanquhar Volunteers in 1715. A call was made at Mr Wilson's residence, the Royal Bank House, where there is an extensive collection of local antiquities. The locality also has its historical association, for in this quarter stood the ancient town house of Lord Crichton of Sanquhar, in which Queen Mary spent the night following the battle of Langside, as she was hurrying to the Border under the escort of Lord Herries and other nobles.

Mr Wilson had obtained special permission from the Marquis of Bute, through his factor, Mr Charles G. Shaw, of Ayr, for the party to visit Sanquhar Castle, which is in course of being to a large extent restored by his lordship. Mr Samuel Gibson, contractor for the work, was also in attendance, and the staircases were open, so that visitors had an opportunity of climbing to the top of Wallace's Tower, as the square one is named, enjoying the magnificent prospect which it commands up and down the valley of the Nith and away to the Lowthers about Wanlockhead and Leadhills. One of the features of the castle disclosed in course of the excavations is a built draw-well with a depth of 42 feet.

A visit to Eliock House, to which the party had been invited by the Rev. H. G. J. Veitch and Mrs Veitch, was one of the chief pleasures of the day. The fine old mansion-house stands amid a wealth of stately timber on the right bank of the Nith, a conspicuous object to the traveller by the Glasgow and South-Western railway some two miles and a half below Sanquhar. The visitors first directed their attention to the woods, to which they were accompanied by Mr Laidlaw, the land steward. A row of seventeen great silver firs claimed special notice. They are believed to be about two centuries old. There were originally twenty of them. The largest in 1872 was reported to be 156 inches in girth. A measurement taken on Saturday three feet from the surface gave a girth of 183 inches, shewing an increase of 27 inches in 26 years, if the tree is the same; but of that there is a doubt, as one of the largest, if not the monarch of the grove, fell a victim to one of the great gales in the eighties. An immense larch, one of a group brought as saplings by Lord Eliock from Blair Athol, grows near to the house. Measure-

ments taken of it in 1872 gave a girth of fourteen feet at the ground and of nine feet at a height of eight feet. Corresponding measurements made on Saturday were 16 feet 9 inches, an increase of 2 ft. 9 in.; and 10 ft. 6 in., an increase of 1 ft. 6 in.

The house, which is picturesquely quaint, consists of three distinct portions, evidently built at different periods—a square block in the centre, with a round tower at the west front; and an oblong on either side and projecting in both directions beyond the central portion of the building. A vaulted chamber still survives, which had apparently formed the ground storey of an old square keep that preceded the present building. Eliock was at one time a possession of a cadet branch of the Crichtons, Lords of Sanquhar, and it is believed to have been the birthplace of the Admirable Crichton, the sixteenth century prodigy of learning and chivalry about whose name time has gathered many legends. The reputed natal chamber is now partly incorporated in a bedroom adjoining the study and partly in the passage. Mr Veitch's father, who was also in holy orders, filled for a long time an ecclesiastical position in Jerusalem, and the house contains many memorials of the family's residence in the Holy Land. One of the most interesting is the apple of Sodom, which from its tempting but deceptive appearance has supplied a figurative phrase to describe a course of vicious pleasure. Mr Veitch has also a small archæological collection. The gem of it is a Jacobite snuff-box. This particular form of mull was so contrived as to enable adherents of the Stewart family outwardly to conform to the loyal customs of the day without doing violence to their political conscience. It is mounted with silver. On a band just under the lid is the motto, "Suum cuique," "To every man his own." On the silver lining of the lid is a device of crossed swords with the letters J.R., and the figure 8 worked into it, meaning *Jacobus Rex viii*. On the top of the lid is a pictorial representation of a stream. Holding this snuff-box in his left hand, the old Jacobite could quite honestly join in the toast of "The King," for before raising the glass to his lips he passed it above the box; the gesture in conjunction with the picture supplied the qualification "over the water;" and he drank to the health not of William but of the Old Pretender. There has recently been added to the collection a celt which was got in the foundation of a cottage on the estate when an addition was being made to it. Another recent acquisi-

tion obtained from a Dumfries dealer is a flint lock of last century, with a little case for the flints ingeniously formed in the butt of the musket. The arm was formerly the property of the late John Brodie, who used to assert that it had belonged to Burns.

In the dining-room are a number of striking family portraits. Two of them represent Sir James Veitch, Lord Eliock, a judge of the Court of Session, regarding whose impetuous wooing by a north-country lady a curious tale was told at a recent meeting of the society. One of the portraits—a full length—is by Raeburn. Another of the portraits, that of Colonel Veitch, grand-uncle of the present proprietor of the estate, is by Sir John Gordon Watson. The very handsome gifts made to Mr and Mrs Veitch by the parishioners of Kilmersdon, Somersetshire, of which he was for thirty-three years the respected rector, were also shown to the visitors.

Eliock was acquired by the family in whose hands it now is soon after the rising of 1745, being part of the forfeited estate of the Earl of Carnwath. They belonged to Peeblesshire, and in the grounds is a sun dial, of very perfect construction, which bears the family arms and the name and date—"Veitch de Glen, 1722."

Before quitting the house, in which they were hospitably entertained to afternoon tea, Mr Murray, George Street, voiced the thanks of the company to Mr and Mrs Veitch for their kindness. They then walked up the side of the Garpel Burn, where the oak, the beech, and the shield ferns grow luxuriantly, to a picturesque waterfall. Tradition represents a Covenanter as hiding in a cavity in the side of this linn and receiving intelligence concerning the movements of the military of the district from a well affected domestic in the Eliock household, who would steal out in the evening and affect to deliver a soliloquy, full of palpable hints, under a large oak that grew by the side of the stream. A member of the party had another tale to tell of the Garpel. Some time in last century the village of Kirkconnel was the residence of a noted wool dealer. At that time the wool was carried there on pack horses by the ordinary hill tracks, and the farmer of Auchenhessnane, in Tynron, was conveying his wool on a pack horse to Kirkconnel, and in passing over Garpel Burn, on the lands of Eliock, the pack of wool got displaced, fell into the burn, and was much wet. Adjusting his

pack he arrived at Kirkconnel, and after settling with the wool dealer returned home well mellowed with the liquor of the country. Humming to himself as he went along, and overjoyed at selling water for wool, he was heard to ejaculate—"Fair fa' ye, Garpel! Fourteen stane at Auchenhessnane and sixteen at Kirkconnel!"

Returning to Sanquhar, the company had tea together in the Queensberry Arms Hotel; and Dr Maxwell Ross embraced the opportunity to tender thanks to the gentlemen who had placed their local knowledge at their service during the day.

Second Field Meeting—July 23rd.

The following report of the meeting is taken from the *Dumfries Courier and Herald* :—

An outing with the antiquarians is reckoned by most people too heavy a summer treat to be greedily sought after, the intellectual strain involved in recollecting whatever one believed himself to have complacently forgotten concerning the places visited cancelling the otiose relaxation craved on a hot Saturday in the dog-days. Hence, perhaps, the small, however eminently select, company that gathered at the call of the indefatigable secretary of the Dumfries and Galloway Natural History and Antiquarian Society on purpose to visit under his genial guidance the treasures not less of natural beauty than of historical and modern interest in the rich lands of the Kirtle valley. We got there, to be sure, by train to Annan, thence behind a pair of hired horses. Despite dull and threatening skies, the drive towards Kirkpatrick-Fleming (could no genius invent a shorter name, or drop some of the consonants?) afforded a wide and exhilarating view of the Solway as spanned by the viaduct to Silloth, while darksome in the distance rose the summits of the Cumberland lake mountains, and at least one tall chimney could be discovered by strong eyes as an index on the horizon to the whereabouts of "merry Carlisle." Stapleton Towers soon stimulated the antiquarian mind, and mention of the Edward Irving, by whom the Tower was built, recalled the associations of the district with his descendant, the genius of the

pulpit three generations ago and the trusty friend of Thomas Carlyle, who with him made Annandale famous in literary history. Passing the neat village of Fairy Row, where the peasants know how to gratify wandering fairies with roses of fairest bloom, we reached the church, graveyard, and manse of Kirkpatrick-Fleming. This modest old edifice is beautiful for situation, and it was good to remember there how the father of Dr Currie, first biographer and editor of Robert Burns, was minister early in last century, a rare scholar—so his grandson tells us in his *Life* of Dr Currie—an eloquent preacher, and as a man universally beloved.

Antiquarians, whether amateurs or otherwise, are not always found arguing the former times better than these, not always engaged scraping the unoffending lichens from hoary monuments or unearthing bones. Touched by the spirit of modern industrialism, we turned aside on the Kirtle from scenes and objects reminiscent of antiquity to examine the commercial enterprise known as the Cove Quarries. There we were heartily welcomed by Mr Lamb, manager, a gentleman with brains *plus* the knack of using them, who could make two potatoes grow in room of the laggard one anywhere. These quarries present certain unique features. From the standpoint of profitable commerce, proximity to the Caledonian Railway line counts for much, but the situation otherwise is singularly sequestered and picturesque. The main quarry has been formed on the precipitous remote bank of the Kirtle, whose clear waters murmur far below, their music lost amid the combined clamour of locomotives, steam cranes, picks, and hammers. The Cove Company have been at work now for two and a half years, and already an immense slice has been cut out of the red sandstone bank, indicative of very rapid prosperity from the start. Before showing us round, however, Mr Lamb, like the good host he was, spread his table with tempting refreshments in the appetising Kirtle air, little soiled by smoke from the quarries, with a lavish hand. Thereafter we caught a glimpse at least of the 300 employees at work, producing on the average 220 tons of stone per day, mostly for the markets of Edinburgh and Glasgow. The manager considers the day bad that does not despatch 30 waggons of dressed stone mainly, and the wage bill amounts to fully £1000 per month. Seven steam cranes were operating on the heights, clearing away roots and surface soil from the rock, lifting blocks into the waggons, &c.,

and the workmen, probably because it was Saturday, looked bright and happy at their laborious tasks. Not a solitary horse was in evidence, the entire haulage evidently being accomplished by means of rails and locomotives. Seated in a rude truck in genuine Bohemian order, we enjoyed a short journey on a natural switchback from the quarry to the large shed in which the hewing and sawing processes are executed, and the necessary workshops centralised. Here Mr Lamb took admirable pains to describe to the antiquarians the secrets of the electric plant now in course of adoption by this enterprising Company. Already an electrical engineer is employed, and the machinery in the shed driven by electricity from dynamos of American origin, and with a measure of economy in the matter of generating fuel, which, as compared with steam, might well give the Company's happy shareholders a hint of coming riches "beyond the dreams of avarice." We wereshown with what startling convenience and economy the electric motor-force may be detached, conveyed, stored. The portable crane used inside the great shed is worked by an electric motor, and it was easy to anticipate the best results every way from this departure. Mr Lamb's courtesy, his intelligence, his earnest desire to gratify the visitors were much appreciated.

In common with the country all over nowadays, the Kirtle valley suggests the contrast between successful modern industrialism and the romance of antiquity. Leaving the former at the Cove Quarries, we passed into the heart of the latter on our way to Springkell, and this in the brilliant sunshine of a recovered day. The towers of Woodhouse and Bonshaw interested us rising out of the hospitably wooded lands of the Irvings, and we passed the Merkland Cross, associated in Border history with the foul murder towards the close of the fifteenth century of one of the Caerlaverock Maxwells, killed from a motive of revenge by his own vassal, one Gass of Cummertrees. We did not stay to examine this pathetic monumental reminiscence of mediæval Border manners, which looked an elegant stone as it stood on a grassy slope not many yards from the road, and surrounded by green bushes. Kirtlebridge Junction recalled the antiquarian mind again to modern comforts, and the thriving village of Eaglesfield suggested thoughts of the competence and peace accessible to such small rural communities, where each householder, whether he should read Barrie and Ian Maclaren, or not, may sing—

There grows a bonnie briar bush in our kailyard.

We were soon screened from Sol's hot beams by the stately trees in the policies of Springkell. Signs of the costly activity of Mr Johnson-Ferguson, M.P., abounded from the entrance gate throughout. In truth, we felt for the rest of the afternoon as if we were in dreamland, and on a visit to Tennyson's *Palace of Art*. Springkell, we understand, has always been famed for its trees. Every variety in arboriculture seems to be represented there by first-class specimens, the whole crowned by a giant silver fir in the lawn. Of modified Grecian architecture, the house is an exquisite harmony in stone, and the present owner has vastly improved the frontage by walling off a portion of the lawn and filling it with *parterres*.

Met at Springkell by Mr Johnson-Ferguson in person, who had just returned from Parliament and the Vaccination Bill, we were conducted by him through umbrageous walks odorous with flowers, and by the banks of the Kirtle, to the ancient Kirkconnell graveyard. On reaching the gate, we observed the notice anent applying for admission at the estate office, also two pencillings, the one telling the public to "Take no heed of this board," the other declaring with genuine wrathful Border emphasis—"This board should be taken down and burned at once." We looked, sorrowing that the peace and loveliness of those Kirtle solitudes should be disturbed by this *contretemps*. Mr Johnson-Ferguson was not long resident in Springkell before he enforced the present regulations. He changed his policy at the graveyard, he informed us, in consequence of a nervous shock received last autumn by Mrs Ferguson and some lady visitors, from observing a skull exposed there still covered more or less with skin and hair! The matter is *sub judice* for the present, but it was manifest to us that all who are interested in the improvement, preservation, and sanctity of Kirkconnel Churchyard, whether they know it or not, have a friend in the laird of Springkell. We meditated, of course, at the coupled graves of Helen and Adam, whose pathetic story descends from age to age in the ballad *Where Helen Lies*; we also saw much more of antiquarian interest, including a curious old epitaph which tells how somebody "died by a fall from a horse in which both were killed." On leaving the romantic graveyard, we were shown a rude cross marking the spot to which Adam carried the dying Helen after the tragedy, also the thorn on Kirtle's pleasant banks where the lovers were

so fatally assailed by the infuriate rival. We visited, too, "Fair Helen's Bower"—a comfortable shade and shelter—in the deep dell beyond, and returned by way of the gardens to Springkell, where our host and hostess received us at home, provided a most ample afternoon tea, and exhibited the rare treasures of art and antiquity with which the house is stored with a gush of hospitality not soon to be forgotten by the company. Antiquarians speak of men and things as they find them, and dare not allow the judgment in anything to be biassed by the prejudices of the fleeting hour.

Mr Johnson-Ferguson has apparently inherited the taste for all that is best in art as well as the treasures of some of his ancestors who were distinguished collectors. The result at Springkell is an exceedingly interesting and valuable collection of works of art, ranging from oil-paintings by some of the older Dutch and Italian masters to a complete gallery of Reynolds engravings, to specimens of Turner and other moderns as well in oil as in water-colour drawings, while the portrait of Mrs Johnson-Ferguson, exhibited by Luke Fildes in the Royal Academy of 1895, occupies on its merits a central place on the line—in itself one of the masterpieces of contemporary portrait-painting. We observed one quaint little picture of local interest, drawn and engraved by W. Matthews, Oxford, entitled *Gretna Green, or the Red-hot Marriage*. The blacksmith is there in approved smithy costume, with his hands clasped over an open Bible which lies on the anvil, while a lady and a gentleman in travelling garb, attended by a postilion, are standing between the anvil and the door. Under this sketch these doggerel lines are inscribed :—

Oh ! Mr Blacksmith, ease our pains,
And tie us fast in wedlock's chains.

The Secretary having conveyed the exuberant thanks of the party to the most generous host and hostess, our drive was resumed, and with the long level back of Burnswark behind us and the Solway shores beckoning us homewards, we negotiated pleasantly the journey back to Annan, more than delighted with a day on the Kirtle.

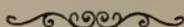
Third Field Meeting—September 3rd.

THIS was held at Birrenswark, where the members who attended were shown over the excavations being made for the Scottish Society of Antiquaries under the supervision of Mr James Barbour. An account of these excavations will appear in a future volume of the Transactions.



LIST OF MEMBERS,

As at 1st October, 1898.



Honorary Members.

- E. G. Baker, F.L.S., British Museum.
J. G. Baker, F.R.S., Royal Herbarium, Kew.
Arthur Bennett, F.L.S., Croydon.
J. Harvie Brown, F.L.S., Larbert.
William Carruthers, F.R.S., British Museum.
E. J. Chinnock, LL.D., London (former Secretary).
Frederick R. Coles, Edinburgh.
Dr Anstruther Davidson, Los Angeles.
Peter Gray, Dumfries.
James Macdonald, LL.D., Edinburgh.
Alexander M'Millan, Castle-Douglas.
Sir Herbert E. Maxwell, Bart., M.P., F.S.A.
Alexander D. Murray (former Secretary), Newcastle.
Dr David Sharp, F.R.S., Cambridge.
Robert Hibbert Taylor, M.D., Liverpool.
William Thomson, Kirkcudbright.
Joseph Wilson (former Secretary), Liverpool.

Life Members.

- Duke of Buccleuch and Queensberry, K.G., K.T.
Earl of Mansfield, Scone Palace, Perth.
Colonel Edward Blakett, Arbigland.
Mrs Bell, Glenæ House.
F. R. Coles, 1 Oxford Terrace, Edinburgh.
Thos. Fraser, 94 High Street, Dalbeattie.
Alexander Young Herries, Spottes.
J. J. Hope-Johnstone, Raehills.
Miss M'Kie, Moat House.

Wellwood Herries Maxwell, F.S.A., Munches.
 William J. Maxwell, M.A., Terraughtie.
 William D. Robinson-Douglas, F.L.S., Orchardton.
 Sir Mark J. M'Taggart-Stewart, Bart., M.P., Southwick.
 Samuel Smith, M.P., Liverpool.
 Capt. William Stewart, Shambellie.

Ordinary Members.

John Adair, Rotchell Park.
 Sir Andrew N. Agnew, Bart., M.A., Lochnaw, Stranraer.
 John Carlyle Aitken, Gatehouse.
 Miss Margaret Carlyle Aitken, Maxwelltown.
 Rev. William Andson, Newall Terrace.
 Joseph J. Armistead, Newabbey.
 Samuel Arnott, Carsethorn.
 William Barber, M.A., Tererran.
 James Barbour, F.S.A., St. Christopher's.
 Mrs James Barbour, St. Christopher's.
 James Barbour, Glendarroch, Dalry.
 Robert Barbour, Belmont.
 Robert Barbour, Solicitor, Rosemount Terrace.
 Thomas Beattie, Davington, Langholm.
 Richard Bell, Castle O'er, Langholm.
 Thomas Hope Bell, Morrington.
 James Biggar, Chapelton.
 James Blacklock, Solicitor, Irish Street.
 Jonathan E. Blacklock, Solicitor, Irish Street.
 John Borland, Auchencairn, Closeburn.
 William Bowron, Marchmount.
 Thomas M. Brown, Closeburn Castle.
 Mrs Brown, Barnkin of Craigs.
 Sir James Crichton-Brownie, M.D., LL.D., F.R.S., Crindau.
 Alexander Bryson, Irish Street.
 Rev. John Cairns, M.A., Ivy Lodge.
 George Campion, B.A., Sheriff-Substitute.
 James Carmont, Bank Agent, Dumfries.
 Frank J. C. Carruthers, Architect, Lockerbie.
 Rev. Alexander Chapman, M.A., St. Mary's.

- James Clark, M.A., Rector of Academy, Dumfries.
Dr Frederick H. Clarke, Buccleuch Street.
W. A. Coats, Dalskairth.
Miss Copland, Newabbey.
John F. Cormack, Solicitor, Lockerbie.
Adam J. Corrie, Senwick, Borgue.
John Corrie, Moniaive.
John Cumming, Albany Lodge.
James Davidson, F.I.C., Summerville.
John Davidson, Crichton Cottages.
Rev. John R. Denham, Norwich.
Rev. J. C. Dick, Eskdalemuir.
William Dickie, Laurieknowe.
William A. Dinwiddie, Buccleuch Street.
John W. Dods, St. Mary's Place.
Bernard Drummond, Moffat.
Charles R. Dubs, Cargen.
Robert F. Dudgeon, Kirkcudbright.
John Bryce Duncan, Newlands, Kirkmahoe.
William Duncan, Rotchell Park.
John H. Edmondson, Riddingwood.
George F. Scott-Elliot, F.R.G.S., F.L.S., Newton.
Mrs Scott-Elliot, Newton.
Captain Robert Cutlar-Fergusson, Craigdarroch.
Joseph Gillon Fergusson, Isle.
James Fingland, Thornhill.
Rev. James Fraser, D.D., Colvend.
Mrs Gilchrist, Linwood.
William Gillespie, Solicitor, Castle-Douglas.
Provost Glover, Dumfries.
Robert Gordon, London.
William M. Graham, Mossknowe.
John Grierson, Town Clerk.
Robert Grierson, Castle-Douglas.
John Gunning, Victoria Road.
Miss Hamilton, Victoria Road.
Miss Hannay, Langlands.
Miss Jane Hannay, Langlands.
Miss Hardy, Moat House.
John Henderson, Claremont.
Lord Herries, Lord-Lieutenant of the Stewartry.

- James Herries, Loreburn Park.
 James Hiddleston, Nithbank.
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 George Irving, Newcastle.
 Matthew Jamieson, Craigelvin.
 Mrs Matthew Jamieson, Craigelvin.
 David Jardine Jardine, Applegarth.
 J. E. Johnson-Ferguson, M.P., Springkell.
 John Thorburn Johnstone, Moffat.
 Mrs Johnstone, Victoria Terrace.
 Walter Johnstone, Victoria Terrace.
 Duncan James Kay, Drumpark.
 John Kerr, Blountfield, Ruthwell.
 Rev. Thomas Kidd, Moniaive.
 Rev. Roger S. Kirkpatrick, B.D., Jedburgh.
 Thomas Laing, Noblehill.
 Rev. Sir Emilius Laurie, Bart, M.A., Maxwelton House.
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 Miss Lennox, Edenbank.
 A. Ligertwood, Kirkbean.
 James M'Andrew, New-Galloway.
 James M'Call, Caitloch.
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 Miss M'Cracken, York Place.
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 Thomas M'Gowan, Solicitor, Buccleuch Street.
 Dr A. D. MacDonald, Castle Street.
 Colonel Edward Mackenzie, Auchenskeoch.
 William D. Mackenzie, Fawley Court, Henley-on-Thames.
 Matthew S. M'Kerrow, Boreland of Southwick.
 Thomas C. M'Kettrick, Irving Street.
 John M'Kie, Anchorlea, Kirkcudbright.
 Thomas M'Kie, F.S.A., Advocate, Edinburgh.
 David M'Jerro, Town-clerk, Lockerbie.
 Rev. John D. M'Kinnon, Newall Terrace.
 Dr James MacLachlan, Lockerbie.
 John M'Naught, Royal Bank, Sanquhar.

- Alexander Malcolm, Lauricknowe House.
William E. Malcolm, Burnfoot.
Mrs M^cTier, Ladyfield.
Dr J. W. Martin, Holywood.
Wellwood Maxwell, F.S.A., Kirkennan.
William J. Maxwell, Terregles Bank.
Frank Miller, Annan.
Miss Milligan, Irish Street.
James Moffat, Banker, Annan.
John A. Moodie, Solicitor, Irish Street.
Thomas A. Moryson, Montague Street.
Miss Agnes Mounsey, Thornhill.
Benjamin Rigby Murray, Parton.
Robert Murray, George Street.
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George Neilson, Writer, Glasgow.
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John Neilson, Mollance, Castle-Douglas.
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Dr J. M. Robertson, Penpont
John Robson, Clerk to the County Council.
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 Adam Skirving, Croys, Dalbeattie.
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 Robert Wallace, Industrial School.
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 Rev. Robert W. Weir, M.A., Castle Street.
 David Welsh, Waterloo Place.
 James W. Whitelaw, Troqueer Moat.
 W. H. Williams, Inland Revenue.
 James R. Wilson, Sanquhar.
 Colonel James Maxwell Witham, Kirkconnell
 Mrs Maxwell Witham, Kirkconnell.
 Miss Maud Maxwell Witham, Kirkeconnell.
 Edward C. Wrigley, Gelston Castle, Castle-Douglas.
 William M. Wright, Charnwood.
 Robert A. Yerburgh, M.P., Chester.

PRINTED

29 MAY 1906



No. 15.

THE TRANSACTIONS

AND

JOURNAL OF PROCEEDINGS

OF THE

DUMFRIESSHIRE AND GALLOWAY

Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862.

SESSION 1898-99.

PRINTED AT THE STANDARD OFFICE DUMFRIES.

1900.

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COUNCIL 1898-99.



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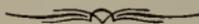
PROCEEDINGS AND TRANSACTIONS

OF THE

Dumfriesshire & Galloway Natural History and Antiquarian Society.



SESSION 1898-99.



28th October, 1898.

ANNUAL MEETING.

Rev. Sir EMILIUS LAURIE, Bart. of Maxwellton, in the Chair.

Donations and Exchanges.—Year-book of the U.S. Department of Agriculture, 1897; Missouri Botanical Garden Report, 1892; Journal of the Elisha Mitchell Scientific Society, 14th year, 2 parts; Prehistoric Burial Places in Maine (Peabody Museum Papers); Proceedings of Academy of Natural Sciences, Philadelphia; Bulletin of the Geological Institute of the University of Upsala; Transactions of Stirling Natural History and Archaeological Museum, 1897-98; Transactions and Proceedings of the Canadian Institute, 1897-98; Annual Report and Proceedings of Belfast Naturalists' Field Club, 1897-98; Composition of Maize (U.S. Department of Agriculture).

SECRETARY'S REPORT.

Dr Ross submitted his annual report for the year to 30th September. Twenty new members were added to the roll during the year. Eight resignations were received, and two ordinary members died. Eight evening and three field meetings were held. At the evening meetings fifteen papers were read and a number of interesting specimens shown. The latter included impressions of ancient seals, cut stones, French tricolor, assignat, autograph letters of the Duke of Wellington, an ancient sasine throwing new light on the history of the burgh of Annan, insignia of Dumfries, and a remarkably fine collection of pebbles and other stones, with some beautiful specimens of amber. The field meetings were to Sanquhar and Eliock, Cove Quarries, Kirkconnel Churchyard and Springkell, and to Birrenswark. At Eliock the society enjoyed the hospitality of Rev. Mr Veitch, and at Springkell that of Mr Johnson-Ferguson, M.P. At Birrenswark an opportunity was afforded, under the guidance of Mr James Barbour, of examining the very interesting excavations made by the Scottish Society of Antiquaries. The excavations at Raeburnfoot undertaken at the expense of this society, and with the consent of the proprietor and tenant, were brought to a most successful issue under the close supervision of Mr James Barbour, and formed the subject of a learned and interesting communication by him which appears in the transactions for the past session.

TREASURER'S REPORT.

The Treasurer (Mr J. A. Moodie) read his Annual Report, from 1st October, 1897, to 30th September, 1898:—

CHARGE.

Subscriptions from 153 Members at 5s each	...	...	...	£38	5	0
Do. „ 7 „ 2s 6d „	..	...	...	0	17	6
				<hr/>		
				£39	2	6
Six Subscriptions at 5s each paid in advance	...	...	..	1	10	0
Arrears of Subscription paid	...	...	...	0	5	0
Life Subscription from the Right Hon. Lord Balvaird (now the Earl of Mansfield)	...	...	...	2	2	0
Entrance Fees from 12 New Members	..	...	...	1	10	0
				<hr/>		
Carry forward	...	..	...	£44	9	6

Brought forward	£44	9	6
Copies of Transactions sold		0	10 4
Amount of Subscriptions received towards the work of Excavating Roman Camp at Raeburnfoot ...	£11	5	0
<i>Less Expenses—</i>			
(1) Wages of Workmen, and Outlays of Mr James Barbour, Architect, while superintending Excavations ...	£4	18	11
(2) Amount paid for labour filling up Trenches		1	17 0
			<u>6 15 11</u>
Interest on Bank Account		0	4 5
Balance due to Treasurer	£13	12	0
<i>Less</i> Balance in Savings Bank		0	4 5
			<u>13 7 7</u>
			<u>£63 0 11</u>

DISCHARGE.

Balance due to Treasurer at close of last Account	£15	11	8
<i>Less</i> Balance in Savings Bank		1	7 0
			<u>£14 4 8</u>
Paid Salary of Keeper of Rooms and additional Allowance for Heating Rooms during Winter Months		3	3 0
Paid for Stationery, Printing, &c.		3	2 4
Paid for Periodicals and Books		3	0 7
Paid for Coals and Gas		0	14 2
Paid Fire Insurance Premium		0	4 6
Paid for Repairs to Building		1	18 2
Paid Expenses of calling Meetings as follows :—			
Post Cards	£4	12	6
Addressing same		1	2 0
Printing same		1	6 6
			<u>7 1 0</u>
Paid Expenses of publishing Transactions for last year, as follows :—			
<i>Dumfries Standard</i> for Printing Transactions	£24	17	0
Postages of Transactions		1	6 9
			<u>26 3 9</u>
Paid <i>Dumfries Standard</i> for Printing Library Catalogue ...		1	11 6
Paid Secretary's Postages and Outlays		0	6 10
Paid Treasurer's Postages and Outlays		1	2 0
Miscellaneous Payments		0	8 5
			<u>£63 0 11</u>

Account in connection with the Publication of "Birrens and its Antiquities," for the year ending 30th September, 1898.

Balance due to the Treasurer as at 30th September, 1897	...	£15	12	3
<i>Less Copies of Book sold during the year, as follows:—</i>				
15 Copies at 3s 6d each	... ..	£2	11	6
10 ,, 3s ,,	... ..	1	10	0
1 ,, 2s 11d ,,	... ..	0	2	11
<u>26</u>				
Balance due to Treasurer...	... ..	£11	7	10
			4	4
				5

DUMFRIES, 28th December, 1898.—I have examined the foregoing Accounts and compared them with the Vouchers, and find the Balances stated to be due to the Treasurer to be correct.

JOHN NEILSON.

ELECTION OF OFFICE-BEARERS.

The following were elected Office-Bearers and Members of Council for the ensuing session: *President*—Rev. Sir Emilius Laurie, Bart.; *Vice-Presidents*—Mr James Barbour, Mr W. J. Maxwell of Terraughtie, Provost Glover, and Rev. J. Cairns; *Secretary*—Dr J. Maxwell Ross; *Treasurer*—Mr John A. Moodie; *Librarians and Curators of Museum*—Rev. Mr Andson and Mr James Lennox; *Curators of Herbarium*—Mr G. F. Scott-Elliot and Miss Hannay; *Council*—Messrs William Dickie, Matthew Jamieson, James Clark, James Davidsohn, W. J. Maxwell (Terregles Banks), J. M'Gavin Sloan, R. Murray, Mrs Thompson, Miss Hannay, and Miss M. Carlyle Aitken.

Exhibits.—Mr James Barbour showed (1) a circular stone from the neighbourhood of Birrenswark with indentations on two sides for finger and thumb supposed to be a hammer dating from the Stone Age, (2) from the Roman Villa recently excavated in Kent a piece of roof-tile with circular markings, tesserae from the floor, and part of a tile from the hypocaust.

PRESIDENT'S ADDRESS.

Gleanings from Family Records.

In the paper which I had the pleasure of reading before the Members of this Society some years ago, I took as my subject

“The Home of Annie Laurie.” In that paper I made some remarks upon the family history of its present possessor, and I stated that the facts I mentioned were based upon authentic records. This led to the request that I would at some future time give further information upon the same subject; and this, with your leave, I now propose to do.

The family of which I am a member has, of course, as all families have, a double lineage; one on the father's, another on the mother's side. In our case we are descended on both sides from Protestant Refugees, and it is chiefly of that connection that I propose to treat.

Our paternal name of “Bayley” is neither English nor Scotch, but Flemish. It was an old tradition in our family that we were descended from a Protestant Refugee, who settled in the neighbourhood of Thorney in Cambridgeshire. It was also a tradition “that none of the family were ever engaged in any kind of trade;” they certainly lived as gentlemen; they brought with them their love of field sports; they associated with and married into the best families of the neighbourhood.

My father's brother, who was the genealogist of the family, gave most of his spare time to the investigation of the family history. The first discovery he made was of a French register of baptisms at Thorney, containing numerous entries in the name of de Bailleul, and in one instance of Bayley. In an entry of 1655 Philippe de Bailleul is named as a sponsor; this Philippe was our ancestor.

Philippe de Bailleul about the year 1650 bought an estate at Willow Hall, near Thorney, where he built a house, in which the family resided for several generations. Attached to the house were stables and granaries, remarkable for their height, size, and construction; which indicates that the land was used for grazing purposes, no occupation connected with the cultivation of a person's own land being considered as any disparagement to his nobility. Arthur Young, a well-known agricultural authority in the last century, writes in his “Travels” that “in Flanders the cattle are tied up and fed in stables all the year round, but kept scrupulously clean;” and was told that no practice was considered so wasteful as letting the cattle pasture abroad, from the loss of food which was spoiled, as also of manure, to which great value was attached. The nature and extent of the buildings at Willow

Hall would seem to shew that the same practice was adopted there ; and pointed to Flanders as the country from which the de Bailleuls came. Further investigation proved this to have been the case. In 1565 Hector de Bailleul was Seigneur of Eecke and Steenvoorde in Flanders ; his great-grandson was Philippe, the refugee. There seems to have been a double migration, first into France, and then into England. In 1598 Henry IV. had published the Edict of Nantes, securing toleration in France. On the other hand, the Inquisition was still in force in Flanders, and in all countries subject to Philip II. At the close, therefore, of the 16th century there was persecution on the Flemish side of the frontier, but toleration on the French. Eecke was only 10 or 12 miles from the French frontier ; once across the frontier and the Protestant was for the time safe. At that time the de Bailleul family realised their property in Flanders, crossed the frontier, and settled in France. The period of safety, however, was short. In 1610 Henry IV. was assassinated by Ravallae ; and his son Louis XIII. reigned until his death in 1643, when his son Louis XIV. succeeded to the throne. Under Louis 13th persecution had been somewhat veiled ; under the Grand Monarque it was bitter and unrelenting, culminating in the revocation of the Edict of Nantes in 1685. The well-known saying of Louis XIV. explains the situation : "My grandfather loved the Huguenots without fearing them ; my father feared without loving them ; I neither fear nor love them." It was shortly before 1650 that the de Bailleuls sold their property and took refuge in England, forming part of a Huguenot colony settled at Thorney. The colony consisted mainly of farmers and labourers, but one family consisting of four brothers belonged to an old and noble family in Flanders ; they brought money with them, bought land, and lived on terms of intimacy with the county families around them. One of these brothers was Philippe de Bailleul. His grandson Isaac had three sons, from the second of whom, John Bayley of Elton, as the name had then become, we are descended. John Bayley married Sarah Kennett, granddaughter of White Kennett, Bishop of Peterborough in Queen Anne's reign, of whom more anon. I know little of this John Bayley except that he was 6 feet 4 inches in height, a great sportsman, kept fox-hounds, was among the first to ride thoroughbreds to hounds, and spent a large fortune. His son, my grandfather, was for many years on the English bench, and I can remember seeing him try

five men for murder at the Carlisle Assizes. I remember still more distinctly his sending me £5 on my taking a double Remove at Eton. He had been at Eton himself. "You have gladdened our hearts," he wrote; "depend upon it a man's success in life depends almost entirely upon himself."

So much for our descent from the de Bailleuls, a family holding a high position for many centuries in Flanders, early adherents of the reformed faith, driven from Flanders by the persecuting tyranny of Philip II., and from France by that of Louis XIV., and finding safety and liberty in this country.

A few words now upon our maternal descent. At the period during which the family of de Bailleul was seeking freedom of conscience—first in France and then in England—there was living at Cormont, near Montreuil, in the north of France, a middle-class family named Minet. The first of the family of whom we have any authentic record is Ambrose; born in 1613, he removed to Calais, where he built up a large business. He seems to have been a general merchant. He was a distiller, he supplied the country round with groceries and drugs, he sold more tobacco than was sold within a hundred miles round, being the first who had from London an *ingin* (sic) for cutting tobacco square. He seems to have had the true commercial instinct, and wherever a demand existed he was ready to supply that demand. Spirits, groceries, tobacco, drugs, all were alike to him; he was the forerunner of the modern stores, the universal provider. But not only was he a man of business and a citizen of Calais, he was a member of the Reformed Church, a deacon of the church at Guines, near Calais, which he attended, and of which the accounts, with his autograph appended, are still in existence.

Curiously enough, in the diary of Bishop White Kennett, to whom I have referred as one of our paternal ancestors, there is an account of a visit he paid to France in October, 1682, the crossing from Dover to Calais having taken 17 hours. He describes his first Sunday there. "Went up by boat to Guines. A custom for the Protestants formerly to sing Psalms in the several boats, but of late forbidden by authority." Then follows an account of the service in the church at Guines. "The reader at some distance from the pulpit reads the lessons and sets the psalms, their sermons set off with eager repetitions and vehement expressions. The sacrament administered after sermon, the table placed under the pulpit,

fenced off with seats for persons of better rank. The bread divided in a dish, and the wine poured into two large cups. The two ministers consecrate and administer to each other; the communicants occupying the table in sets, receiving the bread and wine, and then making room for successive sets. Each minister received a salary of £100."

On the Sunday following White Kennett was an eye-witness of the marriage of Daniel, son of Ambroise Minet. His account of the ceremony is curious. "Several waggons with four horses in coach order to carry the guests to Guines. The bridegroom clothed in black the first day. Three couples married without any repetition of the office; a list of their names being read by the minister from the pulpit. At our return to Ardres a very solemn bride supper prepared, after which they danced till bedtime. On Monday the entertainment continued. The custom for the people at such solemnities to sit at table from eight in the morning till four in the afternoon with supplies of fresh dishes without any rising up, and with very small intermission from eating and drinking. The poultry dressed without larding, pigs roasted with legs on, and the spit run through the head without wiping." White Kennett seems to have been a curious and minute observer. He was a young man at the time; and the future Bishop may have objected as little to Sunday dancing as he did to the feast prolonged from eight in the morning to four in the afternoon.

It is not, however, from Daniel but from his brother Isaac, the 6th son of Ambroise Minet, that we claim descent. Born in 1660, he conducted the Calais business with success after his father's death up to the revocation of the Edict of Nantes in 1685. At that time the persecution had waxed hot. Isaac and his mother, who lived with him, were cast into prison. The President told him that he was "a heritick and smelt strong of fagots, and that if he did not sign to be a Roman Catholic he should be burnt." After six weeks spent in prison, his mother being seriously ill, they were carried by the dragoons to church, threatened as if they had been dogs, and prevailed upon to sign the adjuration, though protesting with tears that it was against their consciences to do so. Of this he afterwards bitterly repented and publicly confessed his sin.

AN ADVENTUROUS VOYAGE.

For the moment, however, he was free, but rested not until he had made his escape. Isaac has left two narratives of his flight from Calais. He had arranged with a brother, who had already escaped to England, to send a boat to carry him and his family across the channel, fixing a place of meeting about two miles east of Calais at midnight on July 31st, 1686, having bribed the mounted guards to allow him to embark. His own party consisted of seven persons, viz., himself, his mother, his sister, her husband and his mother and their two children. There were six seamen. The boat was small, and on coming down to it, to their horror they found two farmers, their wives, and six children and their baggage already in possession. The seamen declared that should there be any wind the boat would sink, and the farmers were ordered out, though, as Isaac remarks, "much against stomach." So piteous, however, were their entreaties that a passage was given them, on condition that if the boat should be in danger of sinking they should be thrown into the sea; to which they answered that "if it was God's will they would submit to it, but hoped that God in his mercy would preserve them all." And he did so. I quote the closing words of the narrative:—"The riding officers had of me 40 crowns, and so by the grace of God we set sail, and the seamen rowed sometimes. About two hours after we left the shore we spied a sloop, and fearing the Dunkirk cruiser, they spread a sail over all the passengers' heads, who layd down in the boat, and the fine wind and weather being favourable we landed at Dover about eight o'clock the same morning (August 1st), for which mercy I shall ever give thanks to God, it being a very great deliverance. We were met on the shore by brothers Ambroise, Jacob, and Stephen, and sisters Susan and Mary, full of tears of joy in our eyes, and many more of our friends, who received us as brethren saved from the great persecution."* We have thus brought Isaac Minet to England. He was shortly afterwards naturalized, and joining the mercantile and banking house which his brother had founded at Dover, pursued a successful and honourable career; dying at the age of 85 in the year 1745; held in high esteem for his religious principles, his business

*The landing was effected on the Bulwark Rock, where now the South-Eastern Railway Station stands.

capacity, and the overflowing gentleness and kindness of his Christian character.

An original portrait of the refugee was long in possession of our family ; it was until recent years hanging at Maxwelton, when it was handed over by my predecessor to the Minet family, as having a deeper interest in it than we could have. The scroll in the hand has on it the words " Rappel de l' edit."

I now touch briefly upon the link between our own family and that of the Minets. At the time of the persecution in the 17th century, to which I have been referring, there was living at Mulhausen, in German Switzerland, a family of the name of Vechter. They were members of the Reformed Church, engaged in manufacture ; and, whether drawn together by business or religion, they became intimate with the French family of Minet. A son of the family, Jeremy Vechter, established a house of business in Rotterdam, and married Mary, daughter of Thomas Minet, eldest brother of Isaac the refugee. Mary's son Peter came over from Rotterdam as a lad in 1739 to be clerk in his great uncle's house at Dover. Isaac's son John had become rector of Eythorne, in East Kent, and an account is preserved of the expenses of his induction in 1723, and of providing him with a horse, saddle, feather bed, and wig ; and also of some Havana snuff, of which he seems to have been fond. The Rector of Eythorne had a daughter Mary, to whom her cousin Peter became attached, and whom, after several refusals on her part, he married. Born in 1724, he survived until 1814. His portrait is at Maxwelton, as also that of his son John Minet Fector, my grandfather.

And this brings me to another link of the chain which unites the Laurie family with all these ancient worthies. I quote from a copy of the *Kentish Register* of 1794, which I lately unearthed. " February 18. In London, by special license, John Minet Fector, Esq. of Updown, Kent, eldest son of Peter Fector, Esq., of Dover, to Miss Laurie, only daughter of Sir Robert Laurie, Bart. of Maxwelton, member for the county of Dumfries." My father's marriage with their daughter, Miss Fector, completes the chain which unites the lines of Bayley (de Bailleul), Fector (Vechter), Minet, and Laurie. The families of both Fector and Laurie are now extinct in the male line, but in the female line they are represented by your humble servant.

For lack of better material upon which to found my paper, I

have given a succinct account of some of the sources to which our family traces its origin. Of course, there are other sources if we cared to deal with our English or Scotch lines of descent; but enough has perhaps been said to show what variety of blood has from time to time entered into our national life. In our own case, Flanders, France, German Switzerland, as well as England and Scotland, have been contributors; whilst the one bond which has bound all together has been the bond of the Reformed Faith. In one product of your Scottish industry much stress is often laid upon the importance of a judicious blend ripened by age. We need not, I think, be ashamed of the blend which I have been describing. Whether it has been ripened by age I will not say, it certainly has stood the test of years; and we, the descendants, may well be content to walk in the faith and follow the example of those who have gone before us. In tracing up the story of our family life one fact stands out in view, viz., that in a sense we owe much as a family to the tyrannical monarchs of France and Spain. Indeed, but for the persecution waged against the Huguenots our family would have had no existence, certainly not in its present form. But for Philip and the Inquisition, the de Bailleuls, rooted for centuries in the soil of Flanders, would certainly not have sold their ancestral possessions and crossed the border into France; and again, but for the persecuting spirit of the French king they would not have again struck their tents, and, crossing the seas, sought refuge in England.

Again, if it had not been for Louis XIV. the Calais merchant would not have crossed the channel to Dover. He was carrying on a thriving business in France; he evidently clung fondly to his native land; but bonds and imprisonment compelled him to act upon our Lord's maxim, "When they persecute you in this city, flee ye into another;" and thus a second Huguenot family, driven from its own land by the wicked policy of a short-sighted intolerance, found a home in England. Whilst again, if the banking house had not been established by the refugees in Dover, the son of the Mulhausen manufacturer would never have been sent to make his fortune there; for the house, to the headship of which he rose, would have had no existence. And, to carry the sequence one step further, but for the modest but fructifying fortune which he left Maxwelton would have been sold to pay the ruinous calls of £2600 per share, on the failure of what Burns called "that villain-

ous bubble," the Ayr bank, in 1772. Three-fourths or more of the property was sold ; but through the urgent advice, and, no doubt, assistance of the Dover banker, a residue was preserved ; and in later years, out of the fortune which he bequeathed, some of the lost portions have been redeemed and restored to the old estate.

What curious links are sometimes evolved in the chain of cause and effect ! Thus, when Louis XIV. put his signature to the Act of Revocation he unwittingly helped largely to found a new family, and to secure its modest prosperity in the land to which his tyranny had banished it. But he did far more ; the influence of his act was world-wide. He put an end in France, for a time at least, to freedom of thought and liberty of worship ; he inaugurated an epoch of mental stagnation, political depravity, religious hypocrisy, and moral decay. Protestantism was crushed out, Jesuitism was triumphant ; and the reign of bigotry was followed at no distant date by the reign of terror, and the horrors of the Revolution ; a Revolution which, beginning in 1789, has not, as it would seem, yet run its course.

This is not the place to dwell upon the fortunes, or rather the misfortunes, of France, which were largely consequent upon the expulsion of the Huguenots ; but it is certainly a remarkable fact that since the time of Louis XIV. no ruler of France has, with two exceptions, died upon his throne. The fate of Louis XVI. and of his son is well known. Louis XVIII. died indeed upon the throne, but it was after long years spent in banishment. Charles X., his brother, died in exile ; as also did Louis Philippe, who supplanted him. The Duc de Berri, son of Charles X., was assassinated, and his son, the Count de Chambord, the last of the elder branch of the Bourbons, lived and died a stranger to his own land. The fate of the two Napoleons is, of course, familiar to us ; and who can say where the headship of that great nation at present resides, in the army, in the mob, or where ?

We need only turn to the Huguenot dispersion to see how different has been the fate of the Refugees and their descendants. From the first their prosperity has been very marked ; and whether as soldiers or sailors, as lawyers or physicians, as men of science or men of business, they have contributed their full share to the wealth and progress of the countries of their adoption. We are apt to boast perhaps too much of our Anglo-Saxon origin : the root stock may be Anglo-Saxon, but it had been largely recruited from

other races ; and I venture to believe that not the least valuable of this foreign blood has come from Huguenot sources.

Nor was it only that the refugees brought with them their skill and their industry ; they brought with them that which was far more valuable, their enlightened faith and their well-tested piety. It was the saying of one of them—"Ne sommes point venue de race illustre et noble. Sy est ce que nous sommes venue, Dieu merci, des gens craignans Dieu." Our family, as we have seen, owes its constitution to the fact that our ancestors feared God rather than man ; moved by that fear they went forth and found refuge in a foreign land. Nor is it undeserving of notice that when, a century later, numberless emigrés, priests and nobles, escaping from the horrors of the Revolution, flocked to our shores they received a ready welcome and substantial help from the descendants of the Huguenots ; foremost amongst whom were members of my own family. "There can be no pleasure," writes one of them, "equal to doing good, and particularly in assisting the stranger."

Nor is this all. When at the peace of 1814 the Emperors of Austria and Russia and the King of Prussia visited England, and Louis XVIII. quitted it on his return to France, my mother's father occupied a position which enabled him to open his house in Dover to those great Potentates : the humble descendant of the Huguenots thus overcoming evil with good, offering hospitality to the long-banished descendant of their cruel persecutor. Some funny stories of that "time of the Emperors," as it was called in the family, have come down to us : as that of the Russian servants drinking all the oil in the lamps, and leaving my grandfather's house in darkness ; and that of the uncouth dress and strange language of the Emperor Alexander's coachman nearly killing one of the domestics with fright, in the belief that he was the embodiment of Satan.

Another fact may be mentioned in this connection, and one not without some small historical interest. I had heard or read that Louis XVIII., when he embarked at Dover in 1814, was so infirm that he had to be carried on board the yacht which was to convey him to France. I asked my mother's sister, Miss Fector, then a child of ten, whether this was the case. She answered "No. I was standing with my arm over the rail of the gangway when the king walked down it. The Prince Regent came up the gangway

to meet him. Both were infirm. One placed his hand on mine to steady himself. The other leant with his hand upon my shoulder, so that France and England met on my small personality."

This "small personality" survived until 1892. She was the last of the Huguenot descent to whom I will refer, and her life was an embodiment of some of the most typical features of Huguenot character. Of clear and sharply defined Evangelical principles, simple in her tastes and habits, unselfish, unworldly; with an income of some £1500 a year, she spent about £200 upon herself and gave the rest away, but she left nothing in charity at her death, holding that charity at the expense of others is little worth. She was proud, if I may use the word, of her connection with the Laurie family, leaving it as an instruction that in the notice of her death it should be mentioned that she was "niece of Sir Robert Laurie of Maxwelton." But her fullest sympathy was given to her Huguenot ancestry, or rather to the faith for which they suffered, and in which they lived and died. Sure I am that had she lived under Louis XIV. no power on earth would have made her sign a recantation of her faith; it held her, and she held it, with a grip which nothing could shake; an example not without its lesson for us in these days of easy-going Christianity.

Such, then, are some few gleanings from Huguenot story, so far as it bears upon the fortunes of our family. They may teach us to value the civil and religious liberty which was won for us by our forefathers; they may teach us to think more highly than some do of that deposit of truth which they handed down at the cost of so much suffering; they may teach us to hold fast our heritage of a free gospel and an open Bible; they may teach us, in a word, to "stand fast in the liberty wherewith Christ has made us free."

18th November, 1898.

Mr ROBERT MURRAY in the Chair.

New Members.—Mr James Hobkirk, Netherwood ; Mr Robert Connor, Dumfries.

COMMUNICATIONS.

1. *The Botany of 1898.* By Mr JAMES M'ANDREW, New-Galloway.

I am sorry that my contribution to the Flora of the South-Western Counties must this year consist of only a very few brief notes. Numerous new records of plants cannot now be reasonably looked for in the district.

The Rev. H. M. B. Reid, Balmaghie Manse, showed me a large clump of *Sambucus ebulis*, L., near Balmaghie Church, close to the side of R. Dee. I question if this plant—the dwarf Bourtree or Danewort—is found elsewhere in Kirkcudbrightshire.

Wigtownshire.—For the new records of plants for Wigtownshire I am indebted to the Rev. James Gorrie, F.C. Manse, Sorbie. These are :—

1. *Ranunculus auricomus*, L. (goldielocks), near Newton-Stewart, in meadows by the R. Cree.
2. *Pyrus aria*, L. (service tree), Castlewig.
3. *Cichorium intybus*, L. (chicory), near Garliestown.
4. *Mentha sylvestris*, L. (horse mint), Barglass.
5. *Ulmus montana*, Sm. (wych elm), Sorbie.

I found the filmy fern, *Hymenophyllum Wilsoni* (Hook), in Knock Bay, Portpatrick. This fern is very scarce in Wigtownshire.

Cryptogams.—New records of mosses are as follow :—

1. *Andreaea falcata* (Schpr.), Grennan Bank, Dalry.
2. *Hypnum intermedium* (Wils.), at Bogue, Dalry, and on Cairn Edward Hill, New-Galloway.
3. *Eucladium verticillatum*, L., Portpatrick.

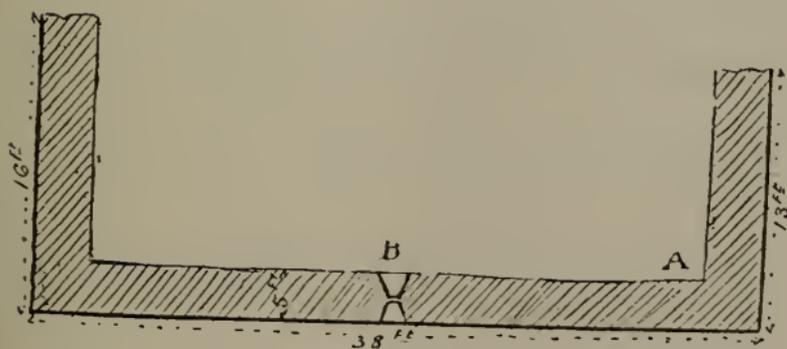
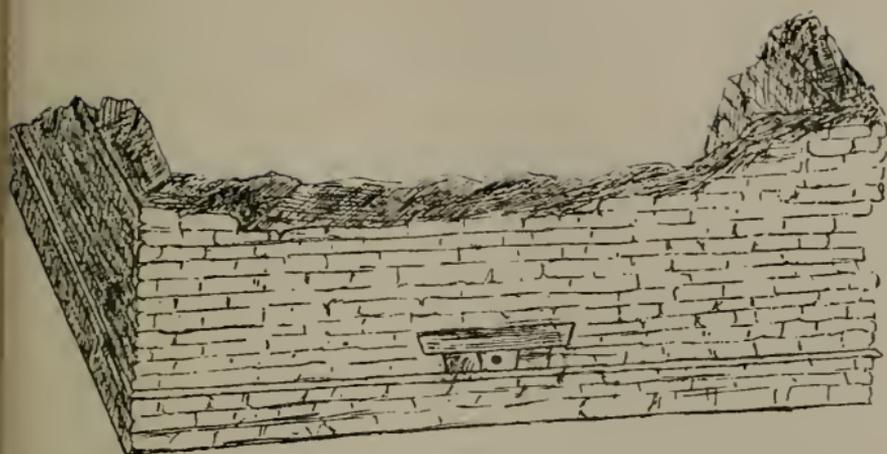
New records of Hepaticæ are :—

1. *Radula Lindenbergii* (Gottsche), Knocknarling Burn, New-Galloway.
2. *Lepidozia Pearsoni* (Spruce), in plenty on the north side of the Black Craig, New-Galloway. This hepatic has also turned up in Moidart, Inverness-shire.
3. *Hygrobiella laxifolia* (Hook), in Lowran Burn, New-Galloway.

Also a new species of Lichen, *Pannularia perfurfurea* (Nyl), from Burnfoot Hill, New-Galloway.

2. *The Old Hall of Ecclefechan (Kirkconnel Hall)*. By Mr GEORGE IRVING, Corbridge on-Tyne.

When at Ecclefechan a few weeks ago my attention was called to an old wall at "The Ha'." I went and examined it, by the kind permission of Mr Wilson, the present occupier of Kirkconnell Hall. I found the wall all covered with ivy, climbing roses, and other greenery, and included in the grounds attached to the present residence. The part now standing is the North side, measuring 38 feet; part of the West side, measuring about 13 feet; and part of the East side, about 16 feet. The South and remaining parts of the West and East walls are gone, and now covered by the lawn, but I have no doubt, by digging, the whole extent of the walls of this old Tower might be ascertained. The existing walls are about 10 feet high and 5 feet thick, built of good, large blocked rubble of Brownmuir stone. There is a six inch plinth of the softer red sandstone of Corsehill or Kirkpatrick. The part of the North wall still standing is in good repair and shows very good workmanship. The outer stones of the West wall have nearly all been "skinned" off. I have ascertained that during the absence of Dr Arnott with the Army his mother sold the stones of the old Tower. When I write of Dr Arnott, I refer to the well-known and greatly respected surgeon of the 20th Regiment, and personal medical attendant of Napoleon at St. Helena, where the Emperor died. There are signs in the interior that it had the usual vaulted chamber, and in one corner, marked (A) on plan, signs of a spiral staircase. At point (B) on plan there is an opening through the wall to the North to let in light and air



The Ruins of the
Hall of Cecl. e. fechan.

to the vaulted chamber, and also for defensive purposes. The plinth is about 3 feet from the present surface of the ground on the North side, but in the interior, where it has been levelled up for the lawn, it is only a few inches. No doubt this is the original "Hall of Ecclefechan," which stood on certain lands "pertaining to Kirkconnell." Very curiously, no notice is taken of this tower in any of the Gazetteers of Scotland, nor is it figured on the old Ordnance Survey. In the original Valuation Roll of 1671 these lands are described as the "Ten merkland pertaining to Kirkconnell." In the Roll of 1827 these lands appear as divided up among a good many owners. Thus, "Dr Archibald Arnott, Hall of Ecclefechan, part of Kirkconnell," and about 33 other owners whose holdings are all described as "part of Kirkconnell," and appear to have included the whole of the East side of the Ecclefechan Burn, from Cowthat to Cressfield and Grahams-hall.

On the old Dwelling House adjoining, apparently built about the beginning of last century, there is cut over the doorway in strong Roman letters,

MDCC. WK. SJ. XXXV.

On the window head, but reversed the wrong end up,

WK. SI. 1738.

And on another window, again reversed,

JJ. WK. SJ. 1724.

Though the form of the letters are old, they seem from the clearness of the edges as if some "Old Mortality" had renewed their looks.

My difficulty is to shew how the place came to be called Kirkconnell. The Irvings were Lairds of Kirkconnell, now Springkell, and their lands appear to have extended through part of Middlebie to Ecclefechan. The Irvings of Woodhouse and Bonshaw, we know, took in all the land on the west side of the burn. It is well known that the Kirkconnell, now Springkell, estates were sold to the ancestors of Sir J. Maxwell in 1609, and that the Irvings of Kirkconnell moved to the Hall of Ecclefechan.

William Irving of Kirkconnell died in 1706, aged 80 years. He would be born 1626, or about 17 years after the Maxwells

acquired Springkell. William Irving left a son named Herbert, who died in 1709, aged 60 years. Herbert and Janet his wife left a daughter, Sarah. Sarah married William Knox. They had an only daughter, Janet Knox, who married in 1754, according to the session records, George Arnott. George Arnott and Janet Knox were the parents of Dr Archibald Arnott, who died in 1855 and is interred in Ecclefechan Churchyard. Now, if we turn to the initials upon the window sills what do we find? 1724 we find the initials of Janet Irving, William Knox, and Sarah Irving; 1735, William Knox and Sarah Irving; 1738, William Knox and Sarah Irving. The above is, I think, a fair interpretation of the inscriptions upon the old house, and is supported by the inscriptions upon the tombstones in Kirkconnell and Ecclefechan churchyards. The property still remains in the possession of the Arnott family. It is said that the first Arnott came to Ecclefechan from Fife to manage some linen works—a flourishing industry early last century. It is recorded that when he married Miss Knox it was before a Magistrate, and that they were summoned before the Kirk-Session and censured for irregularity and fined ten shillings and sixpence. It was apparently not convenient for the young couple to pay cash, so the bridegroom granted a bill. Unfortunately there is no mark or date on the Tower to shew when it was built, but it is of precisely the same type as the other Border Towers in the district. I have said that Kirkconnell was held by an Irving, and in those days it was customary, and to some extent still is, to name the Lairds by their lands, and *vice versa*. Now what would be more common than to say it was Kirkconnell's Land or Bonshaw's Land?

In the same old valuation we have the Hoddom estate described as “pertaining to Southesque,” just the same as the “Ten merkland pertaining to Kirkconnell.” Kirkconnell was the familiar title of the Laird of that Ilk. All this, I think, justifies me in saying that the proper name for this old Border Tower is the Hall of Ecclefechan. The name Kirkconnell Hall applied to the present residence is quite a modern name—no doubt adopted by Dr Arnott from the early associations of his mother as a descendant of Irving of Kirkconnell.

Mr William Johnstone, formerly schoolmaster of Hoddom, in his “Bard and Belted Knight,” says its ancient name was Tyre-

connell, but gives no authority for it, except Graham, "The Bard of Milk's" poem, "The Fall of Tyreconnell."

I have stated that the Laird of Kirkconnell's land extended through part of Middlebie into Hoddom. The name of these lands was Blackwoods or Blacklands, one moiety of which belonged to the Laird of Kirkconnell, and the other to the heirs of Herbert Irving.

It would be interesting if some one having access to the old deeds of the lands "pertaining to Kirkconnell" would look this question up.

According to the tombstones in Kirkconnell Churchyard one of these reads:—

Here lyes William Irving of Kirkconnell, who departed this life August 10th, 1706, aged 80 years.

Here lyes also Herbert Irving of Kirkconnell, who departed this life Feby. the 27th, 1709, aged 60 years.

Erected by Janet Irving, relict of Herbert, and Sarah Irving, their daughter.

Here lyes Rosina Knox, daughter to William Knox and the said Sarah Irving of Kirkconnell, who departed this life June the 24th, 1722, aged 3 years; also their son George, who departed this life April the 14th, 1727, aged 10 days.

IN MEMORY OF

Janet Knox, only daughter of Sarah Irving of Kirkconnell, and Spouse to George Arnott, who died the 22nd day of December, 1796, aged 67 years.

This emblem may to all disclose
That beauty withers like a rose;
We live and die within an hour,
And quickly pass like any flow'r.

Also George Arnott of Kirkconnell Hall, husband of the above Janet Knox, who died there in May, 1801, aged 80 years.

And John Arnott, their son, who died at Kirkconnell Hall, the 17th April, 1830, aged 61 years.

Also Margaret Oswald Arnott, their daughter, who also died there the 28th May, 1840, aged 83 years.

Also Catharine Shorte, relict of the above John Arnott, who died at Kirkconnell Hall, 13th Feby., 1873, aged 93 years.

IN MEMORY OF

George, son of George Arnott and Janet Knox of Kirkconnell Hall, who died at Ecclefechan, on 24th Feby., 1829, aged 65 years.

Also of Elizabeth Murray, his wife, who died at Greencroft, Ecclefechan, on the 3rd of March, 1864, aged 82 years.

The above George Arnott was a brother of Dr Archibald Arnott, who was interred at Ecclefechan. The following is a copy of the inscription on his tombstone:—

SACRED TO THE MEMORY OF

Archibald Arnott, Esq.,
Kirkconnell Hall.
Born 18th April, 1772.
Died 6th July, 1855.

Dr Arnott was for many years Surgeon of the 20th Foot, and served in Egypt, Maida, Walcheron, throughout the Peninsular War, and in India.

At Saint Helena he was the Medical attendant of
Napoleon Bonaparte,

Whose esteem he won, and whose last moments he soothed.

The remainder of his most useful and exemplary life he spent in the retirement of his native place, honoured and beloved by all who knew him.

“The Memory of the Just is Blessed.”

Dr Arnott was presented by Napoleon Bonaparte with a gold snuff box, enclosing a cheque, with the letter N engraved upon the lid by his own hand. This precious relic is still in the possession of his heirs.

On each side of the front entrance to the modern mansion house, called Kirkconnell Hall, there is a fine specimen of the old Creeing trough, now utilised as flower vases. They are about two feet high and about one foot six inches in diameter.

In the dining room is a fine sideboard, made out of an old black oak chest that belonged to the Arnott family.

Mr Wilson is also the possessor of a very unique old carved black oak cradle, on which is carved on a small panel round the figure of an Angel, “East West Hame’s Best.” This, however, did not belong to the Arnott family.

It would not be right to close these notes without referring to the "Ha' Ghost" This mysterious apparition seems to have haunted the place from the distant past, and whose mysterious and noisy demonstrations have from time to time disturbed the residents. It is said to make its appearance before and at the time of the death of any member of the family.

3. *The Douglas Tomb at Hampstead.* By Dr E. J. CHINNOCK.

In looking over the old Churchyard of Hampstead, in the north-west of London, I came upon an old tomb lying shattered, but with the pieces placed together. The inscription is as follows:—

“ This stone is erected
in memory of
Charles Douglas,
brother of
Sir John Douglas
of Kellhead,
in the County of Dumfries,
North Britain,
who died the 13th of December, 1770,
aged LX.”

Above the inscription is the Douglas coat of arms.

On consulting Burke's "Dictionary of the Peerage and Baronetage" I find that Charles Douglas of Breconwark married a Mrs Young, but died without issue, on the 13th December, 1770. This, no doubt, is the person buried in Hampstead Churchyard. This Charles Douglas was the third son of Sir William Douglas, the second baronet of Kellhead. He was one of thirteen children, ten sons and three daughters. His brother's grandson, Charles, the fifth baronet of Kellhead, became the 5th Marquis of Queensberry in 1810, on the death of the 4th Duke of Queensberry ("old Q."), and the present Marquis, the 8th, is descended from him.

16th December, 1898.

Mr JAMES BARBOUR, Vice-President, in the Chair.

Donations and Exchanges.—Proceedings of Natural Science Association of Staten Island ; Was Middle America peopled from Asia ? By Prof. Edward Morse.

COMMUNICATIONS.

1. *Rod-Fishing in the Nith.* By Rev. H. G. J. VEITCH of Eliock.

One man's hobby is often another man's aversion. My hobby would therefore never have been trotted out before you unless I had been asked to show his paces.

Well, it is an ancient art, and some of you who have studied Egyptian antiquities may have missed the records of the manner of fishing for crocodiles in the Nile in the days of Herodotus.

It was as follows :—They took a nice little pig and “put him round a hook.” Then they took with them a small live pig, and beat him and pulled his tail to make him squeak. Then when the crocodile, attracted by his cries, approached the bank, they cast in the little dead pig that was “round the hook.” The crocodile, having swallowed the bait, was played as we now play a salmon, and either lost or brought to the basket, as the case might be.

But this was rough fishing. Rod-fishing now-a-days has become a science and an art. To be an expert there must have been long study of entomology. The various flies and their seasons, the different kinds of worms (would that someone would find me a breed that would squeak to attract the trout!), the innumerable creeping, crawling, and swimming creatures which inhabit the water, and on which trout and salmon feed, open up a field for life-long scientific enquiry.

But rod-fishing is also an art. There is no other which so enthral its devotees. An old friend of mine puts this most pointedly.

“It is a grand sport, a noble sport ; it is the only sport of which it can be said that the man who can wander about the riverside in thunder, lightning, hail, rain, wind, and snow, or sit all day without bit or sup on a wet sod, in a cramp-inviting

position, surrounded by a fog thick with influenza, asthma, and rheumatic gout, is the same man who cannot be induced to go to church because the pews are uncomfortable."

But rod-fishing is an art. Why should we deny to it that which we grant to all other arts? The poet, the painter, the architect, can never rise to eminence unless he be highly gifted with the faculty of imagination. Why, then, if I, an angler, tell you how I caught twenty salmon in the Nith in one hour with a trout rod, should you suggest mendacity? Put it down to exuberant imagination. Anglers are hurt when they are denied the exercise of that faculty which, believe me, they possess in quite as large a measure as poets or painters.

But my subject is Rod-fishing in Nithsdale. The Nith rises in Micklehill, and flows as a burn to New Cumnock; there it is joined by the Glen Allan water; increased in volume it rests in long, quiet lanes, and ripples over gravelly shallows, till, having received the waters of Kelloe, Crawick, and Euchan, it becomes a river, and having made a great bend round the old grey ruins of Sanquhar Castle, plunges into the rocky gorge from Eliock to Drumlanrig. Below Thornhill bridge the river is less rocky, and by many gravelly streams it flows with willing sport to the wild ocean.

Now, rod-fishing is supposed to be the contemplative man's recreation. Recreation it is, and one of the most seductive; but "contemplative?" Did you ever see a man wading deep in some rocky stream, waving his rod frantically, and straining every nerve and muscle in his endeavour to reach the distant salmon, or the trout rising by that big rock on the far side? Did you ever see him when he had got out every inch of line that he could cast, hook the top of a fir tree behind him, or the thorn bush opposite to him? Did you ever hear what he said on such an occasion? Did he look contemplative?

The truth is that rod-fishing on such a river as the Nith is very hard work, and he who would rise to eminence in the art must possess muscular strength, a good temper, patience, keen powers of observation, and, as I said before, imagination in a high degree. You would not, I fancy, care to listen to a long disquisition on the various kinds of rods which are at present in use, nor the vast variety of tackle, and the innumerable species of flies which are turned out by the tackle makers. All I would say is,

if you would go a fishing, let your tackle be of the best (good tackle is far cheaper than bad in the end, no matter what you pay for it), and your rod suited to your strength and the water you are going to fish.

When rod-fishing was first practised on the Nith I know not. I have a rod, and not a bad one, which belonged to my grandfather and must be getting on to a hundred years old, and I had some salmon flies which must have been some hundred and fifty years old. They were mounted on thick, twisted horsehair, were much of the same colour as those now in use, but were of a strange and weird shape, and I feel sure that a salmon of to-day with any self-respect, were he to see one in the water, would turn and flee to the Solway, and bury himself in an agony of fear in some thick bed of weeds. These flies were kept as a curiosity, but some time ago, when I went to look for them that they might accompany this paper, I discovered that the rats had eaten the horsehair and the moths had eaten the feathers.

Many people look upon rod-fishing as an amusement, which is all very well for those who like it. Some ladies look on it as a most useful way of getting rid of their husbands when they are troublesome, and will suggest that the water is in good order, and that they would like some trout for dinner, or for breakfast next morning. The husband who is fishing is considered safe—he cannot get into any mischief, so they think. But few think of the enormous value of rod-fishing as a recreation for overworked men. The hard-worked mechanic, who has toiled week after week in workshop or factory, whose muscles have been strained to the utmost, whose lungs are full of smoke and dust, is a better man, morally and physically, for a few days' fishing in one of our lovely glens. The air of the hills and moors is like champagne to him, and the little stream (if he will but hearken) makes music for him such as he can hear in none of his city haunts.

But it is perhaps to the overwrought brain worker that rod-fishing affords the greatest recuperation and rest. The professor who has burnt the midnight oil too much, the doctor, the lawyer, the clergyman, whose patients and clients and parishioners have sorely tried his powers and his patience, becomes a new man when for a few days, having clothed himself in some well worn old suit of fishing garment, he casts off care and worries and wanders, rod in hand, by some rippling stream. The wooded

banks of the river, the heather-clad braes of the burn, and the the great round hills sweeping down in every imaginable curve, speak to him with a still voice, which only some can hear. The beauties of nature lead him up to nature's God, and to thanksgiving for this fair world and our power to enjoy it.

But there is another view of the subject. Very few people have any idea of the economic value of rod-fishing to Scotland. The rents that are paid for salmon fishing, and the rents that might be paid for trout fishing, were it cared for as it should be, would amount to an enormous sum, and by far the greater portion of the money would go to makers of fishing tackle, water bailiffs, river keepers, and gillies. The breeders of trout, the makers of flies, the diggers of worms, &c., &c., would be multiplied, and all their families would be better fed and cared for. The deterioration of rod-fishing in many, very many, of our rivers is therefore much to be lamented. All this applies strictly to the Nith. When I was a boy I could catch many more trout in the Nith than I can catch now, with all my increased experience and skill.

When my father was a boy, he and his brothers could fill their baskets in the Nith and the burns which flow into it so easily that they left off fishing because they could carry no more. Why is it the fishing has degenerated? First and foremost, because so large a portion of spawning ground has been utterly destroyed, or rendered so dangerous to the eggs, that few or none come to any good.

The draining of hill farms has entirely altered the character of our burns. You probably know that trout run up the burns to spawn. They pick out some nice gravelly shallow on which to lay their eggs. They are generally all laid before Christmas, and come out in the end of February or March. Now, before the days of sheep drains, the rain sank into the moss as into a sponge, the burns rose slowly, and fell slowly to their ordinary level. But now a few hours' heavy rain sends the burn down, roaring round rocks, and tearing up the gravel, destroying the eggs, or the little fish which have just come out of them, and so working utter ruin with the year's spawn.

2nd. There is a pollution from factories and coal-pits. On certain days the upper Nith is quite ruined for fly fishing. It does not always kill the fish, but it makes them so unwell that they will not rise.

3rd. There are now-a-days probably twenty anglers for one who fished fifty years ago, and the trout have become so highly educated that the young ones are taught to distinguish not only between the natural fly and the artificial, but between the different patterns of the artificial. An elderly trout lying in some nice little eddy points out to her pupils the distinguishing marks of English and Scotch flies, and sometimes when some lovely work of art floats over them, a perfect dream of beauty in tinsel and silk and feathers, unhesitatingly names the artist from whose hands it came, and points out that these are vanities to be severely left alone by all right-minded little trout!

No wonder, therefore, that our baskets are not so heavy as they used to be, and that in spite of our finer tackle, and more exact imitation of the natural insect, we are becoming a laughing stock to well-educated trout. But as no man is wise at all times, so no trout is safe from making an occasional mistake, and the increased difficulty of catching trout adds to our pleasure when we do succeed.

One other cause there is for the decline of rod-fishing which I have not mentioned, that is poaching with nets. I do not know whether that evil practise exists on the Nith, but on the Clyde and rivers of like character it has ruined rod-fishing.

But it is with regard to salmon that the falling off of rod-fishing is the most serious. When I was quite a boy, I knew well an old fisher in Sanquhar, who told me of wonderful catches of salmon which he had made long before I was born. Of course it is possible that he added a little to the numbers and weight of fish which he had killed. But the legislation of past years with regard to salmon has been against the rod fisher and in favour of the nets. Those who have framed the various Acts relating to the subject have many of them been altogether ignorant of the life history of the salmon. The upper proprietors of our salmon rivers who own the streams in which salmon spawn have been ignored, and the net fishers have got it all their own way. The cry has been that net fishing was a great industry, and that any reduction of the time during which their nets were allowed to work would reduce their earnings, and what was worse, would reduce the food supply of the people. Can you understand the sapient legislators being led away by such a cry as that? Salmon the food of the people! How many of the people ever taste a bit of salmon from

one year's end to another? Salmon is a luxury, and unless considerable alteration is made in the laws which regulate its capture it will become a more expensive luxury as years go on. Rod-fishing on the upper portions of many of our rivers has been ruined. Few fish get up till quite late in the season, and we upper proprietors, who are told that we have been most generously treated, in that while the poor net-fishers are not allowed to fish, we are allowed to wield our rods for some six weeks and more after the nets are off and have the chance of killing a fish or two heavy in spawn, or black and utterly unfit for killing.

Yet it is in the upper waters that the eggs are laid and the fish reared. Can you wonder that upper proprietors cease to care for the preservation of salmon and the watching of spawning beds? Someone may say that the Board of Conservators put on a watcher for the upper waters, but how many miles of river has he to look after? Can he prevent salmon being killed on the spawning beds, or kelts being killed for salting? Give the upper proprietors a chance of a fair share of the fish hatched in their waters, and then they will take an interest in the preservation of the fish, and some would begin to rear salmon to stock their waters. It is my private opinion that if the nets were off for three days in the week the upper proprietors would find it worth their while to cultivate salmon, and in a few years' time net-fishers at the mouth of the river would get many more fish than they do now.

It may perhaps seem to you that I am taking a very pessimistic view of the prospects of rod-fishing, but really I have hopes. There is a stir being made in the matter of trout-fishing in Scotland which will bear good fruit if anglers will support it.

Meetings have been held in Edinburgh lately, with the object of establishing a National Association, which if carried out will go a great way towards improving the trout-fishing in our rivers; and if we could get the shepherds on our side, and make it worth their while to watch the burns and spawning beds on their respective beats, and get proprietors to do a little artificial rearing of trout, a very marked effect would soon be produced.

It is some thirty-five years ago that I began the artificial rearing of trout, and it is so easy that any intelligent man might be taught in a few lessons to take the eggs and impregnate them and place them on some gravelly shallow, or in boxes in some

little run from a good spring, where they would be safe from floods. Of course the percentage of fish reared would not be nearly so large as if the eggs were placed in a regular hatchery under cover, but it would be much larger than that of eggs laid by the trout on beds which might be left high and dry one day and the next torn up by some sudden flood.

My special love for the Nith may, I think, be traced to the fact that more than fifty years ago I caught my first trout with rod and line in it, just where Mennock burn pours its crystal clear water into the river. Probably the little trout was not more than a few ounces in weight, but to me it was a monster, and though since that day I have killed salmon in the Nith and monsters in Norway, I have never felt such a thrill of triumphant joy as the capture of that little trout gave me; and though I am growing somewhat old, and the trout-fishing is poor, I enjoy a day on the Nith more than any other river that I know. The stretch of water from a little below Sanquhar to Thornhill bridge is charming to the eye of the artist and the angler, and brings to me old memories, some joyous and some sad. In that stream I once made a good basket—behind that rock long years ago I caught that big trout, here I fell into the water and had a hard fight to get out, there I parted from an old friend whose cheery voice I shall never hear again, and though the wading of rough streams is no longer a delight to me, and the sudden and unexpected sitting down on a hard rock (it seems to me that rocks have got much harder of late years) is a positive pain, I still love the rocky streams and wooded banks of Nith, and would gladly see the fishing restored to something like what it was long years ago.

I have just come across an article in one of the papers which reminds me that Frank Buckland, when appointed one of the commissioners of fisheries, expressed a hope that by wise legislation salmon might become so much more abundant that it might be sold at sixpence a pound, and really become food for the people. Had he been invested with sufficient power to carry out his schemes, it is probable that our supply of salmon would have been much increased. But popular prejudice and vested interests were too strong for him, and I know that he was sorely disappointed at the failure of his efforts, for the good of both upper proprietors and net-fishers.

The past season has been a bad one both for rod-fishers and netters, but there is little real hope of satisfactory amendment till the net-fishers learn that it is to their advantage that a larger number of salmon should be allowed to go up the rivers to lay their eggs, and should combine with upper proprietors to fight manfully against pollution whatever form it may take.

You may perhaps think that I have strayed a good deal from my subject and have treated the matter too generally. But every word refers to the Nith as much as to other rivers. If trout are scarce and salmon absent till too late in the season there can be no good rod-fishing, and I feel sure that if you are not anglers yourselves, you would be glad to see your poorer brethren and your fishing friends get better sport than they do now.

This brings me to a very much vexed question; that is Free Trout-fishing. There are some who assert that trout-fishing in Scotland is free, and many who think that it ought to be. You probably know that there is no such thing on the Nith, nor on any river that runs into the Solway. The Solway Fisheries Act is very stringent, and the penalties for rod-fishing in any water without the permission of the proprietor are heavy. But a great part of the Nith can be fished by ticket from one or other of the angling associations for a very small sum. Therefore practically a large portion of the river is free to all who will conform to the rules under which the tickets are issued.

Free trout-fishing as some understand it—that is, that everyone should have the right to fish wherever he pleased—would very soon complete the ruin of our fisheries. Something which happened to me a few years ago opened my eyes to the danger of free-fishing. I was in the habit of giving leave freely to all who asked for fishing in my waters. One man, to whom I fancied I might safely give unlimited leave, was found with his pockets full of pheasants' eggs, which he picked up in coverts by the waterside. A right of free fishing would give to evil men the opportunity of collecting the eggs of grouse and black game to such an extent that the moors would be denuded of game. A whole army of keepers would not be able to protect them.

It is my earnest wish that our rivers and streams should be thrown open as much as possible to hard working men who fish legitimately; and if they would band themselves together against the poacher, and all illegal methods of capturing trout and salmon,

and help a little to restock our waters, and refrain from killing undersized fish, their baskets would year by year contain better fish in greater numbers. A fishing holiday would then be not only a source of enjoyment and health, but would be rewarded with a basket of trout fit to be taken home to the wife and bairns.

May I be permitted to give a piece of advice to the wives of anglers? If your spouse comes home with an empty basket do not jeer at and flout him. It is not given to every angler always to command success. If he brings home trout much larger than any that are to be found in the stream which he has been fishing do not suggest that he has paid a visit to the fishmonger on his way home, because even should he have done so he may still say he caught them, and at all events he has shown a desire to please you. He may say he caught them, for there is a story told of a Yorkshire angler who, returning with an empty basket, seeing some very fine trout reposing on a fishmonger's slab asked the price, and, finding it reasonable, astonished the fishmonger by asking him to throw him half-a-crown's worth. He caught them one by one in his hand and deposited them in his basket. He could then truthfully tell his wife that he had caught them all himself.

I would suggest also that it is wise of the wife to sympathise with her husband and pretend to believe in the enormous size of the trout which he has lost during the day. It pleases him and does not hurt anyone.

Let me conclude this very rambling paper with an apology for a mistake which I have made on the first page. I there wrote of salmon *feeding* on certain creatures which inhabit the waters.

A certain very scientific body has discovered that salmon do not *feed* in fresh water. We are told that it is well known that salmon do occasionally take and swallow worms and other wriggling objects—but this is not *feeding*. *Feeding* means “not the mere swallowing of material, but the digestion, absorption, and utilization of that material by the body.”

I crave your pity, therefore, for the poor salmon who has stuffed himself with worms during a flood. What a dreadful stomach ache he must have! The scientific society which has been enquiring into the life history of the salmon has dissected some salmon and declared that their stomachs were found to be functionless. Therefore they could not feed. Therefore no

salmon feed in fresh water. Therefore, though they swallow worms, minnows, and parr, and take march browns like any trout, they do not *feed*. Therefore the plain meaning of the English language is to be distorted to support a scientific theory. But it is a scientific dictum, and of course we are bound to accept it.

2. *Annotated List of Antiquities from the Stewartry of Kirkcudbright now preserved in the National Museum.* By Mr F. R. COLES, Assistant-Keeper, National Museum of Antiquities, Edinburgh.

In offering this contribution to the Society, I thought that the preservation of such a list might be helpful to students of Archæology, and also useful for reference to visitors from the country in need of a direct and ready method of finding the objects in which they are likely to be most interested. Perhaps, too, some useful inferences may be drawn from a survey of what the Stewartry has yielded in comparison with what it has not. I make the Catalogue of the National Museum the basis of arrangement, than which it is impossible to find one that is more thorough, complete, and in all respects satisfactory.

At the very outset one is struck with the fact of the entire absence of even a small collection of Flint Implements—a fact all the more strongly emphasised by the presence of only one insignificant piece of Flint out of all the varied objects, numbering nearly two hundred, unearthed during the famous Borness Cave excavation. This is the more astonishing when we know, that from Wigtonshire, the Glenluce Sands alone have yielded nearly eight thousand Flint Implements of many various forms.

The earliest Implements, then, as yet credited to the Stewartry, are *Stone Axes*, of which there are six, ranged as follows in the Museum: Section AF 27, Axe of Felstone, 6 in. by $2\frac{1}{2}$ in., found in Twynholm and presented by Rev. J. Milligan in 1868. Number 28, Axe of Greenstone, 8 in. by 3 in., from Tongland; 66, Axe of Syenite, $6\frac{1}{2}$ in. by $3\frac{1}{2}$ in.—both presented by Rev. J. Milligan; the next, Number 77, an Axe of Greenstone, measures only 3 in. by 2 in., and is from Girthon, presented by Rev. G. Murray in 1861. Number 86, portion of the pointed end of a finely-polished Axe of Green Avanturine, presents several

points of interest. It is a mere fragment 3 in. long of an Axe which, when complete, must have measured about 8 in. by $2\frac{5}{8}$ in. The extremely brilliant polish of both its surfaces and its beautifully regular edges fit it to compare with any of the finest specimens; and, as it was found near Castle-Douglas, and presented by Thomas Forrest in 1782, it is one of our oldest possessions. The original entry of the donation of this fragment is: "By Mr Thomas Forrest, Bailie of Douglas, a flat piece of polished green marble with sharp sides $3\frac{1}{2}$ in. long, broken at the base where it has been broke off, the sides tapering to a point; found in an outfield, in tilling, within a mile and a half of the antient Castle of Douglas." Number 140 is a Felstone Axe, 5 in. by $2\frac{3}{4}$ in., found at the bottom of a Circular Moat—probably the small one which gives its name to Moat Croft—in Twynholm, and presented by Rev. J. Milligan, 1868. The total number of Stone Axes in the Museum, it may be well to remember, is over 450.

In the next group, that of *Perforated Stone Axe-Hammers*, which exhibit considerable variety of form, we have to deal with five specimens. The distinguishing feature of this group is that, at the thicker end, there is a circular hole for a wooden handle made by drilling from both sides. Some of the specimens show the process in a half-finished state. AH 9 is a good Wedge-shaped Hammer of Sandstone, $9\frac{1}{2}$ in. by $4\frac{1}{2}$ in. by $2\frac{1}{2}$ in., from Deebank, near Kirkcudbright, presented by William Turnbull in 1833. Number 10 is almost identical with this; from Carlingwark Loch, presented by Alex. Gordon in 1781. Number 19 is a much-broken Axe of Sandstone from Balmaclellan, one of the many donations of the late Rev. Geo. Murray. Originally it must have measured $8\frac{1}{4}$ in. by $4\frac{1}{2}$ in., and is very thick, rounded, and heavy. Number 27 is a Wedge-shaped Hammer of Greenish Sandstone, $7\frac{1}{2}$ in. by 4 in. by 2 in., from Kelton; Rev. J. Milligan, 1868. Number 64, a Hammer Head of Greenstone, 8 in. by $4\frac{1}{4}$ in., the butt imperfect; from Monybuie, and presented by Dr W. G. Dickson in 1886.

Whetstones and Polishers.—Over a hundred of these may be seen in the Museum, only one of which is from the Stewartry: AL 26. It is a very small oblong piece of dark reddish Quartzite, measuring only $2\frac{7}{16}$ in. by $\frac{1}{2}$ in. by $\frac{1}{2}$ in. It came from Cairnsmore, Kells. These very small whetstones form a class by them-

selves : narrow in proportion to their length, always tapering evenly towards both ends, which are square cut ; the largest in the collection barely reaches 4 in., and the smallest barely 2 in., the majority being quite small. They are not all of Quartzite ; but even when made of a much softer stone none of them show any signs of use ; they are not hollow in the middle, as one would expect, had tools been sharpened upon them. Dr Anderson suggests that the very small quartzite specimens may have been used as touch-stones for gold. The smallest of all is from Uist ; it is under 2 in. in length, it is of a rather soft, dark stone, and, in common with others of the same kind, it has a neatly-drilled round hole at one end. In the Uist specimen there is still a small metal ring attached to the perforated end. Is it not just possible it and its cognates were used as charm stones ? The fact that several other whetstones of an ordinary type, and abraded by use, also have holes at one end, does not militate against my supposition. Sir H. E. Maxwell notes that these very small whetstones of Quartzite were used in Wigtownshire within living memory to smooth seams in needlework. (Proceedings xxiii., 219.)

Perforated Stone Implements.—These are mostly water-worn pebbles pierced through the centre with a drilled hole ; but in one of the two specimens from the Stewartry, AO 24, we meet with an example of peculiar form. It is triangular, the delicately-curved sides measuring $3\frac{1}{4}$ in. each, and was probably a true hammer. It is from Balmaclellan, and was presented by Rev. Geo. Murray in 1868. No. 83 shows the common type, a regularly oval flattish pebble of sandstone, almost black-gray, $3\frac{7}{8}$ in. by $2\frac{1}{2}$ in. by $1\frac{1}{8}$ in., with a central perforation $\frac{5}{8}$ in. wide.

The one *Stone Cup*, AQ 64, is an unhandled, rude, thick, uninteresting specimen from Kirk Andrews. It was purchased in 1888. Its diameters are $5\frac{1}{2}$ in. by 5 in., and on its outside are a few poorly incised nearly perpendicular lines. These heavy stone cups appear to be mostly of iron age date, or even later ; and judging this uncouth specimen by its clumsy denial of all attempt at either grace or dignity, I should be inclined to place it among the examples of degradation in its special line.

The *Pivot Stone*, AW 24, of Quartzitic Sandstone, presented by Rev. G. Murray, calls for no comment; nor is there any striking feature about the *Sink-Stone*, AX 31, which measures $8\frac{3}{4}$ in. by $2\frac{3}{4}$ in., and is more oblong than many others. It was found at Borness, Borgue, and presented by James Marr in 1882.

Among stones fashioned by use as *Grain Rubbers and Knocking Stones* the small mortar-like vessel of sandstone, BA 27, from Glenlair, was presented by Rev. J. Milligan in 1868.

Quern Stones, of which there is a noble collection, are represented from Kirkcudbrightshire by but one upper stone, but a specially fine one, interesting alike on its own account, and for its having been found in association with a number of fine bronze ornaments presently to be described in trenching a moss in Balmacellan. It was presented to the Museum by Rev. G. Murray in 1861. Its catalogue designation is BB 7. It is not, however, among its fellow Querns, but on a wooden block below the case in the Pre-Historic room, where the bronze relics are deposited. This fine quern stone measures 14 in. in diameter, and the style of its ornamentation may be seen in the woodcut in the Catalogue. The elegance and freedom of this are very remarkable, and one particularly notes how the upright bar on the left of the central raised rim annihilates the stiffness of what otherwise would have been a merely symmetric short-armed cross.

With the two *Stone Weights*, BG 116-117, not requiring detailed notice, we close this section, and proceed to the varied and interesting relics in bronze.

The Museum possesses a fine collection of *Flat Axes in Bronze*, and it so happens that it is only the most recently added specimen, DA 67, that hails from the Stewartry. It measures $5\frac{1}{2}$ in. by $2\frac{5}{8}$ in., and is ornamented on both sides with a chevrons pattern—a rather favourite style with this type of implement—and was found at Mainshead, Terregles.

Bronze Flanged Axes, DC 17, a good specimen of workmanship, deeply flanged, with rivet hole, stop ridge, and raised rib down the centre, measuring $6\frac{3}{4}$ in. by $2\frac{1}{2}$ in. Found at Kilnotrie, Crossmichael, and presented by James Napier in 1830. The other flanged axe is a very small one, $3\frac{1}{2}$ in. by $1\frac{3}{4}$ in. It is one of Rev. Geo. Murray's donations in 1866 from Dalry.

Bronze Socketed Axes.—DE 3, Axe $3\frac{1}{4}$ in. by $1\frac{7}{8}$ in., a neat specimen with raised lines on the sides. From Kilnotrie. Number 5, in the original entry of date 1785, is thus curiously described by Mr Robert Riddell, the donor: "Part of an ancient instrument of mixed white metal resembling the small end of a trumpet, found in the Loch of Carse." It is a smallish imperfect axe with parallel lines by way of ornament, and the usual loop on one side; the absence of such loop being so rare that out of three score specimens in the national collection there is only one without the loop. Number 53, presented by Sir H. E. Maxwell, is a plain, solid axe, $3\frac{1}{8}$ in. by $2\frac{1}{4}$ in., from Muirfad, Kirkmabreck.

Bronze Spear Heads, DG 30.—Portion of a spear head, 4 in. long, from Buchan, Glen Trool, presented by John Forsyth, 1871. The other specimen, No. 44, from Balmaclellan, was presented by Rev. G. Murray, 1862.

Of *Bronze Dagger Blades*, properly so called, there is not one specimen from Kirkcudbrightshire; but a small and imperfect specimen of a bronze blade is catalogued under DI 3, and its original entry in Smellie's Account of the Society of Antiquaries offering some points of interest, I here quote it in full: "June 25th, 1782. By Alex. Copland, Esq. of Collieston: A piece of a Roman sword of fine brass, with a round pin of the same metal, found in Carlochán Cairn, on the top of a high hill in the lands of Chappelerne, and parish of Crossmichael, in the year 1776, when the remains of this cairn, once the largest in Galloway, were removed for enclosing a plantation round it. In the middle of this cairn, at the bottom, was found a coffin composed of large flat stones, but there were no bones in it." Now let us examine this account a little in detail. Letting pass the writer's opinion that Carlochán Cairn was the largest in Galloway (which from actual measurements of all the cairns extant I know could not have been the case), we have the statement "that in 1776 the remains of this cairn were removed." The presumption is, therefore, that previously to 1776 many of its stones had been removed, probably to build dykes, the usual destination of cairns in those days of vandalism. At this date then, 1776, the bulk of the remainder of the stones were removed, not, mark you, to construct common field dykes, but in order to make a fence to protect the young firs and beeches which were then planted. What object

any one could have had in marking out the site of a great cairn twice subjected to destruction at the hands of dyke builders passes my wit to understand. Lastly, if, as appears from Mr Copland's account, there was only one interment, central, and at the bottom of so vast a heap of stones, it is almost incredible that the only object preserved was this fragment of a bronze blade.

Bronze Swords.—This section gives us better, but still imperfect, specimens. DL 26 is a sword now measuring $20\frac{1}{2}$ in., originally over 23 in. It has three rivet holes in each wing, but two of these on each side are imperfectly cast and do not go through the metal. The hilt plate also has three rivet holes. This sword was found in Carlingwark Loch, and presented by D. A. Gordon in 1873. On a portion of the edge of the blade of this sword there are, as noted by Dr Joseph Anderson in the Proceedings XIII. 33, "minute parallel lines crossing other lines running nearly parallel to the edge," a feature unique even in his long experience and examination of bronze swords.

Portions of another sword, DQ 118, and of a Plain Ring of Bronze, DQ 119, were presented in 1885 by the Rev. Dr C. J. Cowan of Kelton, on whose glebe they were dug up. Unfortunately, as stated by the donor, the sword, which was complete when found, was broken into three pieces by the careless handling of the workmen. Originally it must have measured about 25 inches in length and nearly 2 in. in greatest width. The edge is much spoilt, but there is fine quality in the texture and colour of the *patina* all over the surface, and in one of the six rivet holes the rivet still remains fastened securely. The Bronze Ring is quite plain, nearly $1\frac{1}{2}$ in. in external diameter and nearly $\frac{1}{4}$ in. thick.

Bronze Caldron.—This, with its contents, is really one of the best of our possessions. The Catalogue describes it under DW 1, Bronze Caldron with Hoard of Iron Implements. As these various objects number eighty-six, we can here name but a few of them, *e.g.*, an axe-head, four hammers, portions of saws, punches, a file, a hinge, a snaffle horse-bit, a gridiron of iron bars with feet, and a multitude of nails and fragments of tools, evidently the refuse of a smithy. The Caldron itself will be best appreciated, failing actual examination, by the woodcut. It is formed of very thin plates of yellow bronze, the bottom of one

large sheet, and the sides of various smaller portions, all rivetted together. Here and there it is patched. Across the mouth it measures 26 in., the bulge being about 1 in. wider. It was dredged up from Carlingwark Loch by Messrs S. Gordon and J. T. Blackley in 1866. Most of the better preserved objects found in it are well figured in the Proceedings, VII., p. 8.

Besides the Caldron, we have at present on loan the little *Bronze Pot* found in Banean Loch, the property of Mr Lowden. It is described and figured in your Transactions for 1868. I think no one has hitherto observed that on the bottom of this vessel there are a few finely scored lines, perhaps the mark of its owner.

Keeping still to the order of the Catalogue, the next great class of relics is represented by the *Urns*. And here again one is struck by the absence of any of the large cinerary urns so typical of burials of the Bronze Age. The collection of cinerary urns is one of the marked features of the National Museum, and it does seem extraordinary, considering the very large number of cairns that have been rifled and of open cists that have been noticed in the Stewartry any time during the last 150 years, that not one specimen of the typical large urn has found a resting place among its fellows. One is inclined to hope that it is not through the same evil fate, presently to be alluded to, having overtaken them, but that mere inattention and forgetfulness have been the cause. The first urn, then, I have to notice belongs to what for convenience is called the *Food-vessel Type*, EE 32. This, like some other objects just noticed, was presented by Mr Alex. Copland in 1872, and is described in the original entry thus:—
 “A Roman Cinereal Urn [everything a century ago was Roman, of course!] of gravely brown earth, $6\frac{1}{4}$ in. in diameter and $5\frac{1}{4}$ in. in height, found in the parish of Urr, on the lands of Glenarm, in a cavity large enough to hold two or three people, on removing a quantity of stones in a quarry. There was in it a little black liquor like tar. There were other vessels [this is the distressing point] found along with it, which were broken by the carelessness of the workmen.” The phrase, “a cavity large enough to hold two or three people,” and the fact of “other vessels” being found, seem to indicate that the place of interment here was a long cist, such as are found, so far as I know, rather frequently only in the

western districts of Kirkcudbrightshire, several cairns there being of the long barrow or double circle type and containing several interments.

The section lettered EQ is devoted to Sepulchral Deposits, and Nos. 95 and 96 are a flat ring of silver, ribbed on the outer side, measuring $1\frac{3}{4}$ in. diameter, and a bead of amber, another of the donations of Mr Copland in 1782. They were found at Blackerne, Crossmichael.

Personal Ornaments.—The most important of these are contained in the group FA 1-14, all from New-Galloway, and all of bronze with Celtic ornament. (1) A bronze mirror 8 in. diameter, with a handle 5 in. long, with late-Celtic ornament both sides alike; (2) bronze gorget, 15 in. wide, ornamented with spiral scrolls; (3-5) bronze belts or mountings; (6) bronze plate in five fragments, 27 in. by 11 in., with raised border; (7-11) fragments of similar plates with similar ornament, but the outer edges curved; (12 and 13) ornamental bronze studs; (14) portion of the cloth in which these articles were found under the Quern BB 7, above described. All found at Balmaclellan and presented by Rev. Geo. Murray in 1861. The bronze armlet (36) is of late-Celtic type; it is very thin and light and is jointed, a contrast in every respect to the object immediately following. It is the smallest armlet in the museum, measuring only $2\frac{5}{8}$ in. by $2\frac{1}{4}$ in. by $1\frac{1}{8}$ in. in height. It was found near Plunton Castle, Borgue, and presented by Dr Wm. M'Ewen in 1859.

In FA 40 we recognise a veritable trophy of the skill displayed by our forefathers, whom an ancient Roman author contemptuously describes as "the barbarians in the sea." It is a crescent-shaped pendant of bronze, probably a harness ornament, beautifully decorated with Celtic designs in champléve enamel—that rich and intricate process of filling in segments of copper with molten pigment which was distinctively British. This pendant, which was found at Anchendolly, and presented by Major Archibald Hume in 1886, measures $3\frac{1}{2}$ in. by $2\frac{5}{8}$ in., and the colours used in filling in the circles and segmentals are opaque vermilion and opaque yellow, while the curvilinear design so characteristic of this art is left raised and is now covered with a brownish *patina*. At the date of discovery no means were taken to identify the exact locality.

FC 171 is a very remarkable little object. It is of bronze, a square vessel $2\frac{1}{2}$ in. by $2\frac{1}{8}$ in., and just half an inch thick; at two opposite corners are small loops, by which the little bottle has been suspended, and at the upper angle between these is the remains of a narrow neck. Though much corroded, the flat face of one side bears traces of a square check pattern, while the sides have all been beautifully decorated with interlaced work, a combination of a pair of cords, each forming a series of loops facing alternately to right and left, derived from a six cord plait. This pattern is No. 551 in the list of Celtic interlaced work designs reproduced in Mr Romilly Allen's great work on the Ornamentation of the Sculptured Stones of Scotland, now printing. The same pattern occurs on the Hunterston Brooch, and on stones in three localities in Scotland—Papil, Meigle, and Iona—and in seven localities in England. This rare little bronze vessel was found at Barr of Spottes; and, in view of there having once existed an old church thereabouts, the surmise may not be amiss that this was an Ink-bottle used by some of the monks.

Of *Gold Ornaments* there is but one specimen from the Stewartry, FE 16, a thick plain ring, weighing 1 oz. 8 dwt., and measuring $\frac{15}{16}$ of an inch inside, the metal being nearly $\frac{3}{16}$ in. thick. It was found at the Parish Church of Kirkpatrick-Durham and claimed as treasure trove. A single ring of *Jet*, FN 1, comes from Dalry, presented by Mr Copland in 1782. It measures $4\frac{1}{2}$ in. diameter, and was found in a moss; and in the Roman and British Section, FR 224, represents the only find, in its way, however, a very fine thing. Its beautifully modelled head of Medusa, and the other devices it bears, make this handle of a bronze vessel a valuable relic. It was found at Cairnholly, Kirkmabreck, under what special circumstances is not known, and presented, along with many other valuable relics, by Sir H. E. Maxwell in 1889.

In the collection of relics found in the famous Borness Bone Cave, in Borgue, the Museum has a good index of the species of objects belonging to this period of man's occupation of Scotland. The separate objects are numbered in the catalogue HN 1-179, and comprise masses of breccia with pieces of skull and other bones adherent, a large number of animals' bones, *e.g.*, those of the red deer and the badger being specially interesting; several whetstones and polishers; an implement of flint $1\frac{1}{8}$ in. by $\frac{1}{2}$ in.

showing, however, but little signs of secondary working; some curious and uncommon handle-like implements of bone, mostly ornamented with diagonal incised lines, their use problematical; bone combs of the long-handled, long-toothed type, probably used in teasing wool, as are similar combs but of metal used at the present day in North India; pins and spoons of bone and a highly-polished long, slender marrow-scoop of bone with a ring cut in its handle. There are also eleven fragments of bronze, including a thin circular brooch $1\frac{1}{4}$ in. diameter, upon which there are very faint traces of enamel, and one fragment of the lustrous red ware usually called "Samian," and so frequently found among the refuse pottery at Roman stations. The Borness Cave as a human habitation is not even of Neolithic Age. Indeed, the cave itself is not, in the opinion of the experts who explored it, old enough for deposits of the Neolithic Period, but belongs to the later remains of the Post Glacial Period. The presence of even one minute fragment of red "Samian" ware is "a world of evidence" alone; "and it appears," say the authors of the account, "that we must fix the state of this cave as most probably between the year 409 A.D., when the Roman legions were withdrawn, and 650, the date of the Saxon conquest of these parts." At the conclusion of the paper on the second exploration of the cave, the authors make the following suggestive remark: "In every one of some six or seven caves along the Muncraig shore some sheep or ox bones similar to those from the Borness Cave have been found. It needs but five minutes' examination to assure one's self that they, like the Borness Cave, were formerly the home or refuge of some ancient Scottish family."

Archaic Sculptured Stones.—In this section, IA 16-19, worthily represent some of the best Cup-and-Ring Marks in Kirkcudbrightshire. They are the four excellent casts made from the famous High Banks rock by our friends, the late George Hamilton of Ardendee and Mr E. A. Hornel. One of these portions of rock displays groupings of many scores of cups as closely put together as possible, surrounding triple concentric circles which enclose one large cup, a grouping we may certainly call unique. Another is specially interesting because it shows many spaces of the rock surface only begun to be worked on. We have here caught the primitive sculptor in the midst of his labour. Was it a flint

chisel he had in his hand or a bronze one? Some minds would be relieved were that little question answered!

Canoes.—The ancient mode of hewing and burning out the interior of a living tree is exemplified by three specimens, by far the largest of which is from Loch Lotus, IN 3. It originally measured fully 45 feet in length, and the stern was 5 feet wide; the prow is carved into the rude likeness of an animal's head, and the sides are pierced with holes for 14 oars. It is a pity that the other half should be allowed to rot away on the banks of its original berth. The canoe was presented by Mrs Hyslop in 1875.

KJ 18 is the half of a stone mould for casting leaden tokens, found about 1843 at Dundrennan Abbey, and deposited by Dr R. Trotter in 1875.

The section lettered KL is devoted to *Carvings in Wood*, number 2 in which is the oak pulpit from Parton Kirk, presented by the Rev. A. Patullo in 1865, at which date it is thus described in the proceedings: "The pulpit is hexagonal shaped, measuring 4 feet in height to the edge of the reading desk. The body is formed of longitudinal panels carved with an interlaced ribbon, with moulded styles above, terminating in a projecting square fillet mouldings in three rows. The panelled back rises 4 ft. 4 in. above the desk, and is 3 ft. 6 in. broad; the centre panel is ornamented with a pattern of interlaced ribbon and leaves forming heart-shaped devices, and the side panels with vine leaves and grapes. The canopy forms the top of the back and is flat; it has in its centre a rose-shaped boss, at the angles above are short projecting pinnacles or finials, between which are raised semi-circular panels. On the centre panel is carved in relief—

FEIR
THE LORD
AND HONO
R HIS HOVS

The one on the left is broken at the top, but shows the remains of letters and date ^{R. G.} 1598 and on that to the left is a shield with armorial bearings between the letters I. G. of the family of Glendonwyn of Parton, patrons of the Parish Church, where the pulpit formerly stood, and whence it was removed on the erection of a new church in 1834."

Domestic Utensils, ME.—Of these number 47 is given in the Catalogue as a greybeard, 12 in. high, from Thorney Hill, Kenmure, by Mr Gilchrist, in 1865.

Lighting Appliances, MG.—In this section, many of the objects of which are, even in our own day, fast becoming obsolete, snuffed out by new and even newer inventions, seven come from the Stewartry. No. 48 is a combined tinder box and candlestick made of thin sheet iron, with lid and bottom of cork; 50, a pocket tinder box with hinged lid; 55, steel for striking fire—all presented by the late Dr John Shand in 1880. No. 76 is a peerman of iron with sliding top and tripod stand, presented by the Kirkcudbright Museum Association in 1889. No. 81, the exceptionally neat and well-finished little bronze save-all, for using the last bits of candles, was found in or near New-Galloway, and presented by Rev. Geo. Murray in 1863.

The objects connected with *Spinning and Weaving* comprise extremely interesting appliances and specimens. MN 14 is a pair of stockings made of white spindle-made yarn, and the note upon this seemingly commonplace donation is interesting: "They were knitted," says Sir Arthur Mitchell, the donor, "by Sarah Rae, an old imbecile who lived in the parish of Balmaclellan. The yarn she used was made by herself. In making it she employed a spindle weighted with a potato for a whorl." Close beside these stockings is a spindle with grey-blue yarn on it which once was also weighted with a potato, and the potato is preserved in a bottle beside it. These were also picked up by Sir Arthur Mitchell at Daviot, Inverness-shire.

In the old Scottish loom for weaving tape for braces, from Carsphairn (47), we have one of those homely, but ingenious, and effective hand appliances, in the construction of which Scotsmen have been famous. It is not the most archaic hand-loom in the collection, but its method of working—somewhat too elaborate for description here—is much the same as that of the very primitive specimen from West Calder. Our loom was presented by Rev. Geo. Murray in 1881.

Among *Miscellaneous Exhibits* MP 40 is an iron anchor, 6 ft. long, found in a meadow near Kirkcudbright, and presented by Rev. J. Milligan in 1868. Nos. 92-99 represented a perhaps quite

unique "find." It consists of a ball of oak 7 in. diameter and seven pins of oak each 13 in. long, 3 in. diameter at lower end, and tapering towards a ball-shaped top $1\frac{1}{2}$ in. wide, found in a moss at Balmaclellan 12 ft. under the surface. Some of the pins were standing and some thrown down as if they had been suddenly left in the middle of an unfinished game. This fine set of mediæval ninepins was presented by Mr John Nicholson in 1865.

An archaic curling stone, with iron handle, from Borgue farm (MP 158), presented by John M'Laren, 1885, and a piece of waistband tape (NA 222), woven in a primitive loom at Balmaclellan, and presented by Sir A. Mitchell in 1867, complete this list—337 objects in all.

We know, however, that a considerable number of relics were found many years ago which are now in private collections. In order to carry out the intention of compiling a comprehensive list of all the Stewartry relics, I shall append the briefest possible description of such objects. There are, *e.g.*, the following five objects named on p. 335 of the seventh vol. of the Proceedings:—

1. Bronze mummer's head mask found at Torrs, Mid Kelton, in 1820; sent to Sir Walter Scott by Mr Train, now at Abbotsford. This is really a Mask or Chanfrein made to place on a horse's head; in the Mediæval Jousts and Tournaments such masks were not uncommon. Through the courtesy of the Hon. Mrs Maxwell-Scott, the National Museum is now enriched by the possession of a fac-simile in bronze of this remarkable relic.
2. Buistie or antique bedstead, found at Threave.
3. Brass or copper helmet, "with several implements of war," found in a stone coffin taken out of a cairn on Gelston.
4. Bronze tripod jug from Mid Kelton.
5. Bronze head of a war horse turned up by the plough near Glenlochar Bridge; was preserved at Culvennan.

In *Archæologia*, appendix to Vol. X., Mr Riddell of Friars' Carse describes and figures several "Galloway" relics, among which are these:—

Fig. 5. A spear head of cast brass, $6\frac{3}{4}$ in. by $1\frac{1}{2}$ in., with a loop at one side, found in Glenkens.

Fig. 8. A ring of mixed metal gilt, or rather plated with gold, found near the friary of Tunngland, and was sent to Mr Riddell by the Hon. John Gordon of Kenmure. May, 1791. [This is a signet ring.]

Fig. 11. A flint axe, 3 in. by 2 in., tapering to about 1 in., found in Galloway.

20th January, 1899.

MR JAMES BARBOUR, Vice-President, in the Chair.

Donations and Exchanges.—Annals of New York Academy of Sciences, October, 1898; On the Habits and Instincts of the Solitary Wasp, by G. W. and Eliz. Peckham, Wisconsin Geological and Natural History Survey; On the Forestry Conditions of North Wisconsin; Proceedings of the Academy of Natural Sciences of Philadelphia, 1898, April-September; Report of Secretary of Agriculture, Washington, 1896; Proceedings of Berwickshire Club, 1896; Two Botanical Papers by Mr Scott-Elliot.

COMMUNICATIONS.

1. *The Meteorology of 1898.* By Rev. Mr ANDSON.

I present as usual in tabular form first of all the main points of interest in connection with the meteorological observations taken at Dumfries during the past year. And I wish now to offer some discussion of the facts which may help to bring out more distinctly the leading features and characteristics of the weather of 1898, as compared with those of the past twelve years, during which observations have been made at this station, and the averages of that period. In many respects 1898 was an *annus mirabilis*, and I believe it will be found that this holds true with respect to its meteorological as well as its otherwise eventful character.

Report of Meteorological Observations taken at Dumfries during the year 1898.

Lat., 55° 4' N.; Long., 3° 36' W.; Elevation above sea level, 60 ft.; Distance from sea, 9 miles.

1898.	BAROMETER.				S.-R. THERMOMETER. In shade, 4 feet above grass.						RAINFALL.				HYGRO-METER.		Dew Point.	Relative Humidity. Sat. = 100.
	Highest in Month.	Lowest in Month.	Monthly Range.	Mean for Month.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean Maximum.	Mean Minimum.	Mean temper. of Month.	Highest in 24 hours.	Amount for Month.	Days on which it fell.	Mean Dry.	Mean Wet.			
Months.	In.	In.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	In.	In.	Deg.	Deg.	Deg.	Deg.		
Jan.	30.562	29.300	1.262	30.157	55.	30.	25.	48.4	40.1	44.2	0.44	2.22	18	44.	42.6	40.3	87	
Feb.	30.200	29.073	1.127	29.804	53.5	22.8	30.7	45.8	34.4	40.1	0.46	3.45	20	38.8	36.7	33.9	82	
Mar.	30.328	29.409	0.919	29.921	56.	24.7	31.3	47.3	32.8	40.1	0.19	0.79	14	39.2	37.1	34.3	83	
April	30.227	29.293	0.934	29.826	62.	29.	33.	54.4	40.	47.2	0.61	3.55	19	46.4	44.1	42.4	84	
May	30.355	28.867	1.488	29.855	70.	31.8	38.2	58.8	40.7	49.7	0.64	2.35	17	49.5	45.4	41.	72	
June	30.467	29.360	1.047	29.942	79.	41.	38.	67.	48.2	57.6	0.44	1.84	17	56.2	52.2	49.3	75	
July	30.530	29.760	0.770	30.188	76.	41.	35.	69.2	48.9	59.1	0.09	0.23	6	58.	53.3	49.1	73	
Aug.	30.287	29.380	0.907	29.925	81.3	42.	39.3	68.2	52.8	60.4	0.74	4.47	17	58.7	55.6	52.9	80	
Sept.	30.447	29.540	0.907	30.025	82.8	34.	48.8	66.1	48.9	57.5	0.76	2.28	15	56.4	54.2	52.1	85	
Oct.	30.429	29.000	1.429	29.816	78.7	33.	45.7	58.	45.9	52.	0.71	3.25	17	51.	49.	46.9	86	
Nov.	30.365	28.841	1.524	29.781	59.	20.8	38.2	48.5	36.7	42.6	1.71	4.25	19	42.6	40.2	37.3	82	
Dec.	30.470	28.870	1.600	29.695	56.7	20.	36.7	49.	39.1	44.1	0.98	5.03	27	44.3	43.1	41.5	89	
Year..	30.562	28.825	1.737	29.911	82.8	20.	62.8	56.7	42.4	49.5	1.71	33.71	206	48.7	46.1	43.3	81.5	

WIND—

	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Var. or Calm.
Days ...	161 ¹ / ₂	231 ¹ / ₂	41	301 ¹ / ₂	391 ¹ / ₂	1081 ¹ / ₂	591 ¹ / ₂	34	12

1. BAROMETER.—The highest reading of the barometer occurred on 15th January, when it rose to 30·562 inches. The lowest reading was on the 11th May, when it fell to 28·825 in., thus giving an annual range of 1·737 in. The mean barometrical pressure for the year was 29·911 in., which is higher than the average of the last 12 years by rather more than one-tenth of an inch (reduced to 32 deg. and sea level). The months in which the mean pressure was highest, exceeding 30 inches, were January, 30·157 in., July, 30·188 in. and September, 30·025 in., and these months were all remarkable for fine settled weather, with temperature above (except in the case of July) and rainfall under average, the details of which will be noticed afterwards. The lowest monthly means were those of February, October, November, and December, ranging from 29·804 in. in February to 29·695 in. in December. It was in the last two months, and also in May, that readings below 29 inches occurred, twice in November, on the 24th and 25th, and once in December, on the 27th. In May there were two days on which readings below 29 in. were registered, viz., the 11th and 12th. The lowest of these was 28·825 in. on the 11th of May. The depression in November was accompanied by a severe easterly storm, by which much damage was done both by sea and land, especially on the east coasts. In the other instances the storm was south-westerly.

2. TEMPERATURE (in shade, 4 feet above grass).—The highest absolute temperature of the year was recorded on the 4th September, when the thermometer rose to 82·8 deg. Its occurrence in September was an unusual circumstance. The highest single day temperatures occur most frequently in the latter part of June, about or soon after the summer solstice, sometimes in July, hardly ever in August; and on looking over my past record I find that this is the only year out of the twelve that it has been registered in September. But it occurred once also in May, which is equally exceptional. The other months in which temperatures exceeding 80 deg. were registered were 81·3 deg. on 12th August and 80·3 deg. on the 21st; and it is worthy of note that there were three in September on successive days, from the 4th to the 6th, ranging from 81·3 deg. to 82·8 deg. The lowest temperature of 1898 occurred on the last day of the year, viz., 20 deg. on 31st December, showing an annual range of 62·8 deg. With

regard to the monthly means of temperature, the highest was in August, with a mean of 60·4 deg., the mean of July was 59·1 deg., June 57·6 deg., and September 57·5 deg., so that August was the warmest month, but July had the highest mean maximum, viz., 69·2 deg. as compared with 68·2 deg. in August. It is worthy of being observed that no less than nine of the months of 1898 had a temperature in excess of the average, with an aggregate of no less than 27·5 deg., while the deficiencies in the remaining months were so slight as to make a very trivial deduction from this excess. One remarkable feature of this excess was that it occurred chiefly, although not exclusively, in what are usually the coldest months—January and December. January, for example, had over 6 deg. above the mean, and December 5·7 deg. (almost 6 deg.), and October over 5 deg. But April, May, August, and September had also considerable excesses, ranging from 1·2 to 2·9 deg. This suggests an unusual mildness of the winter months, which comes out very distinctly when we take into account the number of nights on which the protected thermometer fell to and below the freezing point. These were only 38 in all, with an aggregate of 103 deg. of frost. This exhibits quite an exceptional state of things as compared with the average of other years. January and December are usually the coldest months, as might be expected from the shorter period during which the sun is above the horizon, and also the greater obliquity with which the solar rays fall upon the earth. But in 1898 the mean temperature of both these months was no less than 44 deg., only 2 deg. short of the average of April, with only five nights of frost, two in January and three in December, with an aggregate of 21·8 degs. ; while February alone had ten nights with an aggregate of 32 deg., and March eighteen with an aggregate of 41 deg. The two latter months were the coldest of the year, with a mean of 40 deg., as compared with 44 deg. in January and December ; and yet the temperature of February was a little above the mean, and March only slightly below it. The explanation of the high temperature of January and December is to be found in the unusual prevalence of southerly to westerly winds, and the convection of heat from the warmer to the colder regions by means of atmospheric currents, which greatly modify the effects of solar radiation. To illustrate this, I may mention that southerly, south-westerly, and westerly winds prevailed for no less than 26 days

out of the 31 in January and for 27 in December. The mean annual temperature of the year was 49·5 deg., as compared with an average of 47·5 deg. This is the highest annual mean recorded during the 12 years of observation, the next highest being 49·4 deg. in 1893, and only once or twice did it reach, or slightly exceed, 48 deg. The year 1898 may thus be justly considered as in point of temperature an *annus mirabilis*, inasmuch as it has been the warmest of twelve, and of I do not know how many more, in this district, as I can only speak of the period to which my observation extends.

3. RAINFALL.—The amount of rain which fell during the year, including melted snow, which formed a very small proportion of the whole, was 33·71 in.; and the number of days on which precipitation took place was 206, on 28 of which the rainfall did not exceed one-hundredth of an inch. As might be expected from the extreme mildness of the winter months, snow was conspicuous by its absence. There was no fall worthy of being called a snowstorm, and the slight falls which did occur were chiefly in February. The heaviest rainfall in 24 hours in the course of the year took place on the 1st November, when 1·71 in. were registered by the gauge. It was followed by 0·54 in. on the 2d, giving a total of 2·55 in. for the two days. On that occasion the river Nith was in very heavy flood, shewing a depth of 11 feet at the New Bridge; and as a strong south-westerly gale prevailed at the same time the tide also rose to an abnormal height, and the Sands were flooded to some depth, the water extending up into the adjoining streets of Friars' Vennel, Bank Street, and Nith Place for a considerable distance. This was the heaviest flood of the year, as it was the only instance also in which the rainfall was in excess of one inch. The total amount for the year was less than the average of 12 years by 2·11 in.—33·71 in., as compared with a mean of 35·82 in. The rainiest month was December, with an amount of 5·03 in., and 27 days on which it fell. The driest was July, a very exceptional circumstance, the amount having been less than a quarter of an inch—0·23 in.—as compared with an average of 3·92 in. There was another month in which the amount was under an inch, and less than half the average, viz., March, which had only 0·79 in., as compared with a mean of 2·12 in. The other months were for the most part not far from the

average, excepting April, usually one of the driest months, which had an excess of about two inches. On the whole the year was a very favourable one in point of rainfall as well as in point of temperature. Although the drought of July gave a check to the progress of the growing crops, no weather could have been more favourable for the in-gathering of the hay crop, which had already received a copious supply of moisture in the early spring and summer months, and the check of July was largely compensated by the unusually fine weather in respect both of heat and moisture of August and September, extending into October, which had a record without frost and a temperature of 5 degs. above average, and even into past the middle of November.

4. HYGROMETER.—The mean of all the readings of the dry bulb thermometer, taken twice a day, at 9 A.M. and 9 P.M., was 48·7 deg., and of the mean wet 46·1 Temperature of the dew-point, 46·1 deg. Relative humidity (saturation = 100), 81·5. This shows a humidity decidedly less than the average of 12 years, which comes out at about 83. The monthly means of humidity varied from 72 in May and 73 in July to 89 in December.

5. THUNDERSTORMS. &c.—The past year was remarkably free from thunderstorms, as far as I have observed. I noted one, however, of considerable severity, which lasted from 6.15 to 6.45 P.M. on the 16th of August. Once in May there was a solar halo—there may have been others but I did not see them—and lunar halos were of not unfrequent occurrence throughout the year. On the night of the 15th March there was a remarkably brilliant and protracted display of the aurora borealis, which will, no doubt, be in the recollection of the members of the society, as it excited great attention at the time and was described in many of the newspapers.

With regard to the wind observations, I find that, as usual, the south-westerly wind prevailed most frequently. It claims $108\frac{1}{2}$ days out of the 365; and if we add to it the southerly and westerly, $39\frac{1}{2}$ and $59\frac{1}{2}$, we have 207 days for the warmer direction, while the northerly and easterly amount to about 130, without taking into account the calm and variable. We are partly indebted to this preponderance of southerly to westerly winds for

the mildness of our climate in the British Islands—especially when they prevail to an unusual extent in what would otherwise be the coldest months, viz., January and December, which was remarkably the case during the past year. As I mentioned before, January had 26 and December 27 days with southerly to westerly winds. But partly also the mildness of our climate, especially in the winter months, is due to our insular situation, and to the influence of the Gulf Stream, that great oceanic current which conveys no small amount of heat from the tropical regions to the shores of our islands, and which is not varying and irregular like the winds, but a constant factor, which never ceases to modify the low temperatures, which might otherwise be our lot. If it were not for these modifying causes the winter climate of Great Britain would be by many degrees colder than it is, and would resemble that of those countries on the Continent which are situated in the same latitude.

Mr Murray begged to propose a hearty vote of thanks to Rev. Mr Andson for his valuable and accurate paper. The attention Mr Andson had given to that work for so many years had made his paper a valuable addition to their *Transactions*. They regretted his absence, and hoped he would soon be restored to health. (Applause.)

Mr Clark, in seconding, said he thought the paper a entirely interesting one, and particularly dealing with the *annus mirabilis*, as Mr Andson termed it. It was particularly interesting at the present moment as a reminder to them that there was some dry weather in 1898—(laughter)—and that 1899 was doing its best to make itself an *annus mirabilis* too in regard to rainfall. (Laughter and applause.)

Dr Ross said he had received from Mr Rutherford, Jardineton, who was unable to be present, a record of the rainfall he had taken there during the year, which showed a total of 33·68 inches, a difference of ·03 less than at Dumfries during the year. There were, however, greater variations during the months, the records being as follow :—January—Jardineton 2·78, Dumfries 2·22 ; February—Jardineton 3·41, Dumfries 3·45 ; March—Jardineton 0·90, Dumfries 0·79 ; April—Jardineton 2·90, Dumfries 3·55 ; May—Jardineton 2·32, Dumfries 2·35 ; June—Jardineton

1·60, Dumfries 1·84; July—Jardineton 0·50, Dumfries 0·23; August—Jardineton 4·12, Dumfries 4·47; September—Jardineton 2·40, Dumfries 2·20; October—Jardineton 3·25, Dumfries the same; November—Jardineton 3·85, Dumfries 4·25; December—Jardineton 5·65, Dumfries 5·03. Mr Rutherford did not give the number of days on which rain fell, but Mr Andson stated the number at Dumfries as at 206. The figures for Cargen appeared the other day in the *Courier and Herald*, and there were 48 more days of rain last year at Dumfries than at Cargen. In this connection a curious discrepancy referred to last year by some of the speakers was explained by Mr Andson by a difference in some of the rain gauges, which did not record falls so small as one or two-hundredths of an inch. The totals for the year were—At Dumfries 33·71, at Jardineton 33·68, and at Cargen 49·12, the last being much the heaviest rainfall. There was only one month at Cargen in which the rainfall was under one inch—namely, in July, when it was a little over half an inch, or ·56. In March, when it was under an inch both at Jardineton and Dumfries, the fall at Cargen was 1·04.

2. *Ptolemy's Scotland.* By Dr E. J. CHINNOCK.

Claudius Ptolemæus, the astronomer and geographer, lived in the first half of the 2nd century. He wrote in the reigns of Hadrian and Antoninus Pius. In his celebrated work on the geography of the world he gives a bare description of the various countries then known, simply marking down the names of the various places and appending to them their longitudes and latitudes, without giving any detailed account of them. His work is a complete contrast to that of Strabo, which is rich in the description of the objects of interest connected with different countries and places. With the exception of the introductory matter in the first book, and the latter part of the work, it is a mere catalogue of the names of places. Here and there he makes a few desultory remarks, but not often. A part of the seventh and the whole of the eighth book are occupied in the description of a set of maps of the known world. These maps are still extant. I have extracted from the work all that Ptolemy says of Scotland, leaving out the longitudes and latitudes which he appends to each place. Ptolemy's order is carefully followed.

“The peninsula of the Novantæ and the cape of the same name” are what are now called the Mull of Galloway and Corsill Point; Rerigonian Bay, Loch Ryan; Vindogara Bay, Girvan Bay; Estuary of the Clota, Firth of Clyde—Clota is also mentioned by Tacitus (*Agricola*, 23); Lemannonian Bay, Loch Fyne; Epidian Cape, Mull of Cantyre; mouth of the river Longus, perhaps represents Lochs Linnhe and Lochy; mouth of the river Itys, probably the Sound of Sleat, between Skye and Mainland; Vola Bay, perhaps Loch Broom; mouth of the river Nabar (I can suggest nothing for this); Cape Tarvedum or Orcas, Dunnet Head. Ptolemy then returns to the Mull of Galloway and works round the west coast to the Land's End. He first mentions the mouth of the river Abravannus, which appears to represent Luce Bay; then the estuary of the Jena, which ought to denote Wigtown Bay; the mouth of the river Deva, denoting that of the Dee; the mouth of the river Novius, by which is meant the Nith; the estuary of Ituna, the Solway Firth. He then returns to Dunnet Head in the north and works down the east coast. Cape Virvedrum, Duncansby Head; Cape Verubium, The Noss, near Wick; the mouth of the river Ila, Dornock Firth; the High Shore, by which is meant perhaps the Ord of Caithness; the estuary of the Varar, Moray Firth; the mouth of the river Loxa, the Findhorn or Cromarty Firth; the estuary of Tuesis, the Spey; the mouth of the river Caelis, the Devoran; the Cape of the Tæzali, Kinnaird's Head; the mouth of the river Deva, the Dee; estuary of Tauva, the Tay; the mouth of the river Tina, the Eden; estuary of Boderia, Firth of Forth. Tacitus calls this Bodotria (see *Agricola*, 23, 25). Then he gives the various nations inhabiting Scotland. It must, however, be remembered that he treats the whole island as one country, which he calls the Britannic island *Albion*. The Romans found Britain in the tribal state, and made no distinction between the southern and northern parts thereof, that which lay beyond the boundary being called *Britannia Barbara*.

1. The Novantæ, in Wigtownshire and part of the Stewartry. The towns were:—Lucopibia, probably Whithorn; Rerigonium, Stranraer.

2. The Selgovæ, to the east of the Novantæ in east of Galloway and Dumfriesshire, the name survives in Solway. Towns:—Carbantorigum, probably Kirkcudbright; Uxellum, supposed to be

Carlaverock; Corda, either Castle O'er or Old Cumnock; Trimontium, Annan or Langholm.

3. Damnonii, to the east and north of Selgovæ. Towns:—Colanica, Lanark or Carstairs; Vindogara, Girvan or Paisley; Coria, Crawford? Alauna, Kilsyth? Lindum, Ardoch, where are the remains of a Roman camp; Victoria, Strageth, near the remains of a Roman road. (Horsley thinks it is Abernethy, near Perth.)

4. Otalini, to the south-east, from the Forth to the Tyne. Town: Coria, Borthwick Castle.

5. North of the Damnonii came a number of tribes without towns, the Epidii in Argyleshire, the Cerones, the Creones, the Carnonacæ, the Cæreni, and the Cornavii. From Loch Fyne to the Moray Firth lived the Caledonii; north of them was the Caledonian Forest; to the east were the Decantæ, the Lugi, and the Smertæ.

6. Beyond these were the Vacomagi in Moray and Inverness shires, who had these towns:—Bannatia, Bean Castle, near Nairn; Tamia, Dunkeld; the Winged Camp, Burgh Head*, near Inverness; Tuesis, a town near the Spey which had the same name.

7. To the west of these were the Venicones, with a town called Orrea, said to be Orrock, near the water of Orr in Fife. It may be Anstruther.

8. More to the east were the Tæzali, with a town Devana, now Aberdeen.

9. The only islands lying near that of Albion mentioned by Ptolemy are Vectis, Wight; Tanatis, Thanet; Coinus, Convey, at mouth of the Thames. Near the Cape Orcas (Dunnet Head) the island of Scetis, Skye; the island of Dunna, Lewis; the islands of Orcades, about 30 in number, the Orkney Isles; beyond them a degree or two, Thule, which must be Mainland, the largest of the

*The fort called Alata Castra (or the Winged Camp) was probably raised by Lollius Urbicus after his victories in Britannia Barbara, A. D. 139, to repress the incursions of the Caledonian clans, but it was soon abandoned, and all traces of it were soon obliterated. (See Capitolinus, Life of Antoninus Pius, 5.)

Zetland Isles. Ptolemy is wrong about the number of the Orkneys. It is 67, of which 39 are now inhabited.

This is all that Ptolemy has to say about the part of Albion which we now call Scotland. He has nothing to say about Roman settlements in this part of the island; and it is evident that most of it was a terra incognita to the Roman, except the south and the east coast. The towns mentioned seem all of them to be British not Roman, except Victoria and Lindum, which were evidently settlements near the Wall of Antonine. Lindum was also the Roman name of Lincoln.

Of course many of the identifications of places are merely conjectural, but I have done the best I could.

3. *Roman Roads in Britain.* By Dr E. J. CHINNOCK.

There are supposed to be three authorities for the Roman roads in Britain. The Romans called the whole island Britannia. In the plenitude of the Roman power in Britain the part now called England and Wales was divided into four provinces, and the Emperor Hadrian added a fifth province by annexing the part of Scotland south of Antonine's Wall and calling it Valencia. This was, however, soon abandoned. The three supposed authorities for the Roman roads are the Itinerary of Antonine, the British Itinerary of Richard of Cirencester, and the Ravenna Cosmography. The last-named work was compiled in the seventh century, and the Itinerary of Richard is a forgery, as will be shewn anon. Therefore Antonine's Itinerary, being the only work compiled during the period of the Roman occupation of Britain, is our sole authority for the Roman roads and stations. There can be no certainty about the genuineness of any so-called Roman camp or station, the name of which does not appear in the Itinerary of Antonine, unless some undoubted Roman remains are discovered upon the spot. Scotland was a purely nominal Roman possession, and that only for a short time. The wall of turf erected by Antoninus Pius between the Forth and the Clyde was soon abandoned, and the Romans retreated beyond Hadrian's Vallum, which stretched from the mouth of the Tyne to the Solway. After the death of Severus at York, A.D. 211, Scotland was left to the natives. Doubtless during the half century of

their occupation of the southern half of Scotland the Romans founded various stations and constructed roads; but they do not seem to have made any permanent roads or camps like those which they made in England.

It is desirable to understand what the Itinerary is. It is entitled the "Itinerarium of Antoninus Augustus." Augustus was the official designation of the Emperor of Rome. Wherever the Romans penetrated as conquerors they formed camps, and constructed permanent roads, the distance being marked along them by mile stones. From the time of Augustus Cæsar a tabulated account of these roads and stations was kept at Rome. This Road Guide or Itinerary was not published until the reign of Antoninus. The best authorities understand by this Antoninus neither of the emperors usually known as the Antonines, viz., Antoninus Pius and Marcus Aurelius Antoninus, but Antoninus Caracalla, the infamous son of Septimius Severus, who reigned in the early part of the third century. From names which occur in it, it is evident that the Itinerary was revised and kept up to date till the end of the reign of Constantine the Great, *i.e.*, to the early part of the fourth century. It represents, therefore, the official record of the Roman roads from the middle of the third till the middle of the fourth century.

The Imperial Itinerary of Antonine gives 15 roads existing in Britain. The part relating to Britain is entitled "Iter Britanniarum." Notice the plural *Britains* not *Britain*. In imperial times the country was called *Britannia*, because there were several provinces. Hence on our own coins the legend runs: "Victoria regina Britanniarum." Antonine's Itinerary describes the roads in the following order, giving the number of miles between each station on the route:

The 1st Road—From the Wall at Newcastle (*Bremenium*) to *Praetorium* (probably Hull), 156 miles, passing through *Eburicum* or York, which was garrisoned by the 6th Legion, *Victrix*. On this road there were 10 stations.

The 2nd Road—From *Portus Rutupae* (Richborough or Sandwich) to *Blatum Bolgium* or Birrens, 481 miles, passing through Canterbury, Rochester, London, St. Albans, Dunstable, to Chester, which was garrisoned by the 20th Legion, *Victrix*,

thence through Manchester, York, and Carlisle to *Castra Exploratorum* and *Blatum Bolgium*, where it ended. The "Camp of the Scouts" (*Castra Exploratorum*) is stated to be about 12 miles from *Luguvallium* (Carlisle). It is Netherby. *Blatum Bolgium* is stated to be about 12 miles beyond *Castra Exploratorum*. It must be Birrens. On this road there were 37 stations.

The 3rd Road—From Dover to London, 66 miles, passing through Canterbury. On this road there were 4 stations.

The 4th Road—From Hythe to London, through Canterbury. On this road there were four stations, three of which were the same as in the preceding.

The 5th Road—From London to the Wall at Carlisle, 443 miles, passing through Colchester, Thetford, Cambridge, Lincoln, and York. On this road there were 20 stations.

The 6th Road—From London to Lincoln (*Lindum*), 156 miles, passing through St. Albans and Leicester. On this road there were 14 stations.

The 7th Road—From London to Chichester (*Regnum*), 96 miles, passing through Windsor, Reading, and Winchester. On this road there were 6 stations.

The 8th Road—From London to York, 227 miles, through St. Albans, Dunstable, Leicester, Lincoln, and Doncaster. On this road there were 15 stations.

The 9th Road—From London to Norwich, 128 miles, passing through Colchester and Ipswich. On this road there were 9 stations.

The 10th Road—From Cokermonth to Whitchurch, 150 miles, passing through Keswick and Lancaster. On this road there were 9 stations.

The 11th Road—From Chester to Carnarvon, 74 miles. On this road there were 4 stations.

The 12th Road—From Aston to Carmarthen, 186 miles, passing through *Caerleon* (*Isca*) in South Wales, which was garrisoned by the 2nd Legion, *Augusta*. On this road there were 10 stations.

[There is mention of only 3 legions stationed in Britain, one at Eburacum (York), one at Deva (Chester), and one at Isca (Caerleon).]

The 13th Road—From Caerleon to Reading, 109 miles, passing through Monmouth and Gloucester. On this road there were 8 stations.

The 14th Road—Another route from Caerleon to Reading, 103 miles, passing through Bristol and Bath. On this road there were 9 stations.

The 15th Road—From Reading to Exeter, 136 miles, passing through Winchester, Dorchester, and Honiton. On this road there were 9 stations.

In after times there were four roads in England which ran along the ancient Roman roads. Watling Street represents the old zigzag route from Dover to Chester and York, and northward in two branches to Carlisle and Newcastle, principally along the 2nd of Antonine's roads. The Fosse Way ran diagonally through Bath to Lincoln, along the 6th and 14th roads. The Ermin Street led direct from London to Lincoln, with a branch to Doncaster and York along the 6th and 8th roads; and the obscure Icknild Street curved inland from Norwich to Dunstable, and went on to the coast near Southampton along the 7th, 8th, and 9th roads.

In the Antonine Itinerary Birrens is the only Roman station in Scotland mentioned. There is generally said to have been a Roman road from Newcastle to near Edinburgh and another from Carlisle through Carstairs to Dumbarton, and then to Falkirk, Cupar Angus, Brechin, and Stonehaven. The existence of these and other Roman roads in Scotland can be proved by remains if they are to be found. There is, however, no contemporary Roman authority for their existence. Of course, when the Romans occupied the country as far as the Wall of Antonine they must have constructed roads and built stations; but at the time of the publication of the Antonine Itinerary Scotland had been entirely evacuated, and the roads and stations must have fallen into ruin and disrepair, and gradually became obliterated. For more than a century antiquarians and historians were deluded by the so-called Itinerary of Britain said to have been compiled by Richard, a monk of Cirencester. Nothing was ever heard of this work till

1747, when Charles Bertram declared he had deciphered a MS. existing at Copenhagen, written by Richard of Cirencester, a well-known monkish historian. He made what he called a copy of the non-existent Latin text, with notes and a map. It was one of the most clever literary forgeries ever devised, being the fruit of his own genius without a vestige of foundation in fact. Bertram resolved to dupe Dr William Stukeley, the most noted antiquarian of the time. Stukeley was quite taken in by the supposed Itinerary, and published it with a commentary and map. The Itinerary gave 18 Roman roads. Stukeley's authority was sufficient to give the forgery possession of the field. Whitaker, the historian of Manchester, General Roy, Dr Lingard, Lappenberg, Stuart, the author of "Caledonia Romana," and others, have treated it as a genuine work. Classical atlases like that of Sir William Smith abound with errors from this source, and many of Bertram's imaginary names have found their way into the ordnance map. Even in 1872 Dr Giles translated the forgery as a genuine work for Bohn's Antiquarian Library. The forgery was exposed by the late Mr B. B. Woodward, librarian of Windsor Castle, in a series of papers published in the *Gentleman's Magazine* for 1866 and 1867. Those who cannot procure Woodward's papers may consult Mr Henry Bradley's article on "Charles Bertram" in the Dictionary of National Biography. Doubts had been expressed as to the genuineness or authenticity of Richard of Cirencester's Itinerary by Thomas Reynolds, who published, at Cambridge in 1799, the part of Antonine's Itinerary entitled "Iter Britanniarum" with a commentary and maps. Birrens, therefore, enjoys the singular distinction of being the only Roman station in Scotland bearing the imprimatur of the Imperial Itinerary. This enhances the value of the work recently performed by our distinguished members Dr James Macdonald and Mr James Barbour. Can anyone throw light upon the meaning of the name Blatum Bolgium?

17th February, 1899.

Rev. JOHN CAIRNS, Vice-President, in the Chair.

Donations and Exchanges.—Some Questions of Nomenclature, by Theodore Gill ; An Account of the Work of the Surveys of Egypt and of the Egyptian Institute during 1892-3-4, by J. de Morgan ; Bows and Arrows in Central Brazil, by Hermann Meyer ; Preliminary Account of an Expedition to the Pueblo Ruins, near Winslow, Arizona, by J. Walker Tewkes ; Was Primitive Man a Modern Savage ? by Talcott Williams.

COMMUNICATION.

Observations and Experiences of the Breeding of Salmon and Trout. By Rev. H. G. J. VEITCH of Eliock.

Away from home, in a lodging on a high cliff overlooking Tor Bay, with a fierce north-east wind raging across the sea and whistling through the ill-fitting windows of our room, without books or any notes of my experiments and difficulties in rearing salmon and trout from the egg, it is impossible for me to do more than write a chatty sort of sketch on the subject.

I had thought my first paper to your Society might have had the same effect upon you that the first sermon of a certain English bishop had upon his diocese. He used to tell the story with a twinkle of his eye. "When I first came into the diocese I was asked to preach at a great function in the Cathedral. I told the Dean that I had very little voice, and was by no means a good preacher. But they would have me preach, and so I did. The result was what I expected. All the week after my famous sermon the people went about telling one another that they could not hear a word I said, and that they hoped never to hear me preach again ; and they never did. So I was able to give my whole attention to the business of the diocese, and have been able to introduce many first-rate preachers into it." However, as you have given such a cordial reception to my last paper, I feel that it would be impossible for me to refuse the request which I have received for another.

The breeding of salmon and trout is a subject which must before long be seriously taken in hand, unless our fisheries are to

go to decay. If the authorities would only take a lesson from the Americans in the matter of the cultivation of fish and the protection of fisheries, there would be good hope that we might see our net fishers and anglers rejoicing in such takes as were not uncommon sixty or seventy years ago. In those days there were plenty of streams in all our land where salmon and trout could find clear water rippling over gravelly beds, well-suited to all their requirements. There they could rest after their long and toilsome journey from the far-off sea, and there, in quietness and peace, they could deposit their eggs and leave them in confidence and hope. But now great numbers of those lovely spawning beds are silted up with coal dust, or foul with refuse from manufactories, or poisoned with less manifest but quite as deadly chemical liquids. There were no railways up our lonely glens amongst the hills in those days. There were no gangs of poachers from far-off towns who could take the train in the evening, get out at some lonely station forty or fifty miles away, harry long stretches of water through the night, and return with their spoils by the early morning train. If a like amount of grass land and moor had been rendered unproductive, and bands of men had come by train to drive off sheep and cattle by night, what would have been the state of our flocks and herds now? Therefore something must be done, and that soon, or our fisheries will decline almost to extinction. County Councils and members of Parliament are no doubt useful, and a few of them do make a noble fight on behalf of the poor salmon. They are but a few folk crying in the wilderness. The many are quite apathetic. A great deal may be done in the way of purifying our streams, but perhaps more will have to be done by artificial rearing if our fisheries are to be restored and kept up to a high standard. If I were a salmon I really think I should try if it were possible to live a jolly bachelor life in the sea, without care, and with plenty to eat. If marriage is a failure, it must be a terrible failure to many a love-sick salmon. Let me say a few words first on natural breeding of salmon and trout, and secondly on the artificial rearing of them. And what I say of salmon holds good of trout, except that the one goes back to the sea after depositing its eggs, and the other does not. Sixty or seventy years ago there was very little accurate knowledge of the ways of salmon on the spawning beds. The difficulties of observation were many and great. It was hard to get a clear view of

them in the rippling streams, and if one incautiously showed oneself to them they took fright, and retired into deep water. To sit on a wet bank or a cold rock in the end of November and through December, perhaps in driving sleet or snow, was not on the whole comfortable. Now, had it been possible to take a salmon and get it to lay its eggs in a nice comfortable nest in a tub by the fire, observation would have been easy. But no salmon could be induced to behave in this reasonable manner.

Salmon, as you all probably know, run up our various rivers at all times of the year, whenever the water suits them. Some rivers are early and some are late. In the early rivers the fish make their way slowly up to the head waters. In the late rivers great shoals of heavy fish come in late in the autumn heavy in spawn, and make their way up as far as they can. By the end of November great numbers get on to the spawning beds, and through December and January the laying of eggs goes merrily on if weather and water are propitious. They are very particular in the choice of a suitable spot for their operations. What it is that decides them in their choice I could never make out. They must have a gravely bottom, and sufficient stream over it to keep it clear of mud; any deposit of mud or sand on the top of the eggs is fatal. But I have seen streams which looked in every respect suited for salmon or trout with scarcely ever a spawning fish on them, and others apparently of much the same character crowded with them. But I judged that the fish knew their own business better than I did, and therefore did not interfere. You will see them cruising about examining the ground as if they were not quite able to make up their minds, but when they have once made up their minds the female sets to work with a will. Her great broad tail sweeps over the gravel from side to side, and sends it flying from under her. Whether she actually touches the gravel with her tail or not I am not sure, but I think not, except sometimes by accident. Were she to do so it seems to me that her tail would be worn away in a short time. I think she has some knowledge of hydraulic power, and drives the water down upon the gravel with such force that it is scattered on each side and away down stream behind her. Opinions differ as to whether the male fish takes any part in the making of what I suppose we may call the nest. Some have told me that the male uses the sort of horn which develops at the point of the lower jaw at spawning time to

plough up the gravel, but I have never seen it done. I have had more opportunities of closely watching large trout on the spawning beds than salmon, therefore do not like to speak positively. The male fish takes up his position a little way behind the female, and gives his attention to keeping off intruders. I have seen a male trout of a pound rush at an intruder of twice his size like a tiger and drive him away, and then draw up beside his mate, and I fancy whisper to her that it is all right now, that he will protect her, and that she can go on with her business without fear of interruption; then drop back to his place, or take a little cruise around just to see that nobody is lurking about who has no business there. Gradually the eggs are deposited with much swishing of tail, and covered over with gravel. This may take more or less time according to circumstances. Sometimes a flood comes down and plays terrible mischief. Sometimes the water falls in and leaves the bed high and dry, and the eggs perish. What the percentage of eggs that hatch out may be who can tell? but in some years I fear it must be very small. And when the poor little things come out of the egg they have indeed a bad time of it. Minnows, and sticklebacks, and trout gobble them up as soon as they can swim. Ducks and certain crawling things which live amongst the stones feed on them before they have absorbed their umbilical sack. Kingfishers sit on overhanging boughs and watch for them. Herons fill themselves with them, and worse than all, when returning next year to the sea as kelts, their mamma's and papa's devour them as pike would. Verily, it is strange that any of them ever reach the sea or live to come back again.

Some of the earliest experiments in the artificial rearing of salmon were made in Nithsdale by Mr Shaw, the head keeper at Drumlanrig, and he it was who fired me with a desire to discover something of the ways of salmon and trout. He succeeded in rearing little fishes from the egg, and thus proved beyond all possibility of doubt that parr were young salmon. Many people in those days declared that parr were young trout. Even as late as 35 years ago I was flatly contradicted on the question, but fortunately was able to prove that I was right. After my companion and I had finished our discussion on salmon and their ways we talked on other things, and then went for a walk in the garden. Suddenly I said, "By the way, I have some little fish I want to show you. I wish you could tell me what they are." We

went round to the back of the house, where I had some small parr in a box half full of gravel, with about three inches of water running over it. The moment he saw them he said: "They are parr; I should have thought you would have known that, as you have been talking so positively about them." "Yes," I said, "I know they are parr, and they came out of salmon eggs which were hatched out in that little tray above them, and that is why I know that they are not young trout; unless you mean to say that trout come out of salmon eggs, and salmon out of trout eggs."

But perhaps I shall interest you more if I tell you of my own experience, of my failures and successes, of the messes which I made of myself and other people, and of the nuisance I must have been to everybody, from the time I put my eggs into their boxes till I carried off the young salmon and sea trout and placed them in a nice little burn about half-a-mile above its junction with the river.

It was about five and thirty years ago that for the first time in my life I found myself in a position to carry out my long cherished scheme. At the back of the house was an old cistern which at one time was filled from a pump and used to supply the kitchen and back premises with water. A new water supply having some time before been put into the house this cistern had fallen out of use. It was discovered that it would still hold water, and that a few slight repairs would put it in working order. But I suspected that old pump and also the quality of water in the disused well. There were old drains suspiciously near it, and I fancied that it had an odour not quite to be expected from pure water, and a taste which had a certain richness about it but was not altogether nice, so I connected the cistern by pipes with a spring not far off, and at length filled my cistern, turned on the tap, and found that I had a sufficient stream of water. But would the spring keep up a good supply for three months? Suppose my pipes got frozen up, what then? So I determined to keep both sources of supply in working order. And it was lucky I did so, for some four weeks before the eggs hatched out the spring failed a good deal, and I was obliged to supply the eggs, which up to that time had behaved remarkably well, with a blended water. Some people say that a blended whisky is better and more wholesome than that which comes from a single still, and the blend of water did not disagree with the eggs.

Now the boxes had to be made. There is no need that I should trouble you with dimensions. You can have no idea of the trouble I had with the local carpenter. Like others of his fraternity, he seemed to think that he knew what I wanted much better than I did myself. When I told him that I wanted two boxes of certain dimensions to hold water, he suggested that barrels would be much more suitable for the purpose, not knowing of course in the least what my purpose was. But at last I got him to make them exactly as I ordered, and when I got them home and set them up found they were not the right size and not the right shape. However, I could not find courage to confess that I had been wrong lest he should say "I told you so." I set to work, and at last managed to get them into their places, filled them with fine sifted gravel from the burn, and turned on the water in triumph. The upper box was about 3 inches below the tap, and the lower one about 3 inches below the upper. The end of the lower one was placed close against the end of the upper box, and the idea was that the water from the tap was to fall into the upper box and carry air in bubbles to the bottom of it, and then flow into the lower box, with a fall of a few inches so as to aerate that box also.

With pride I watched the water fill the upper box; but, alas! it did not flow into the lower one, it ran all over the sides and end of the box. I had forgotten to cut the groove and place the little spout in position which was to convey the water from one to the other. I tried to stop the water. The tap would not move; do what I would I could not turn it. I rushed off to find some instrument with which to turn it, and after long seeking discovered a powerful pair of pincers. By this time the water had run all over the place, and I began to feel a sense of animosity against that tap. I seized the key with the pincers and at once broke it off, and the tap kept running serenely on, its voice seeming to have a mocking note of triumph in it. "I will stop your games," I said, and fetching a cork cut it as nearly as I could in my haste to fit the tap and stuffed it well up. For a moment the tap seemed puzzled. Then as the force of water increased it began to chuckle and fizzle and squirt in all directions, till at last, being pretty well wet all over, I had to give it up. That tap was one too many for me. I cut off the water from the cistern and let it empty itself as it liked. I really think that tap smiled when the cook came running

out to say that the water was all over her kitchen floor, making a horrid mess. I think I could have stood up to one or the other of them, but an irate cook and a triumphant tap together were too much for me. I fled and left them to settle the matter between them. But, to make a long story short, after many difficulties and troubles I got things in order, and all was ready to lay down the eggs.

At that time the Acclimatization Society, to which I was a subscriber, had begun to rear fish near London, and my old friend, Francis Francis, editor of the fishing department of the *Field* newspaper, was in charge of their establishment. He supplied me with 3000 eggs, 2000 of salmon and 1000 of a large kind of sea trout which run up one of the Hampshire rivers. They were packed in two tins filled with damp moss, and so well had the work been done that only two or three eggs out of the whole lot were bad when they arrived, after a three hundred mile journey by railway. They were placed on the gravel in the two boxes, the water turned on, and all went well. Filled with enthusiasm, and somewhat proud of my triumph over innumerable difficulties, I dreamt of the future, when I should place the young of the true salmon in our river, where there had never been any before, and of a more distant future when these little fish, having gone down to the sea and having fattened themselves up into great salmon, should return to the river and I should every day catch huge fish in great numbers, eat some of them myself, and send others as presents to my friends; and to a still more distant time, when the nets at the river's mouth should be full of salmon and the fishermen should bless my name, and I should be looked upon as a public benefactor. I was young in those days! and you will not be surprised to hear that all my dreams did not come true. We all know that no great work can be carried out without enthusiasm; some of you may from experience know what a terrible nuisance the individual enthusiast may become to all about him. Some of the members of our household began almost to hate me before many weeks were over. Some said I could talk of nothing but fish, and that I was always damp and messy. But the greatest grievance was that of two maid servants. I overheard one say to the other—"There he is out there messing about with his eggs and things again, bother him!" Why should it annoy them? I made no messes in their department. I was puzzled,

but suddenly it dawned upon me that my presence in the back premises at all hours of the day hindered certain little innocent flirtations with the butcher and the baker, &c., when they called.

From the time that the eggs were deposited in the boxes there began a fierce struggle between nature and myself. Nature seems to me to be supposed by some people to be a beneficent power which holds a balance, and that if you do anything to destroy the balance of nature you have committed a great sin. Well, I suppose I had destroyed the balance of nature by putting 3000 eggs into so small a space, any way nature in many forms fought against me. All went well for about a week. Then I missed one or two eggs, or rather I should say found the skins of those eggs in a corner. Careful examination with a powerful magnifying glass showed that the outer skin of the egg had been pierced and the contents abstracted. I visited the boxes as often as I could every day. Who was the culprit? At last I caught a creature about half an inch long with many legs and a cruel looking pair of nippers for jaws clinging to one of the eggs and apparently sucking it with much contentment. I promptly slew him, and thus again destroyed the balance of nature. In fact, before the conclusion of my experiments in rearing fish from the egg, I quite made up my mind that one of man's great missions in this world was to see that nature held her balance right.

Suddenly I remembered that I had never boiled the gravel before putting it into the boxes. There might be innumerable ravenous insects hidden away in their dens amongst the stones lying in wait to ravage my eggs. There was nothing for it but to take them all out, boil the gravel, and put them back again. Now the taking up something like 3000 eggs one at a time in a little wire spoon is a tedious business, but I got through with it at last, boiled the gravel for an hour in the copper, put it back in the boxes, turned on the water, and fancied that I was at the end of my trouble. But one morning soon after this I went out as soon as it was light and found the water in the boxes as thick as pea soup. There had been heavy rain in the night; it had run off a ploughed field into my spring, and was flowing from the tap in a rich yellow stream. I cut off the water from the spring, and when the cistern was empty pumped it full from the well. After the clear water had been running for a while I found the eggs all covered with yellow mud. Unless that were cleared off them not

one would ever hatch out. The eggs of salmon are about the size of medium peas, of a lovely flesh colour, transparent, and enclosed in a membrane quite as fine as gold-beater's skin. They will not endure anything like rough handling, and I was fairly at my wits' end what to do. However, taking a large camel's hair paint brush and gently stirring up the mud I did at last get rid of most of it, but it was a long and weary business, and I almost began to wish that I had not dabbled in salmon rearing and had left the fish to attend to their own duties. After this, for about a fortnight all went well. Then sharp frost set in, and all my time was taken up in keeping the boxes clear of ice. I used to come back into the house so numb with cold that I seemed to have lost all feeling, and was often reminded of a certain bishop of whom an amusing story is told. He was an old man, and was sometimes attacked with a loss of sensation in his limbs. If he grasped his arm or his knee he would find that he had no feeling in it. The doctor told him that whenever he found that to be the case he must at once take a dose of some potion which he always kept by him. He was a genial and amusing man, and one day when he was at a dinner party he was suddenly observed to turn pale and look very anxious. He said in a weak low voice—"Pray, excuse me, I must go home. I have that terrible feeling of numbness come over me. I have been grasping my knee for some minutes and have no sensation in it at all." "Excuse me, my lord," said an elderly lady who was sitting next him, "I do not think you need feel any alarm. It is my knee that you have been grasping for the last five minutes!"

When the frost was gone and I could examine my eggs again to my great alarm I found that a few were dead; they had become quite white and opaque. Others had white spots upon them, which day by day spread fast over the inside of the membrane or covering of the egg. As soon as this white substance had spread all over the egg it was dead.

This brings me to the most interesting part of my experience. It struck me that perhaps the water was too cold, but how to warm it was a problem which I could not solve. So I set to work to rig-up a small hospital for sick eggs by the dining-room fire. A large bath which had a tap in one end of it formed my cistern; under the tap I placed a small tin tray about six inches long and four wide and about three inches deep; glass rods

about half as thick as a cedar pencil were placed parallel to one another about an inch under water, and at such a distance apart that the eggs could not fall between them. The spotted eggs in the boxes were then carefully picked out in my little wire spoon and placed on the rods. The water was turned on and ran through the tin tray, the overflow falling into a small bath below. The water was kept at from forty-five to fifty degrees. From the day on which the eggs were placed in the warmer water the spread of the white matter under the outer membrane was arrested, and in time became detached, it was never absorbed, but floated about freely inside the skin. A very large proportion of the eggs hatched out, there were about two hundred of them, every one of which would have perished if left in the cold water outside. I used to watch the eggs through a strong magnifying glass. As they came near the time of hatching it was most interesting to watch the development of the little fish inside the egg. The eyes could be plainly seen, and a dim shadowy outline of the fish. After a while you could see them move and turn a sort of somersault inside their prison. At last I saw one look at me (I believe he would have winked if he had had any eyelids), give a violent struggle, burst the outer membrane, swim round the tray, and sink to the bottom between the glass rods. So my first little salmon were born.

There are three things which are absolutely necessary to success in rearing fish from the egg:—

1st. Well fertilized eggs.

2nd. Pure water.

3rd. Infinite care and pains about details.

Every egg that shows signs of going wrong must at once be removed from the boxes. If it be left to perish you soon see a sort of fungus begin to grow on it, and the moment that fungus touches another egg it will be infected, and in a few days you will find all the eggs bound together in a mass in the fungus and dead.

I have perhaps wearied you with detail more than I should have done, but I wished to show how it was possible to achieve a fair share of success even with very rude appliances. Since the days of which I have been writing I have had to do with a much larger rearing establishment from which we turned out hundreds of thousands of trout annually. But there we had all the modern improvements. A thickly thatched building in which the varia-

tions of temperature were very slight, with the purest water passing through up-to-date filters, made the work quite easy, and one year we hatched out ninety per cent. of the eggs. There is a very easy way of counting the eggs which may be of use to you if you ever have to deal with them in large numbers, for believe me the counting of even ten thousand eggs one by one is a very tedious business. Take a square board of any size you like and mark it off in square inches. Place as many eggs as you can in one layer on one square inch, count them, then cover the whole board with a layer of eggs and multiply by the number of square inches.

In conclusion, let me say that when the little fish first comes out of the egg he does not look anything like the little ones which you may have seen swimming about in our burns. He has a head and a tail, and a very thin body, but underneath where his receptacle for food ought to be, he has a large sack hanging down, the contents of which are gradually absorbed and upon which he lives for some six weeks. Day by day the sack becomes smaller, and at last when he has arrived at his proper shape he opens his mouth and begins to feed. It would weary you to enter upon all questions of feeding and the care of little fishes. They may be fed in the boxes for a few weeks, and then turned out into carefully prepared ponds, and the next year when they have put on their silvery dress as smoults should be turned into the burn or river, and with all good wishes sent off on their journey to the sea.

Should any of you wish to take up this subject there are text books touching on the matter in all its branches, and you have close to you, in the manager of the Solway Fisheries, one of the best exponents of the art of rearing fish that I know. I wish you large families and good success in rearing them, and trust that the fish will show their gratitude for all your trouble by coming back from the sea well fattened and of large size and allowing you to catch them in great number.

LANTERN DEMONSTRATION.

Milk and Disease. By J. MAXWELL ROSS, Secretary.

Dr Maxwell Ross then delivered a lecture, illustrated by lantern slides, on "Milk and Disease." He first dealt with the

production and chemical constituents of milk, and then shewed how it might become a medium for disseminating disease, particularly tuberculosis, typhoid, diarrhœa, scarlet fever, diphtheria, and pointed out circumstances under which such dangers were likely to arise. He received a cordial vote of thanks.

17th March, 1899.

Mr JAMES BARBOUR, Vice-President, in the Chair.

Donations and Exchanges.—Papers from the U.S. Department of Agriculture on Life Zones and Crop Zones; the Geographical Distribution of Cereals, and Cuckoos and Shrikes in their relation to Agriculture; the Transactions of Wisconsin Academy.

Exhibits.—Pebbles from Brazil; Tiles from the Old Summer Palace, Pekin; Indian Pebbles, Moss Agates, Devonshire Madrepore, Copper and Gold Ore from Rosario, and Russian Malachite, &c., by Mr Hope Bell of Murrington.

COMMUNICATION.

The Moral and Social Conditions of Dumfriesshire and Galloway a Century Ago. By Mrs BROWN, Barnkin of Craigs.

This is a subject which in such a paper as the present one it is only possible to treat very superficially, mainly by means of a few illustrative incidents. Neither must the definition, a century ago, be taken too rigidly. Many of the conditions of that particular period were those existing at a much earlier date, and lasting far enough into the present century to be actually within the memory of people still living, at that extremely advanced age not infrequently met with in this part of Scotland.

That the moral tone of Galloway and Dumfriesshire at the period in question was deplorably low is abundantly proved by the abuses and scandals which, at least in rural districts, were complacently tolerated in connection with religious ordinances, even with the lives and conduct of many of the clergy themselves.

It is hardly too much to say that in country places, with the exception of the weekly services in the church on Sundays, there was hardly a single religious ordinance the celebration of which was not an excuse for unbridled conviviality. The yearly or half-yearly celebrations of the holy communion, marriages, baptisms, funerals, all were occasions marked by one feature in common—an unstinted flow of whisky. For much interesting information on this subject I am indebted to Mr William Wilson, of Sanquhar, many of whose notes were taken down in past years from the lips of old people who had been witnesses of the scenes they described.

The celebration of the holy communion was, of course, the most important religious event of the year. It was a veritable festival, unfortunately apt to be one of a most unseemly character. The gathering into a village or small rural town of perhaps seven or eight ministers to aid in conducting the services, and of a crowd of intending communicants, many of whom had frequently walked twenty miles to be present, inevitably resulted in much crowding and confusion. Refreshment was necessary, and between the services both public-houses and private dwellings of hospitable residents were crammed. Whisky flowed freely, and only too often the whole gathering assumed more the aspect of a fair than of an assembly met for the celebration of a specially solemn religious service. Even at the table where ministers and elders dined together excesses were by no means uncommon. such as in these days would lead to very summary deposition of the offenders. One circumstance, related in connection with Sanquhar, is terribly significant of the tone of sentiment resulting from these abuses. The truck system was then general with the miners at Wanlockhead, but ten shillings were allowed to each man for the expenses of going to Sanquhar for the sacrament. It being found that the greater part went in drink, the amount was reduced to half-a-crown. One of the heavy drinkers of Sanquhar, meeting a convivial spirit from Wanlockhead, asked how it was he saw him so seldom now. "We never see ye at the sacraments noo," he added. "Na," responded the miner, "things are geyly changed noo. The sacraments are no worth a haet. They're only half-a-crown."

Of marriages it is needless to speak. Everyone knows well enough in what a regular orgie a rural marriage commonly ended. I fear it might be said commonly *ends*, even in these days, when

so radical a change has taken place in both sentiment and practice as regards the sacraments that a very staunch and earnest Episcopalian clergyman not long since remarked to me that he thought an open-air celebration of the Holy Communion, at which he had been present in the island of Arran, was one of the most solemn and impressive scenes he had ever witnessed.

The sacrament of baptism did not escape the desecrating accompaniment of whisky. Whether the ceremony was performed in private houses, or several infants were brought to some convenient place arranged beforehand, treating the minister afterwards was a common practice. A very old man of Mr Wilson's acquaintance once told him he distinctly remembered, when one of the younger members of his family was baptised, hearing his father ask his mother for half-a-crown "to treat the minister."

Of funerals little need be said. A century ago it was no uncommon thing for five, even six rounds of whisky to be served out before the party started for the churchyard, with additional supplies after their return to the house. Hence it is easy to credit a well-known story of a funeral party arriving at the churchyard and then discovering they had quite forgotten to bring the coffin with them.

Another proof of the low moral tone of the age is the open complicity of people in a most respectable position, even of ministers, with smuggling. The traffic was carried on between the Galloway coast and the Isle of Man to an enormous extent, and one of the charges against the Rev. Robert Carson, minister of Anwoth, who was deposed from his office by the Presbytery somewhere about 1770, was "that he not only smuggled himself but encouraged others to follow the same unlawful practice." Farmers and tradesmen of respectable position, even men of much higher social standing, were frequently implicated in the nefarious traffic. Balcary House, on the shores of the Solway, is said to have been originally built by a firm of smugglers, and I believe the construction of the cellars, with a view to safe concealment of smuggled goods, is most curious. At numberless farms along the coasts such places of concealment were rife. One ingenious method was brought to light in 1777 by Mr Reid, Inspector-General of Customs, who brought from Edinburgh with him two thoroughly practised drainers. They soon discovered under-cellars skilfully concealed beneath the ordinary ones, and in the course

of a few days Mr Reid secured, in the neighbourhood of the Mull of Galloway, over 80 chests of tea, 140 ankers (that is 1400 gallons) of gin and brandy, and nearly as many bales of tobacco. A whilom excise officer of Wigtown, who died at an advanced age toward the middle of this century, remembered having as a boy counted 210 horses, laden with tea, spirits, and tobacco, and guarded by about 100 men, passing in full daylight within a mile of Wigtown, in open defiance of the excise officers and a party of about 30 soldiers stationed in the town. He also remembered going with his father, then excise officer in Wigtown, and a small detachment of troops, to prevent a landing of smuggled goods at Port William. But the smugglers were in too great force, and a conference took place. The commander of the gang said if any interference was attempted he would clear the beach with his guns, but if he was left undisturbed he would leave some spirits thereon. Accordingly the excise party retired to a distance of a few miles, and on their return found 36 casks of spirits awaiting them at the appointed spot. Even as far as Sanquhar smuggling transactions were briskly carried on. Some of you perhaps know Pamphay Linns, a picturesque spot on the Barr Moor, immortalised by our gifted countryman, Alexander Anderson. The caves there, still in existence, were a century ago much more extensive than now, and very useful for the storage of smuggled goods. More than one worthy tradesman in Sanquhar, who towards the end of last century thrived amazingly and became an important person in the burgh, owed his prosperity to transactions connected with Pamphay Linns.

As regards the social condition of Galloway and Dumfriesshire at the period in question, it must certainly have been such as would cause a severe shock to our more Sybirite habits. Only as a sarcastic relation of mine once remarked to me, "You know they drank water out of any well or burn that came convenient, and didn't have any drains, so they never had typhoid fever." It has lately been argued that colds are a product of civilisation. In the presence of medical science I do not venture to embark on the slippery ice of an attempt to prove typhoid fever to be another beneficent result thereof; but certainly the water supply and other sanitary arrangements of even country houses of some importance a century ago are subjects better left in the oblivion to which the march of progress has consigned them. Whether or not the

acclimatised inhabitants of the district suffered from typhoid fever, it seems they did suffer from ague. In a now, I believe, rather scarce work, Mackenzie's "History of Galloway," published by Nicholson, Kirkcudbright, in 1841, I find the following paragraph referring to this period: "The draining of marshes and mosses, the erection of more spacious and better ventilated houses, the more comfortable clothing and nutritious diet now used, and the greater attention to cleanliness, have banished several diseases—such as ague—which formerly prevailed to a painful degree." To these changes may perhaps be due the fact that the population of Galloway, towards the middle of the present century, was fully double what it was at the middle of the 18th century. The figures are respectively 37,671 and 75,848. This claim to a more nutritious diet at the very time when tea was beginning to come into constantly increasing use may raise a question, in view of the jeremiads to which we are accustomed on this subject. There are very few of the ills which befall Gallovidian and Dumfriesian flesh and blood which I have not at one time or another heard attributed to the substitution of tea and scones and butter for porridge, milk, and potatoes. But if they were beginning a century ago to deteriorate the race with tea, there was at least the compensating advantage that the extraordinary improvements effected about that time in the hitherto rude, imperfect methods of farming in Galloway and Dumfriesshire had a most beneficial influence on both the quantity and quality of the food raised on the soil. If they were a finer race in those days the fact may be due to the general conditions of life, which were calculated to secure the survival of the fittest by prompt extinction of the weaker stock. Still, it is not very many years since a dozen men, taken at random from the parish of Balmaclellan, gave the greatest average height in Europe; while the chief constable of Dumfriesshire gives the average height now of the county police as 5 feet 10½ inches. If these be the dwindling, deteriorated pigmies resulting from excessive tea drinking, it is a little difficult to understand how their more magnificently developed ancestors managed to dwell in the cottages of their time, unless they habitually went on all fours.

For rich and poor alike, one of the most trying conditions of a century ago must have been the difficulty of locomotion. I have heard my father, who was born in 1801, describe the roads of

Dumfriesshire, as he remembered them in his childhood, before the beneficent influences of M'Adam had made themselves generally felt. Anything like a hole in the road was promptly repaired by the casting therein of a big stone. Over this stone the wheels of passing vehicles heaved, descending on the other side with a thud; consequently in a short time the original hole was represented by a diminutive mountain with a small pit full of mud on each side of it. In Galloway and the upper parts of Dumfriesshire there were no means of conveyance for those not wealthy enough to keep carriages save common carts. I remember a woman, who died in Sanquhar about sixteen years ago at a very advanced age, telling me that in the year 1821 she had to go to Edinburgh to undergo an operation on her face, necessitated by a growth in the cheek bone. I asked her how she went. "Oh, just with the carrier's cart," she said, "and I was two days on the road. We went to Biggar the first day, and to Edinburgh the next." A two days' jolting in a carrier's cart, suffering the while intense pain!

These difficulties of locomotion must have rendered life in the most thinly populated parts of Galloway and Dumfriesshire intensely lonely. In such villages as Dalry, Carsphairn, and Wanlockhead people must have lived and died with only the most fragmentary knowledge of any public events, or of any occurrences beyond their own immediate neighbourhood. Newspapers they had none; postal communication was, on account of its expense, practically non-existent. A little information may have occasionally drifted down from some country mansion in the neighbourhood, or farmers returning from market towns may have brought home news from the outer world; but that was all. That the general rate of intelligence was not of the highest order may be gathered from the fact mentioned in Mackenzie's "History of Galloway," that so late as the year 1805 the Procurator-Fiscal of Kirkcudbrightshire thought himself bound to prosecute a woman for witchcraft. She was sentenced to be imprisoned for a year, and once in every quarter, on a market day, to stand openly for an hour in "the jugs or pillory" at the market cross of Kirkcudbright. This, as far as I am aware, is the latest instance of judicial punishment inflicted for witchcraft, though belief therein lingered on to a later date. Mr Wilson, in an interesting account of the famous Crawick Mill witches, mentions instances of un-

expected accidents or disasters being laid to their account as late as the year 1831.

I may further note one condition of the age which, though not exclusively affecting Galloway and Dumfriesshire, must have pressed particularly severely on the poorer inhabitants of the most thinly populated parts of the country. I mean what fully merits to be termed the iniquitous postal system of the time. Letters were a luxury in which the poor could not indulge. They had to pay the exorbitant postal charges. People of rank and wealth got their gossiping letters sent free of charge by securing the frank of some peer or official personage. In more thickly populated districts the poor might sometimes hear of distant friends or relatives through the medium of some passing traveller; but in the lonely wilds of Galloway and Dumfriesshire many a heart must have ached in vain for news of dearly loved ones far away, and gone down to the grave in ignorance of what had been their fate in life. Another reminiscence of my father's is worth pages of denunciation of the wretched system. My grandfather was one of the Commissioners of Customs for Scotland, and had thus a practically unlimited right of franking. My father has often told me how, when he and his brothers were boys at school in Edinburgh, they used occasionally to send packets of sweets to their cousins in Dumfriesshire or to other young friends by post, franked, which would have otherwise cost 3s to 4s. And this while parents and children, even husbands and wives, if parted, could receive no news of the absent ones because of the prohibitory rule of postage which they *must* pay.

One further recollection of my father's I may quote as illustrative of the chances afforded to tramps in such out-of-the-world districts by the then disgraceful condition of the coinage. There were no milled edges, and few of the smaller coins, such as shillings and sixpences, were anything more than round pieces of metal, with only the faintest trace of any stamps left upon them. The forge at Mennock, close by that bridge which ignominiously collapsed lately, was then kept by an old retainer of my father's family, and was, of course, a favourite resort of his brothers and himself. He told me he had often seen a tramp come in, lay a shilling on the anvil, take the hammer and beat it out, and then cut three sixpences out of it.

I must not trespass longer on your patience with a subject which can hardly claim the dignity of antiquity, and is clearly not within the scope of natural history. But such are briefly a few of the most suggestive conditions of life in Galloway and Dumfriesshire a century ago. In these days of telephones and phonographs, electric lights and Röntgen rays, and all the rest of our modern appliances, it requires almost an effort to grasp the fact that those among us who have attained to middle-age have in their younger days lived in intimate association with people for whom such conditions as I have described were the familiar surroundings of their youth.

Cordial thanks were passed to Mrs Brown for her admirable and interesting paper, on the motion of Dr Maxwell Ross, seconded by Mr J. A. Moodie; and a conversational discussion ensued, in course of which some facts germane to the subject were brought under review. Dr Ross observed that the people of the south of Scotland were considered to be of high average height; but with regard to the height of the members of the county police, he explained that nearly all the younger men are from the north-east country. He further alluded to the practice of a minister in the north utilising his pulpit for disseminating news to his congregation during the progress of the Napoleonic wars, in which many of his congregation had friends engaged, by taking the newspaper with him on Sunday and reading from it. Mr Moodie thought the hard struggle for bare existence and gross pleasure disclosed by the account made our ancestors appear almost savage in their way of living. Mr W. Dickie remarked that his commiseration of them was tempered by a good deal of admiration, and contended that amid much that was deplorable there existed a great deal of spiritual and mental activity among the peasantry. He spoke to having witnessed in this town an attenuated survival of the custom of serving whisky out of doors to persons attending a funeral. With reference to the witchcraft trial at Kirkcudbright in 1805, he explained that the charge there was not for possession of supernatural power—in which the judicial class had then ceased to believe—but of imposition by pretending to the possession of such powers.

The Chairman (Mr Barbour) spoke of the important part played in the social economy of the times by pedlars and chapman literature, and he supported the view that a large serious element

entered into celebration of the communion by large gatherings. In St. Michael's, he mentioned, the services were protracted over two weeks, and began at six o'clock in the morning, two ministers preaching simultaneously—one from the church, the other from a pulpit-tent in the churchyard. Smuggling was not regarded by the community as a very blameworthy offence, and besides the trade that went on with the Isle of Man and other places they used to make spirits in little stills, of which he had seen some on the hills about Dalswinton. Mr Dickie observed that it was not only whisky which was smuggled but salt: the people were obliged to carry on a contraband trade in necessaries of life if they were to procure them. Mr Barbour further referred to a curious case that came before the church courts from Irongray two hundred years ago, in which the German mud-bath cure for consumption was anticipated. A woman suffering from this malady was buried in the earth all save the head; and the parties were brought before the church courts on a charge of using certain incantations. Mr J. S. Thomson stated that several years ago, when a woman was taken ill in a close off the High Street, near his shop, a woman declared that she had been bewitched, and drew a circle round her and uttered incantations for the purpose of freeing her from the spell. The Chairman referred to the case of the Rev. Peter Rae, contemporary historian of the rebellion of 1715, who believed that a woman had bewitched him, and took the usual course for breaking the spell by cutting her across the brow. For this he was tried before the Presbytery of Penpont and reprimanded.

21st April, 1899.

Mr JAMES BARBOUR, Vice-President, in the Chair.

COMMUNICATIONS.

1. *Limestone Nodules in Glacial Deposits near Moffat.* By Mr J. T. JOHNSTONE, Moffat.

In a former note I mentioned that the occurrence of these nodules in this district was confined to the glacial deposits, and

they had not been observed in the Permian breccia, although occurring there in the neighbourhood of Dumfries. Last spring (1898) a large excavation was being made in these glacial deposits in connection with the erection of a house in Grange and Academy roads, and in the course of the excavations I repeatedly examined the section for these nodules, and was fortunate in finding not only the nodules as formerly, but large Boulders entirely composed of the Permian breccia, containing the limestone fragments in abundance, but not in so large pieces as the detached nodules. Later in the season an excavation was being made in the neighbourhood of Langshaw, which was only about six feet deep, but which cut through the Permian breccia in situ, and in the exposure the limestone fragments were observed similar to that of the Breccia boulder of Grange Road. This year (1899), in examining a cutting being made in the Breccia at the Hydropathic Establishment, the limestone fragments were observed in it also.

2. *Botanical Notes for the Moffat District.* By Mr J. T. JOHNSTONE, Moffat.

I have not communicated any notes for this district for a few years back owing to the fact that the district has been very well worked up and nothing left but the gleanings to record. None of the plants are new records for the county but are new to this district.

Geranium columbinum, *Lim*, waste ground, Beattock Station, June 11, 1898.

Laminum galeobdolon, *Crantz*, Craiglands, 26th May, 1897.

Salix repens, *L*, Dyke Meadows, 1898.

I am indebted to Mr John B. Duncan, Bevedly, for the following, all gathered in July, 1898 :

Carum Verticilatum, *Koch*, Castle Loch, Lochmaben.

Apium inundatum, *Reich*, Earshaig Lakes.

Andromeda polifolia, *L*, Callum Moor.

Alisma ranunculoides, *L*, Castle Loch, Lochmaben.

Mr B. N. Peach, H.M. Geol. Survey, informs me that *Trientalis Europea* *L* occurs on the west side of the road near Moss-paul. This plant in the Dumfriesshire Flora is queried requires confirmation.

3. *Further Notes on the Old Hall of Ecclefechan (otherwise Kirkconnel Hall).* By Mr GEORGE IRVING, Corbridge-on-Tyne.

In my paper on the above sent to the Society in October last. I stated generally that the Irvings of Kirkconnel (Springkell) had lands at one time extending through part of Middlebie to Ecclefechan. Since I wrote that paper evidence has come to hand which I was not aware of at the time. This evidence confirms what I stated, and I think is worth recording. The old parish of Kirkconnell, now part of Kirkpatrick-Fleming, was in the possession of the Bells in the 15th century, but the then owner forfeited his estate for participating in the Douglas Rebellion in 1451. Their tower, called Bell's Tower, stood near the Kirkconnell Churchyard. This tower was demolished in 1734. Soon after the estate was forfeited by the Bells it passed into the hands of the Irvings of Bonshaw. The first William Irving of Kirkconnell, so far as I have been able to ascertain, flourished about the year 1542, and was in possession of Woolcotes, Middlebie, and other lands in Hoddom, and got sasine in 1551. These lands he probably acquired by marriage with the daughter of Richard Bell. The original charter of lands in Woolcotes in favour of William Irving, elder in Kirkconnell, was dated 21st day of 1608. There does not appear to be any record of issue of this marriage. The second William de Kirkconnell, called senior of Kirkconnell, 1555 to 1605 (youngest son of Edward Irving of Bonshaw, who died in 1605), is said to have succeeded in 1619, died 1642, aged 87. I think the second William married in 1631 Janet, daughter of Jardine of Applegarth, and was father of John of Woodhouse, who married Sarah, daughter of Sir William Douglas of Kelhead, and was succeeded by his son William of Bonshaw. The third William (son of William second) married Jean, sister of Lancelot Armstrong of Artine, died 1680. The fourth William (son of William third) obtained sasine in 1681. Married Isobel Irvine 1654. She died 1684. Isobel left six children, viz., Richard (died young), Rosina, Margaret, Sarah, Elspeth, and Isobel. By the second marriage with Margaret, daughter of Carruthers of Holemains, he had one daughter, Jean. William Irving died June, 1706, aged 80 years. (See tombstone in Kirkconnell Churchyard.) Herbert Irving succeeded and died in 1709, aged 60 years. It is not very clear whether Herbert Irving was a son or brother of William (fourth).

According to the above he would be $22\frac{1}{2}$ years younger. William Irving (fourth) left a daughter Sarah, who married William Knox. There is a curious coincidence in the names William and Sarah. Washington Irving's father and mother were William and Sarah. From William Knox and Sarah Irving have descended the Arnotts, present owners of Ecclefechan Hall. We get some interesting information as to the ownership of lands held by the Irvings in Hoddom from an inquiry at Ecclefechan in May, 1743, as to the enclosure of the commons of "Hoddom and Ecclefechan by annexation" before John Goldie of Craigmuir and John Hynd, Commissary Clerk of Dumfries, appointed by the Right Honble. the Lords of Council and Session, whereat "compeared *William Knox* of Kirkconnell, aged forty-five years or thereby *solutus*, who being solemnly sworn purged and interrogat as above, Depones that the deceased Sarah Irving, the deponent's Spouse, did in the year 1718 with consent of the Deponent dispone to James Douglas of Dornock all and hail the fourty shilling land of Woolcoats and the fourty shilling land of Albielees, all lying in the parish of Hoddom by annexation, and Depones that at the time forsd. the sd. lands were set for the Rents following, viz., Woolcoats, comprehending Burnswork, and Burnsworklees, three hundred merks Scots, and beside the Tenant was bound to relieve the heretor of all publick burthens, inquisition, and cesses Imposed or to be Imposed upon the said lands, and to bring the Grindable corns of the said lands to the Westgill Miln. Also Disponed by the Deponents Spouse and him to Dornock and to pay the multure sequells and all oyr. dutys used and wont to be payed forth of the sd. lands. *Item.*—The lands of Clinthill, one hundred and thirty-fyve pounds Scots, and the Tenant was obliged to pay the cess or supplie, and to bring his corns to the said Westgill Miln and pay multures yrfore. *Itt.*—The lands of Thompsonstown, a pendicle of the lands so Disponed, payed eighty-four pounds Scots yearly rent, and the tenant paid the supplie and was thirled to the Westgill Miln in manner forsd. That the heretor was bound to relieve the tenant of the lands of Woolcoats and Burnswork of all Ministers and Schoolmasters stipend, teynd, and oys due to them forth of the sd. lands; but believes that the Tenants of Clinthill and Thompsonstown payed the sd. stipends themselves besides yr. rent, and being further Interrogat Depones that at the date of the forsd. Disposition and for several years afterwards the said Westgill Miln stood upon a part

of the sd. lands of Clinthill. But the same has been since removed to a part of the lands of Cleugbrae for the convenience of more water. That the said miln at the time forsd. payed ninety-six pounds Scots of yearly rent and besides the lands a'ment. The lands after speed. were thirled to her, viz., the half Merk Land in Middlebie called Wallacetown and Seedhill, the half Merk Land of Seedhill and Shaw, the half Merk Land of Gaitland, the twenty shilling land of Cleughbrae called Cowthats Croft and Aikrig (*alias* Woodland), and the half Merk Land of the half Merk Land of Blacklands lying contiguous to the sd. lands of Cleugbrae, and wch. all now go under the name of Cleughbrae and Wallacetown. *Itt.*—The ten Merk Land of Kirkconnell comprehending the Deponents Interest in Ecclefechan. *The Hall of Ecclefechan* (*alias* the Hall of Kirkconnell), lands of Myre, part of the lands of Langdyke, Jocks Edge, in the possession of Doctor Irving. *Itt.*—Paulsland and part of the lands of Howdale. *Itt.*—Deponents part of the lands of Crossdales and the Merkland in Ecclefechan acquired from the *Tutor of Bonshaw*, and further Depones that at the time forsd. the said lands of Cleughbrae payed of yearly rent eleven pounds sterling, Wallacetown three pounds six shills. and eightpence money forsd. besides the teynd and supplies, and that the ten Merk Land of Kirkconnell and others above ment. pertaining to the Deponent, and his son then payed the rents following, viz., Impr. the Mains, eighteen pounds. *Itt.*—The Edge, two pound six shillings. *Itt.*—The Howdales, one pound ten shillings. *Itt.*—The Langdyke, one pound six shillings. *Itt.*—The Myre, two pounds twelve shill. *Itt.*—The Crossdales, one pound and eightpence. *Itt.*—By Wm. Bell in Ecclefechan, six pound fyve shills. and fourpence; Wm. Smeal, yr. one pound eight shills.; James Black there, one pound three shill. and fourpence; Margaret Forsyth there, two pound ten shills.; Simon Little, yr. two pound eleven shills.; Wm. Forsyth, yr. for houses and yards, one pound; John Lindsay, yr. for a house and yard, eleven shillings; Wm. Ker, yr. for a house and yard, one pound four shills.; Dick Irving, yr. for a house, fyve shills.—all ster. money. And Depones that the Tennents of the Mains pay twenty merks Scots. of stipend yearly besides the forsd. rent, and yr. the Minister draws the teynd sheaf yearly out of all afd. oyr. lauds mentioned including the Edge, and that the Deponent for severall years payed fyve pounds ster. yearly to the Minister for the

drawn teynd of these lands and for a piece of Glieb land in Ecclefechan less than an acre, and Depones that In his Judgment the teynd he drew out of the said piece of Gleib land was not worth more yu. four shills ster. yearly."

Wm. Knox's evidence was supplemented and confirmed by John Irving of Whitehill, aged 60 years, who was and had been factor for James Douglas of Dornock since 1723. He stated that he knew all the lands that pertained at one time to William Irving of Kirkconnell and then to Wm. Knox, and also proved the rents that had been paid for the various farms, including the Mains of Kirkconnel (*alias* "Hall of Ecclefechan"), &c., &c. Mr John Irving's evidence was supported by George Little in Supplebank, who spoke of the lands formerly pertaining to the Tutor of Bonshaw and the Heirs of Woodhouse, and which "now belongs to the Duke of Queensberry."

William Robison in Dykestown deponed that he had made a "narrow inspection" of that part of "The Hall of Ecclefechan" within the last two days, "but does not think he could give more than twelve pounds rent for Mr Knox's possession and live and have bread upon it." John Wightman, 84 years of age, proved that he has lived all his life in Hoddom and Ecclefechan, and "spoke to having cast feal and divot in "the said sucken ground" on the Common. Remembered that about 70 years ago there were two women, who were supposed to have hanged themselves, buried there on Common ground, and heard Mr Matthew Reid, then minister of the parish, give directions to bury one of the said women, and was present when she was buried.

James Kinnell gave evidence as to the rents paid by the tenants in Ecclefechan to William Knox, and specified these rents in detail, which covered the whole of the east side of the burn. Alexander Goldie, W.S., proved that he held the disposition made by Sarah Irving of Kirkconnell with consent of her husband, Wm. Knox. Alexander Goldie, Writer to the Signet, "Doer for His Grace the Duke of Queensberry," spoke of the lands belonging to His Grace and new orchard respectively, and which formerly belonged to the *Tutor of Bonshaw* and *heir of Woodhouse*.

John Irving of Bonshaw, forty-three years of age, deponed that he had been Chamberlain to the Duke of Queensberry for nine years, and confirmed the evidence of George Little in Supplebank, and further spoke to the teynds and supplie paid by tenants; "and

further adds that he has heard his father say that the foresaid lands now belonging to His Grace *formerly* belonged to him as heir of Woodhouse." The above notes illustrate the great hold the Irvings held in Annandale in the 16th and 17th centuries, for it may be said briefly that the Irvings of Kirkconnell and Ecclefechan held the land from the river Sark and the Solway shore to and including Birrenswark Hill, including part lands in Middlebie and the eastern half of the parish of Ecclefechan extending from the east side of Ecclefechan Burn to the Westgill Burn; whilst the Irvings of Gretna, Cove, Woodhouse, and Bonshaw, and their kinsmen held the land from Solway's shore up both sides of the Kirtle to Pennersax, Hoddom, Knockhill, and Ecclefechan; the whole of the ancient parish of Ecclefechan, the ancient parish of Luce, and part of the ancient parish of Hoddom, where Knockhill and the farms belonging thereto extended. In short, the Irvings of Woodhouse owned the west side of Ecclefechan Burn, and the Irvings of Kirkconnell the east, so far as the ancient parish of Ecclefechan appears to have extended.

I referred in my first paper to the irregular marriage of George Arnott with Janet Knox in 1754. I have since been favoured by the following extracts from the minutes of the Kirk-Session of Hoddom dated June 2nd, 1754: "The Session appointed a Committee of yr. number to meet upon Tuesday next in Ecclefechan to call Mr Arnot and Miss Knox before them to own yr. clandestine Marriage, &c. Accordingly upon Tuesday, 4th June, 1754, the Minister and three Elders, viz., William Murray, merchant in Ecclefechan, William Hannah in Cowthat, Andrew Henderson in Mainholm, met in Ecclefechan in said William Murray's House and Rebuked Mr George Arnot and Janet Knox. The Minister took Mr Arnot's Bill for half-a-guinea as a penalty for his irregular Marriage. June 9th, 1754.—The Minister did intimate from the pulpit that Mr Arnot and Janet Knox had been rebuked before the Session for yr. Irregular Marriage, and that they had given a Bill for the penalty. *Nota*.—Andrew Henderson was not appointed to be at the above Committee for he was not in the kirk when it was appointed. *Nota 2*.—Mr Arnot and Miss Knox in March last were fined by Commissary Goldie in Ecclefechan in 100 merks, the Commissary having come out to divide Hoddom Common. *Nota 3*.—This is the first clandestine Marriage that ever I knew

which was rebukt. before a Committee of Session, the most of the Session being against it and myself too." These Nota were by the Minister. It is very difficult in these days to understand how "Commissary Goldie" had any power to "Fine" the offenders, and rather singular how he should combine the offices of adjudicator on irregular marriages whilst acting as inclosure Commissioner, more especially as I believe he was a relative of the parties. I must not omit to say that Helen Irving (otherwise "Fair Helen of Kirkconnell Lea") was a member of this branch of the Irving clan. I am aware that there has been disputes about the name of the fair heroine, but I think that the traditions which have consistently said her name was Irving have been supported by careful investigations over one hundred years ago. These all agree that she was a daughter of Irving, the Laird of Kirkconnell.

FIELD MEETINGS.



First Field Meeting—June 10.

The following Report of the Meeting is taken from the *Dumfries and Galloway Standard* of 17th June, 1899 :—

In Morton, Penpont, Tynron, and Keir.

The first Field Meeting of the Dumfries and Galloway Natural History and Antiquarian Society for the present summer was held on Saturday last ; and it took the form of a circular pleasure drive, covering some 46 miles of road in Mid-Nithsdale. The objective point was Auchenbrack in the Shinnel valley, where the party were the guests of Mr Wallace in the afternoon. They proceeded to it by way of Thornhill, Penpont, and Tynron, and made the return journey through the parishes of Keir and Dunscore. A tourist coach quitted Dumfries with seventeen passengers ; and accessions at Thornhill and Tynron brought up the number to some two dozen. The day was one of brilliant sunshine, and the drive, by hedgerows snowy every here and there with the May and the elder-flower, by banks of golden broom, and lines of trees in the tender freshness of early summer garniture, was a very pleasant experience. There was much, too, of interest to engage attention. The stretch of excellent highway to Thornhill had its peeps of Ellisland and Friars' Carse, and of the graveyard that holds the remains of the notorious "Lagg." When Auldgirth Bridge was crossed, the fact was recalled that Carlyle's father—the grandfather of Miss M. Carlyle Aitken, one of the party—worked at the building of it, as an apprentice with Mr Walter Stewart of Ewanston, grandfather of Mrs Johnstone, of Victoria Terrace, another member of the company, and who also was the contractor for the New Bridge at Dumfries. All readers of Carlyle know with what veneration he regarded this piece of solid masonry

because it was in part the handiwork of his parent ; and it was interesting to learn that on the last occasion when he crossed it, with tottering feet that needed aid, he lingered to draw his hand lovingly along the parapet walls. Closeburn had its reminiscence of Burns in Brownhill farm, which was in his time an inn kept by landlord Bacon of the bard's epigram ; and of the Buchanites in the wayside cottage beyond the village, which was for a time the home of the curious sect who persevered, notwithstanding repeated disappointments, in the hope of a bodily translation to heaven. A halt of fully an hour was made at Thornhill, and the excursionists paid a visit to the museum associated with the name of Dr Grierson, a former president of the Society. It continues to grow in bulk and interest, and its contents are arranged in an orderly and systematic manner. Among the latest additions pointed out by Mr Kerr, the curator, were a collection of butterflies and beetles presented by Mr W. Imrie, Auldgirth ; a fox sent by Mr Kerr, farmer, Newbridge ; a finely-shaped stone axe from Mr Brown, Bennan. The garden was in a state of luxuriance that would have delighted the founder's heart. Resuming the drive, and crossing Nith Bridge, which connects the parishes of Morton and Penpont, Mr J. R. Wilson, Sanquhar, mentioned that the minutes of the road trustees, to whom he is clerk, shew that its original name was Crossford Bridge, derived, no doubt, from the ancient cross that stands in an adjacent field, enclosed by a protecting railing. The sculpture which adorned this monolith has been defaced by the hand of time ; but there is no doubt that in pre-Reformation times it stood by the side of the ferry or ford as an invitation to the traveller to engage in an act of devotion before committing himself to the peril of the water, or to offer up the incense of gratitude when the short voyage had been safely accomplished. The erection of the bridge followed upon a melancholy catastrophe, the upsetting of a ferryboat crowded with passengers. A grim tradition has it that as they pushed out from the bank the occupants of the ill-fated boat had their number augmented by a mysterious personage, who came no one knew whence and vanished no one saw whither, but left behind him a strong whiff of brimstone. The foundation stone of the bridge was laid in 1733 by a now defunct Masonic Lodge, St Paul's, of Moniaive. A few yards further Virginhall Free Church recalled the story of Jenny Fraser, the rustic hymn-writer and uncom-

promising non-intrusionist, who gifted her kailyard as a site for a Free Church when the Duke of Buccleuch had refused a rood of his ample possessions for the purpose, and told his Grace's envoy, who came to buy it of her, that she had "gi'en it to the Lord an oor syne." Carlyle, when a visitor to his wife's relations at the adjacent farm of Templand, made these incidents the subject of some pungent observations concerning what he called "this puddle of a dukery." Noting by the way Grovehill, with its maple tree and its hackney farm, the company drove on to Penpont, and there made a short incursion into the churchyard. Surrounding a stylish, modern church, dating from the seventies, there are here some curious memorials of a former age. One imposing piece of sepulchral architecture has been erected to commemorate a pre-Reformation ecclesiastic, but it has proved faithless to its trust, for the elaborate epitaph is no longer decipherable. Arranged along the wall by the gateway are fragments of headstones with more or less grotesque carving upon them. One, which has, no doubt, marked the resting-place of a village blacksmith, is embellished with a hand and hammer, surmounted by a crown, emblematic of the glory to which he has been called, and is inscribed with the motto of his craft—"By hammer in hand all airts do stand." Airts, of course, is a Scotch rendering of arts in the sense of crafts. In this churchyard, also, is the grave of Dr Grierson. Leaving the tidy and thriving-looking village, Capenoch House next claimed attention, on account of its beautiful situation on a little plateau, embosomed in wood, no less than from the fact that it is the country seat of Mr Steuart Gladstone, Governor of the Bank of England, and a second cousin of the late illustrious statesman. Looking up Scaur Water, a glimpse is got of Corfardin, now part of the farm of Laight, in which the Ettrick Shepherd sank in a short eighteen months the proceeds of the first edition of "The Queen's Wake." His sheep went down by scores of the "trembling," due it is alleged to putting on the land double the stock which it could carry. But the shepherd bore his losses lightly. His man would come in broken-hearted with the news that another batch were dead, to find the master at the fiddle, and got for answer to his doleful tale the invitation to sit down and hear him play a spring. The late James Shaw tells in one of his pleasant sketches how Hogg sought a reduction of his rent and was asked by the Duke of Queensberry—"If I gave you the land

for nothing, do you think you could make a profit out of it?" The reply was poetically nonchalant—"I might, if your Grace wad stand between me and the sheep-rot and the winter wreaths."

At Shinnel Forge the excursionists turned off the road that leads by the Clone Pass to Moniaive, and entered the narrow valley of the Shinnel. At this point the glen presents features of great beauty, with its cover of natural wood and its hill-line of picturesque and curiously contrasted form—the conical slopes of Tynron Doon neighboured by the rugged and precipitous Craigturrah. The Doon has its wealth of legend, associated with the Romans, who had a camp on its top, and with Robert Bruce, who is said to have found a retreat here from his enemies. There is also a tale of a lady who lived in the castle on the hill-top, who is said to have required an ox's tongue every morning for breakfast. One morning she was aroused by an extraordinary lowing of cattle, and looking out on a hill-side covered by a herd of 365, she appealed to her husband to know what was the cause of this parade. She was informed that she saw there her year's breakfasts. This, according to one form of the legend, was a device to cure her of an extravagant caprice. A prettier version has it that the matutinal tongue was a contrivance of a compassionate lady to secure the daily killing of an ox, so that a miser lord might be compelled to share the perishable contents of his larder with the poor.

At the village of Tynron Kirk the party were joined by Mr James Laurie, merchant, and Mr John Laurie, schoolmaster. In the house of the former gentleman they were privileged to see a curious work of art in the form of an elegant, high-backed arm-chair made entirely of buffalo horns, except the seat, which had been sent as a gift from Kansas city; and also books connected with his business extending far back into last century. For the business which Mr Laurie now conducts, and which is known far and near in connection with the special blend of spirit known as "Tynron Kirk," is one of ancient origin. Generations ago Tynron was a centre for distribution to a wide area of wines and spirits, of palm oil and tar for sheep smearing in the days before patent dips, and of such things as Swedish iron for horse shoes. The books throw some curious light on the fluctuations of prices. Tea, for example, we find as dear as seven and eight shillings a pound last century; sugar and soap correspondingly high priced; then

in "the dry summer" of 1862 whisky could be got for 5s 6d and 6s 6d per gallon. Many well-known names occur in the list of customers. Among others we note, under date 1785 and 1786, that of Mrs Carlyle's grandfather, designated in the book "John Welch, Craingputock." Besides being laird of the moorland farm which his grand-daughter's husband has rendered classic ground, John Welch farmed as tenant Penfillan, in Keir. The visitors enjoyed also the hospitality of Mr and Mrs Laurie, and saw a silver kettle which was presented to the former in acknowledgment of lengthened service as secretary to the Tynron Curling Club. Betaking themselves to the churchyard, they viewed the grave of Mr Shaw, the naturalist, poet, and humorist of the glen; and neighbouring it the slab commemorating William Smith, a young Covenanting martyr, only nineteen years of age, and son as the inscription tells us "to William Smith in Hill" (now Crawfordton), who was shot "at Moniaive Moss." The customary verse represents the martyred youth as saying

"Douglas of Stonehouse, Laurie of Maxwelton,
Caused Cornet Bailie give me martyrdom."

The first of this trio will sleep in the same churchyard with their victim, for we read on a table-stone in a walled enclosure: "This is the burial-place of John Douglas of Stonehouse. 1683." The arch-persecutor, Grierson of Lagg, was also a Tynron laird, and the place names, Aird Linn and Aird Wood, perpetuate the title of the barony which belonged to his family. The church is a neat but unpretentious building, erected in 1838, and its interior is enriched with two handsome figured windows, to the memory of Mr John Kennedy of Kirkland and Mr Adam Brown of Bennau.

Turning sharp to the right on passing Stonehouse, and before reaching the steep Dunreggan Hill road to Moniaive, we enter the most contracted part of the Shinnel glen, and the journey proceeds through a pastoral country, for great part of the way under the shade of umbrageous woods, dotted with chestnuts in splendid bloom. Down by the bank of the stream a broad patch of intense blue indicates a luxuriant growth of the wild hyacinth, and other flowers stud the fields. The road is a rapidly ascending one; and starting from Tynron bridge at 359 feet above sea level, we find ourselves at Auchenbrack at an altitude of some 620 feet. Here a hospitable welcome awaits us from Mr J. R. W. Wallace. A substantial tea is set out in the open, and when it has been

discussed—Rev. Mr Andson taking the chairman's seat and Dr Maxwell Ross, secretary of the society, that of croupier—the visitors enjoy a ramble about the grounds, noting among other objects of interest a beehive of peculiar construction brought by Mr Wallace from Egypt when on a visit to his brother while he was agricultural adviser to the Khedive. It is a hollow cylinder of baked clay, having the ends stopped by a perforated plate of the same material. Mr Wallace is himself known for his skill as an apiarist, as well as for the rearing of high-class dairy stock of the Ayrshire breed and of mountain sheep; but his Eastern observation has not led him to discard the wood for the clay. A section of the party walked up the glen to see Appin Linn, where there is a waterfall in a pretty bosky setting. Here the yellow globe flower (*Trollius Europeanus*) was found growing in great clumps in the meadows; and the moonwort fern was obtained.

Before quitting Auchenbrack they were again invited to partake of refreshments, and the Rev. Mr Andson conveyed to Mr Wallace the thanks of the company for the very generous reception which they had experienced. A business meeting was also held, when Mr Wallace, Mr Brown, Bennan; the Messrs Laurie, Tynron; and Mr M'Gookan (Mr Shaw's successor at the school-house in the glen), all of whom had joined the party, were proposed and elected as members of the society. On the motion of Mr Andson, it was resolved to record an expression of regret at the death of Mr Peter Gray, who was long an active member of the society. It was arranged that the next field meeting should be to Moffat district.

The homeward drive in the cool of the evening was greatly enjoyed, and the play of the rays of the westering sun and the cloud shadows on the hill-sides presented panoramic effects. Leaving the former route at Penpont, the coach bowled smartly down the valley of the Scaur until the Barjarg limeworks were reached, passing on the way Courthill smithy, with its mural tablet telling that this was the home and workshop of Kirkpatrick M'Millan, the inventor of the bicycle, and also Keir Church and village. A halt was made at Barjarg, and under the guidance of one of Messrs Houston & Robison's staff (who are the lessees) the party entered the lime quarries and proceeded to explore them as far as the working face. The rock is not quarried from the open

face, but tunnelled, large stone pillars being left, as in coal mines, for the support of the roof. Resuming the journey, the party breasted the Barndennoch hill, and commanded as they looked backward a magnificent prospect bounded by the massive Lowther hills, and with the stream in mid-distance shewing here and there like links of liquid silver. Joining the Dumfries and Moniaive Road at Dunscore Free Church, a smart run brought them once more to the streets of Dumfries at half-past ten.

It may be mentioned as illustrative of the ecclesiasticism of the Scottish character, that no fewer than fourteen churches were passed in course of the journey outside of Dumfries. On the way to Thornhill there were, first, Holywood Parish Church; then the Free Church and the Established Church of Closeburn; and at Thornhill itself, the Parish Church of Morton, the Evangelical Union Church (now allied with the Congregational Union), and the United Presbyterian Church; and on its outskirts, the Free Church at Virginhall and the United Presbyterian Church at Burnhead. In Penpont village we have the Established Church and the Reformed Presbyterian. The latter is one of twelve congregations in Scotland of the "auld licht" branch of the Cameronians (five of which are without ministers), who still maintain a strict protest against "the Erastian Revolution Settlement" by refusing to take any oath of allegiance to Government or to vote in parliamentary elections. A little distance further on is Scarbridge Church, a congregation of the larger body of Reformed Presbyterians, who have merged their identity in the Free Church. Then we have the Parish Church of Tynron; and on the homeward drive, Keir Parish Church and the Free Church of Dunscore.

Second Field Meeting—July 1.

The following Report of the Meeting is taken from the *Dumfries and Galloway Standard* of 5th July, 1899:

The second Field Meeting of the Dumfries Natural History and Antiquarian Society for the session was arranged for Saturday last, and the program was to go to Moffat by train and thence drive to Birkhill in order to visit Loch Skene and the Grey Mare's Tail. The excursion was a peculiarly attractive one, both for the

scientist interested in geology or botany and for the sight-seer ; but unfortunately it was spoiled by persistent rain. Despite the elements, a party of over a dozen travelled to Moffat, only to find that weather conditions were even worse than those which they had left ; and Mr J. T. Johnstone, who met them on arrival, advised that on such a day the tramp to Loch Skene was out of the question. A visit was paid to the Proudfoot Institute, and the party were shewn over this well equipped and well kept establishment by the courteous clubmaster. It includes an excellent library, a large reading-room, draughts room, baths, a hall in which carpet bowls are ordinarily played and in which also lectures are delivered and concerts given ; and a temperance refreshment bar. The Institute is the most visible embodiment of the philanthropy of the late Mr Proudfoot of Craigieburn, who left a fortune of £22,000 made in South Africa to the magistrates of Moffat in trust for the working men of the place. They purchased the Working Men's Institute, a building which had previously been raised by subscription for the general good—and of which the foundation stone was laid by the novelist, Dr George Macdonald—added the hall in the rear, and altered the building to adapt it to its wider purpose. A bust of the founder (the work of Mr J. G. M'Lellan Arnott, Dumfries) is placed over the entrance. After a leisurely inspection of the Institute, the party broke up into several groups. Half-a-dozen determined to drive as far as the Grey Mare's Tail, and had the pleasure of seeing the famous fall in its strength after the rains. Others proceeded to see a dyke of greenstone rock in the neighbourhood of Moffat ; and some returned by an early train.

LIST OF MEMBERS,

As at 1st October, 1899.



Honorary Members.

- E. G. Baker, F.L.S., British Museum.
J. G. Baker, F.R.S., Royal Herbarium, Kew.
Arthur Bennett, F.L.S., Croydon.
J. Harvie Brown, F.L.S., Larbert.
William Carruthers, F.R.S., British Museum.
E. J. Chinnock, LL.D., London (former Secretary).
Frederick R. Coles, Edinburgh.
Dr Anstruther Davidson, Los Angeles.
Peter Gray, Dumfries.
James Macdonald, LL.D., Edinburgh.
Alexander M-Millan, Castle-Douglas.
Sir Herbert E. Maxwell, Bart., M.P., F.S.A.
Alexander D. Murray (former Secretary), Newcastle.
Dr David Sharp, F.R.S., Cambridge.
Robert Hibbert Taylor, M.D., Liverpool.
William Thomson, Kirkecudbright.
Joseph Wilson (former Secretary), Liverpool.

Life Members.

- Duke of Buccleuch and Queensberry, K.G., K.T.
Earl of Mansfield, Scone Palace, Perth.
Colonel Edward Blckett, Arbigland.
F. R. Coles, 1 Oxford Terrace, Edinburgh.
Thos. Fraser, 94 High Street, Dalbeattie.
Alexander Young Herries, Spottes.
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Miss M-Kie, Moat House.
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No. 16.

THE TRANSACTIONS

AND

JOURNAL OF PROCEEDINGS

OF THE

DUMFRIESSHIRE AND GALLOWAY

Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862.

SESSION 1899-1900.

PRINTED AT THE COURIER & HERALD OFFICES, DUMFRIES

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PROCEEDINGS AND TRANSACTIONS

OF THE

DUMFRIESSHIRE AND GALLOWAY

NATURAL HISTORY & ANTIQUARIAN SOCIETY.

SESSION 1899-1900.

19th October, 1899.

ANNUAL MEETING.

Rev. Mr ANDSON in the Chair.

New Member.—Dr Alexander Trotter, Dalshangan, Dalry.

Donations and Exchanges.—"A Country Schoolmaster—James Shaw," presented by Professor Wallace; Transactions of the Edinburgh Geological Society, Vol. XII., Part IV.; Proceedings of the Natural Science Association of Staten Island; Life History Studies of Animals, by L. C. Miall; The Royal Menagerie of France, by E. T. Hamy; The Law which underlies Protective Coloration, by Abbot A. Thayer; on Soaring Flight, by E. C. Huffaker; North American Fauna, No. 14, from U.S. Department of Agriculture—Biological Survey; No. 15, Revision of Jumping Mice of genus *Zapris*; Report of 7th Meeting of Australasian Association, 1898; Transactions of Canadian Institute, Supplement to No. 9, Vol. V., Part I.; Journal of E. Mitchell's Scientific Society, 1898, 15th year, Parts I. and II.; Year Book of the Department of Agriculture, U.S.A., 1898; Report of Marlborough College Natural History Society, 1898; Annals of New York Academy of Sciences, Vol. XI., Part III.; Recent Research in Egypt, by W. F. Petrie; A Preliminary Account of Archæological Field Work in Arizona in 1897, by J. W. Fewkes; A new group of Stone Implements from Lake Michigan, by W. A. Phillips; A Study of the Omaha Tribe, by Alice C. Fletcher;

Anales del Museo Nacionales de Buenos Aires, VI.; Comunicaciones del Museo Nacional de Buenos Aires, 1899; Bulletin of the Geological Institute of Upsala, Vol. IV., Part I.; Proceedings of the Holmesdale Natural History Club for the year 1896, 1897, and 1898; Transactions and Proceedings of the Botanical Society of Edinburgh, Vol. XXI., Part III.; Berwickshire Naturalists' Club—The Session Book of Bonckle.

The Librarian reported that a copy of Dr Munro's book, entitled "Prehistoric Scotland," had been purchased for the Library.

SECRETARY'S REPORT.

The Secretary (Dr J. Maxwell Ross) then read his Annual Report. During the session there had been 10 deaths or resignations among members, and 7 new names had been added to the roll, which now contained 16 honorary members, 14 life, and 188 ordinary. A distinguished honorary member, Mr Peter Gray, who had done much good work for the Society, died shortly after the last monthly meeting. Seven monthly and two field meetings were held. At the former twelve papers were read, and a lantern demonstration given, besides specimens of Roman tiles and tesserae and a collection of pebbles, ores, &c., were shown. The field meetings were to Thornhill, Penpont, and Tynron, and to Moffat and Moffatdale.

TREASURER'S REPORT.

The Treasurer (Mr J. A. Moodie) read his Annual Report, from 1st October, 1898, to 30th September, 1899:—

CHARGE.

Subscriptions from 151 Members at 5s each	...	...	...	£37	15	0
Do. ,, 9 ,, 2s 6d each	...	...	...	1	2	6
				<hr/>		
				£38	17	6
Entrance Fees from 3 New Members	...	...	...	0	7	6
Arrears of Subscriptions paid	...	...	...	2	10	0
Subscription paid in advance	...	...	...	0	5	0
Copies of Transactions sold	...	...	...	1	18	6
Interest on Bank Account	...	...	...	0	8	1
Balance due to Treasurer	...	...	...	£8	19	11
Less Balance in Savings Bank	...	...	...	0	12	6
				<hr/>		
				8	7	5
				<hr/>		
				£52	14	0
				<hr/>		

DISCHARGE.

Balance due Treasurer at close of last Account	£13 12 0
Less Balance in Savings Bank	0 4 5
	<hr/>
	£13 7 7
Paid Salary of Keeper of Rooms and additional Allowance for Heating Rooms during Winter Months	3 0 0
Paid for Stationery, Printing, &c.	0 13 0
Paid for Periodicals and Books	3 4 1
Paid for Coals and Gas	0 9 11
Paid Fire Insurance Premium, less bonus	0 0 0
Paid Expenses of calling Meetings:—	
Post Cards	£3 15 4
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Printing same	1 1 0
	<hr/>
	5 14 4
Paid Expenses of publishing Transactions for last year as follows:—	
<i>Dumfries Standard</i> for Printing... ..	£24 4 7
Postage of Transactions	1 6 7
	<hr/>
	25 11 2
Miscellaneous Payments	0 13 11
	<hr/>
	<u>£52 14 0</u>

Statement as to the cost of publication of "Birrens and its Antiquities," for year ending 30th September, 1899:—

Balance due to the Treasurer as at 30th September, 1898 ...	£11 7 10
Less Copies of Book sold during the year... ..	0 7 0
	<hr/>
	<u>£11 0 10</u>

ELECTION OF OFFICE-BEARERS.

The following were then elected office-bearers for the ensuing year:—Hon. President, Mr W. J. Maxwell of Terraughtie; Vice-Presidents, Mr James Barbour, Mr Robert Murray, Provost Glover, and Rev. John Cairns; Secretary, Dr J. Maxwell Ross; Treasurer, Mr John A. Moodie; Librarians and Curators of Museum, Rev. Mr Andson and Mr James Lennox, F.S.A.; Curators of Herbarium, Mr Scott-Elliot and the Misses Hannay; Members of Council, Mr James Clark, Mr William Dickie, Mr James Davidson, Mr W. J. Maxwell, Terregles Bank, Mr J. M'G. Sloan, Dr Clarke, Mrs Thomson, Mrs Brown, and Miss Hannay.

COMMUNICATIONS.

The Place Names of the Cairn Valley.

By Dr J. W. MARTIN, Holywood.

I do not know that I shall have much to offer you by way of what is new and undiscovered, but I have thought it might be useful to bring up before the members of the Society the subject of place names, and for that purpose I have selected the locality with which I am best acquainted, and which is most easy of access to me, namely, the region of the Cairn from its source till it joins the Nith, and which very aptly comprehends the three parishes of *Glencairn, Dunscore, and Holywood*, or a length of, let us say, 30 miles, by a breadth of $7\frac{1}{2}$ at the broadest point. It may be that the members of the Society may be stimulated into working up other parts of Dumfriesshire not so accessible to those of us in this district, and thus the usefulness of the Society may be extended and enhanced.

Place names are derived from the nomenclature given by the ancient inhabitants of a county or district to the different landmarks and rural objects in the neighbourhood, as well as to the dwellings frequented by them or the new-comers. The *names of places* of any antiquity in the south and west of Scotland are for the most part either of Celtic or Anglo Saxon origin, sometimes spoken of as Northern English. Goedilic or Gaelic was a branch of the Celtic employed by the Picts of Galloway and west of the Nith. It goes without saying that *place names* have retained much of their original form, as far as Goedilic Celtic is concerned, though the inhabitants and people have changed; and a good instance of retention of names of places is found in Bible lands, where, to this day, rudiments of the names of places now almost lost to civilization, are identical with their most ancient names recorded in the Bible and secular history. This is noticeable to any one reading books dealing with Arabia and Palestine, but I need not trouble you with instances. As it is classically put, "Conquest has little power in changing the place names of a county." I need not point out to you that the investigation of the names of places has a considerable bearing on the history, as well as the ethnology and geography, of a county. Unfortunately many names get twisted and changed by mispronunciation and mis-spelling. Much valuable information is thus lost, and identification of the original names is rendered impossible. A

knowledge of the locality is often essential to the unravelling of a place name, the English speaking population having almost entirely changed it. The locality of the Valley of the Cairn and neighbourhood, where names of ancient and more modern are mixed up, affords us examples of such a discrepancy, though the place names are for the most part fairly easily determined.

It may be well to glance at what were the different races which inhabited lowland Scotland from time to time, and from whom the place names were most likely derived. To begin with, the Roman invasion lasted from B.C. 55 to A.D. 420, but there are few Casters or Cesters, identified with Roman occupation, to be found in the south of Scotland. The most ancient inhabitants that we know of were the Iberians, but there are few if any place names derived from their language, unless it be Urr and Isla (Isle).

The people whom the Romans conquered were the Cymri, or Britons or Welsh, but these had not yet reached this part of Scotland, which was occupied by the Goedilic Celts, the same as the Irish, Manx, and Cornish, and included the Northern and Southern Picts, "the Picti" (Phichti) of Caledonia—the land of trees and forests—whomore properly occupied the northern two-thirds of Scotland. These mingled with the Iberian aborigines—characterised as dark-haired, long-skulled, short people, cave dwellers, ethnologically like the Basques, now fast disappearing, and the Atticot Picts west of the Nith and in Galloway. We may place the period about the second or third century.

Associated with these about the fifth and sixth centuries we have the Scots who came from Ireland (Erin), and settled in Lorne and Argyle, and originated the West Highland Clans. (Some of the East Highland Clans, if you may so call them, are French, like the Frazers, Hays, &c.) St. Ninian began his conversion of the Picts about the fourth century. This is a landmark.

It was not till the eighth century that Galloway was conquered by Alpin, King of the Scots, which would have an influence in eliminating the British language. No doubt the names of places would be somewhat established by this time, for we have traces of British words.

Between the sixth and ninth centuries certain adventurers had come from the Continent, viz., the Angles, Jutes, Saxons, and Danes of the Teutonic stock, and these originated the northern English names. Then came the Scandinavian tongue—the people

who ravaged our shores between the eighth and tenth centuries. Firth and Wick are the common examples of Scandinavian terminations, as also gill, beck, rig, garth, and wald.

Lastly, we have the middle English or broad Scotch, a modification of the Anglo Saxon predominating about the thirteenth century, and it entered largely into the literature of early Scottish history as well as place names. Can it be said to have yet died out? Examples we get are town, hows (O.E. holg), hain or hame, knowe from knoc, pow from poll a stream, law (O.E. hlóew), monts from monadh, a mountain or moor, kirk for church, gate for way or road, yett for gate, water was weter in O.E.; and in tracing broad Scots names we get to confusion of Gaelic and Celtic names, *e.g.*, bannock, gore, glass, almond for awmon, and so forth.

We know how the cockney changes names in our own day, and the Ordnance Survey has much to answer for in this respect. We may accept it that by this time hills, rivers, cliffs, and all distinctive features of the landscape had received Goedilic names; while habitations, towns, settlements, and fields were of a mixed nature, or purely given by the new-comers. I am told that large islands, especially those inhabited, have Scandinavian names, while mere rocks and the smaller islands have retained the Celtic.

Place names are of two kinds, simple and compound, and compound are either qualitative or substantive. Examples of simple names in the study before us are drum, lag, butt, rigg; compound as Craigenputtock, Barbaie, Dunesslin, Anchencheyne, Brockleston. Substantive place names are Kirkeudbright (St. Cuthbert), Anchencheyne (St. Kenneth), Maxwelton (imported from the name Maxwell), Maccus Villi. Out of 310 place names before me I find 108 have Saxon terminations, like head, 39 of these being ton or tun; 90 are distinctly Goedilic Celtic origin; others are broad Scots; a few are imported proper names, and three are Danish or Welsh. Some are distinctly Norman.

It is noticeable that the further inland you proceed the names are more and more Gaelic, while nearer the estuary the names are mixed, fewer being Celtic; that fact explains itself from history. I have noticed that on the right bank of the Cairn the names are nearly Anglo Saxon, with some exceptions; while the left bank, or watershed, is more markedly Celtic, at times Welsh or broad Scots. The fact may have pointed to the disposition of the peoples. I find the commonest prefixes are Bar, Ben, Craig,

Dal, Drum, Dun, Bal, Knock, Auchen. A word beginning with Castr has been disputed, and is generally acknowledged to have nothing to do with the Romans.

I shall proceed to give you a vocabulary of most of the place names I have looked into, and for that purpose have used the names of the parishes to denote the district referred to.

I. Glencairn.

Tererran—tir, land or farm, iar, western. (The present proprietor prefers to associate it with Keran or Kiaran, the name of a saint, K becoming T.)

Dibbin—dipping, perpendicular or steep place.

Benbuie—Beann a hill, buidhe of a yellow colour.

Milburn—burn of the mill.

Clarenceton—dwelling of Clarence. Now Cambuscairn (bend of the Cairn).

Neiss—nios top, therefore a height.

Broomfield—modern.

Barjarg—dhearg red, bar height, in Keir.

Barnyard—G. bearnach aird, height with the gaps or fissures.

Carshogle—G. carsg, oclaich, pass of the soldier.

Dabton—Dubh, dun, dark hill.

Keir—G. ciar, dark brown.

Knies—O.E. or Dan. naes, a ness or cape.

Pulcaigrie—Pol water, Crioich boundary.

Tynron—teine, sron, beaconfire point.

Closeburn—cill, church; Osburn, St. Osborne.

Glenhowl—gabhel, a fork, river junction.

Grainshead—O.N. greni, a branch.

Dunreggan—Dun, a hill or fort; chregain, little crag or rock.

Dungalston—Dungal, abbot de Sacrobosco, 1296, ton, place.

Snaid—snaithad, a needle, narrow communication between two glens.

Gilmourston—Gilmour's dwelling.

Birkshaw—Dan. skor, wood, and birch.

Auchencheyne—Choinneach, G. gen of St. Kenneth, Auchen, field.

Twomerkland—a merk 13s $4\frac{1}{2}$ d, land valued at.

Woodlea—Icl.-hlie, shelter.

Craigneston—dwelling at the abutting rock.

Blackston—Black's dwelling.

- Girharrow—garbh, rough, airde, highness.
 Craigdarroch—rock of the oak wood.
 Townhead—height of the settlement.
 Kirkland—lands or locality of the church.
 Maxwelton—Maxwell's dwelling, from Maccus Ville, Normandy,
 Maccus, the son of Murin, a Saxon lord before 1150.
 (Name taken from some house further down the parish).
 Moniaive—Minnyhive, Moine, moss, ghabaidh, dangerous—gh not
 pronounced.
 Glencairn—glen of the heap of stones, or of the river Cairn.
 Shancastle—sean old, castle.
 Crossford—ford of the cross.
 Straith—stratha, a valley.
 Barnhead—height.
 Wallaceton—settlement of Wallace.
 Coldstream—stream, from the coil wood.
 Lagganpark—field of the little hollow.
 Gravelpit—explains self.
 Woodhead—height of the wood.
 Huntfield—hunta, a hunter, O.E.
 Dardarroch—Dar, dair, or dara, wood of the oaks.
 Springvale—valley where springs are found.
 Hastings Hall—the manor of Hastings.
 Skelston—skali, huts.
 Garriston—Garry's farm.
 Ardnacloich—stoney height.
 Lochurr—odhr, grey loch; G. dobhar, water.
 Caitloch—used to be Cadzeloch, place of the battle.
 Barbuie—Bar hill, buidhe yellow, as of flowers.
 Cairnhead—head of the river Cairn.
 Conriek—con a dog, A.S. hrycg, ridge or back of hill.
 Blairloch—Blair level, achadoch field.
 Lochmailing—maol, a bare round hill; O.S. mailen, a farm;
 beside the loch.
 Ingliston—settlement of the English.
 Poundland—land valued at a pound Scots, 20d.
 Holmhead—upper part of the meadow near river.
 Dalwhat—dal a field, geata, chat, of the wild cat.
 Glenlach—tuilach, hill, and glen of.
 Corriedow—black ravine.
 Glencrosh—glen of the cross.

- Waulkmill—mill where cloth was dressed, Sc. wauk is to “full,” or dress cloth; wealean is to turn about.
- Glenwhisk—uisge water, glen of.
- Ewanston—Euan’s settlement.
- Grains—the split or branches of the valley.
- Mains—steading.
- Glenriddel—Riddel, ancient family name.
- Slatehouse—sgleat a slate.
- Borland—land of the food supply. Boers or original inhabitants. See “The Raiders.” Ingliston and Borland frequently together.
- Coatston—G. coil brushwood, sticks, ton dwelling.
- Crawfordton—Crawford’s dwelling, called the Hill.
- Knockauchley—arable or flat field, of the hill.
- Brockloch—place of the badger.
- Muirwhirn—moor of the rowantrees; also, pfularan, a spring of water.
- Crichen—the boundaries.
- Calside—side, coill wood, might be the sunless side O.S.
- Shillingland—‘sheiling’ or booth, land.
- Kirkcudbright—church of St. Cuthbert, C. 700 A.D.
- Crowhill—croabh trees, or crò a circle.
- Breconside—the brake or bracken, and side, slope.
- Castlefairn—castillum, village or town, fhearna, alder trees.
- Balenie—baile house, roinne, point of land.
- Stronshalloch—stran, a little strath; and seilach (shaloch), the willows.
- Auchenstroan—field of the little strath.
- Gordiston—Gordon’s settlement.
- Riggfoot—foot of the furrows or field, O.E. hrick, a ridge.
- Barudannoch—the boldness of the height (danachd).
- Clench—cruach, stack-like hill.
- Fleuchlarg—Fleuch, wet (in the sense of rainy), Leathad, slope.
- Glenjaan—short glen.
- Craiglearn—creagach, rugged rock.
- Jarbruck—garbh rough, burg fort, same as borg.
- Peelton (opposite)—Peel, W., a moated fort, or tower.
- Castlehill—hill of the Castle.
- Mouigryle—moine moss, thicket, Icl. grønn, green.
- Gapmill—named from “kep the gap,” guard the opening in a fence; from Covenanting times.

II. Dunscore.

- Glensslin—glen, a valley, ess or eas, water, linne, a pool.
 Greenhead—the green headland or hill.
 Laggan—a little hollow.
 Drum—druim a ridge.
 Newton—the new dwelling.
 Swyre—O.S., Swair, neck or pass at top of the hill.
 Lochmaderie—Loch of the, madah a wild dog, derry, of the oaks.
 Dunscore—Dun hill, G. sgor the sharp rock, A. 1300 Dunescor.
 Farmersfield—explains self.
 Killyloch—coil wood, leigh, also lago, Sc. for lower.
 Lag—hollow.
 Netherton of Colliston—the nearer house of M'Call's dwelling.
 Farthingwell—baile, house or farm ; farthine, rounded hill.
 M'Cubbington.
 Glenmidge—glen mheadhow, mid, between.
 Isle Toll-bar—Iosal, lower, and toll-bar.
 Hopeside—named after Rev. John Hope, minister of Dunscore.
 West Skelston—skali huts, shielings.
 Shank—tongue of land, O.E. scanca, the leg.
 Boglehole—A.S., bogle a fairy.
 Dempstertown—(deemster a judge in the Isle of Man), man's name.
 Blacksteps—probably from black stones in the stream.
 Merkland—land valued at 13s 4d.
 Woodfoot.
 Throughgate—A.S., geat, passage through, ford.
 Allanton—person's name.
 Burnfoot and Burnhead.
 Bush—Boscus a wood or thicket, Dan. Busk.
 Bar—hill of.
 Muirhall—recent.
 Butt—place abutting or next to.
 Lagganhill—formerly Laverock hall ; name changed by new occupiers.
 Bogrie—soft ground.
 M'Murdoston—family of M'Murdo, founder of the Volunteers.
 Dinning—Dinat a woody glen, also Dunan little hill or fort.
 Rosehill—where the wild rose was plentiful.
 Moat—ancient meeting place.

- Gateside—gat gap, place of.
- Friars' Carse—Kerss low lying marshy or alluvial ground by a river.
- Carsemill—mill and farm of.
- Whiteside—O.E., hwit, white, of the appearance of stones.
- Roughhill
- Nithside—beside the Nith.
- Crawston—Sc., crawe a crow.
- Greenwell—grianach, sunny, baile a house.
- Longbank.
- Linburn—formerly Lintburn, where lint was soaked.
- Craigenputtock—the rock of the putag, small ridge or ring of land ; by some, rock of the wild hawk.
- Dunesslin—Duu a fort or hill, and Ess water, formerly Farthing-rush (rounded hill, covered with scrub).
- Corsefield—field of the cross.
- Hallidayhill—man's name.
- Castrammon—Carstrammon, G. Crasg pass or ford of the Alders, from (craobh, crov) fhearna.
- M'Cheyneston, Ellisland, Milliganton, Amulligan 1619.
- Courthill—cruit or cul, back and hill.
- Townhead—explains self.
- Craig—Creag.
- Dalgonar—field or plain of the little beak, G., goban.
- Moss-side, Poundland, Whitedyke.
- Brocklestone—stone of the badger's hill.
- Holm—O.E., a small island in a river.
- Lagg—valley.
- Broadford.
- Shangan, Drumshangan—hill or ridge of the ants.
- Chapel—probably ancient chapel.
- Goosedubs—O.E., puddles for geese.
- Miltonmill.
- Kenmuir—head of the moor.
- Skinford—sceithan, a bush.
- Kilnhouses—kiln for baking bricks.
- Stroquhan—struthan, a little stream, and valley of.
- Lagganlees—the meadows of the little hollow.
- Craigenvey—Creag and bheath (vay) birches, rock of the.
- Lochenlee is Lochunlead—lade, a water course.
- Bessewalla—old name Barswally, bar, height, hill, shith (shee), top or place, a bhaile, hamlet ; O.E., hlaw, a hill.

- Kelliston—Kelly's dwelling, coil a wood.
 Whiteyett—O.E., geat, a passage.
 Junken—junction of lands.
 Gallawards—height of the gallows.
 Sundaywell—sean, old taigh house, Fr. ville; used to be a tower
 or keep.
 Drumburleigh—ridge of the tumulus.
 Kilroy—ruadah reddish colour (church of the).
 Netherlaggan—frequent affix, lower.
 Isle—anct. Ilis, Iosal (G.) lower, or island land.
 Ancient Names—
 Crossengarrioch—Garriston?
 Pollogan—Laggan.
 Pollocostertan.
 Derengorran—Dalgonar.
 Durisswan—Stroquhan.
 Athenwarn—ford of the rejoicing.
 Pollechonstergan.

III. Holywood.

- Broomrigg—hrick, ridge, where broom grows.
 Gulliehill—the hill of the gully or cliff.
 Hardlawbank—boundary land.
 Holywood—sacrum nemus, the Dar Congal, Thicket of St. Congal,
 hence the Holywood Abbey, founded 1135.
 Portrack (used to be Porttract)—tract of land near mansion.
 Nith—Niduari of Bede, Pictish tribe of Galloway.
 Bellfield—Billa (Bile), a large tree.
 Glengowan—gobhan a goat, glen of the.
 Hulton—belonging to the Hall, or family mansion.
 Speddloch—Ir., spidiog, spiddog, Robinredbreast (wood of the)
 redbreasts.
 Shawford—ford of the wood.
 Scaurbrae—sgurr, precipice, large conical hill, Sc., brae.
 Bearcroft—O.E., Bere, barley, croft field.
 M'Whanrick—M' (muir), magh, plain, Bhainne milk, O.E., hryeg,
 ridge of land; might be anct. Macwatter.
 Crossleys—fields of the cross, anct. Corsleis.
 Morrinton—person's name (Morrin).
 Irongray—(G.) aird an greaich, height of the moor.
 Killylung—coille wood, and G. Luinge, a ship.

- Holm—small island in a river.
 Cowhill—coil, wood and hill.
 Summerhill—surname (Summers).
 Abbey—from Holywood Abbey.
 Standalane—O.E., stan, a tall rock by itself.
 Gribton—Grib's ton (village or dwelling).
 Clouden—clwyd warm, afon or âu, stream or river, also clith, violent.
 Cormaddie—hill of the dog or wolf.
 Birkhall—house of the birches.
 Rue—Rudha, a point of land.
 March-house—march line of division between lands.
 Knowehead—Sc., knowe, hillock, top of the hill.
 Berryland—the hill land.
 Fourmerkland—land valued at 4 merks (54s 8d); Fourmerkland Tower built by R. Maxwell 1590.
 Newtonairds—the new dwelling of the height.
 Balfreggan, Barfreggan—hill of the blackberry.
 Looberry—lub a bend, curvature, high hill.
 Clachan—collection of houses.
 Steilston—O.E., stool place, ton dwelling, hostelry.
 Slaethorn Croft—slae is sloe; G., croit, pendicle of land.
 Dalawoodie—Dail fields of, bheadaig, gossip or wanton.
 Kilneroft—cille church, croft, field.
 Ashyholm—O.E., aesche the ash tree, holm.
 Kilness—cille church, nios top, summit.
 Baltarsan—house at the crossing.
 Druidpark—probably from Druim, a ridge.
 Dumfries—Dun fort, of the Frisians; some say of the furze or whin.
 Solway—O.N., söl.-vagr. muddy bay.

Such are most of the names in the watershed of the River Cairn, extending through the parishes named to the west of Dumfriesshire. It has been attempted to give the most likely interpretation of them, and if bringing this subject before the Society might somewhat advance the work of place-names in the county, this work may not have been done in vain.

16th November, 1899.

MR JAMES BARBOUR, V.P., in the Chair.

Donations and Exchanges.—Annual Report of the Smithsonian Institution for 1896 ; Transactions of the Nova Scotia Institute of Science, Part I., Vol. IX. ; Annals of the New York Academy of Sciences, Vol. XII. ; International Catalogue of Queensland Scientific Literature ; Guide to Queensland ; Proceedings of the Academy of Natural Sciences.

COMMUNICATIONS.

Notes on an Old Tradition.

By the Rev. JOHN CAIRNS.

About six miles to the north-west of Dumfries the River Cairn unites its waters to those of the Cluden, which comes tumbling from its source among the Irongray hills down a rocky course, the most picturesque part of which is the fall at the Routin' Bridge. Below the junction the river sometimes bears the name of the Cairn, which is much the larger of the two uniting streams, but it is more frequently known as the Cluden, and it is thus designated on the Ordnance Map. That it has been so called from early times is shown by the names of such places as Cluden and West Cluden on its banks and Lincluden at its mouth. Above the junction the Cluden is popularly known as the Old Water, and it is so marked on the Ordnance Map.

An interesting explanation of these facts is afforded by an old and very persistent tradition current in the neighbourhood, according to which the Cluden originally had the valley to itself, the Cairn being an intruder of comparatively recent date. It is affirmed by this tradition that at one time the Cairn expanded into a loch above Dalgoner, in the parish of Dunscore, and that the outlet from this loch was to the east and not to the south, the river finding its way by the valley which runs down by Birkshaw, Lag Tower, and Glenmids to the Nith a little below Auldgirth. The tradition goes on to say that in the Middle Ages the monks of Melrose, to whom a grant had been made of the lands of Dunscore, with a view to the improvement of their property, drained the loch at Dalgoner by cutting a new outlet for the Cairn through a rocky barrier, on which it is even said

that the marks of tools can yet be seen, and so caused the river to flow first into the bed of the Glenessland Burn and then into that of the Cluden below the Routin' Bridge. Another form of the tradition makes the Romans and not the Melrose monks the engineers of the diversion, but that the diversion, by whomsoever effected, has taken place it is confidently affirmed. Hence, it is said, come the facts I have already referred to, that the smaller stream gives name to the combined stream below the junction, and that the same stream above the junction is called the Old Water. Hence, too, comes the further fact that beside the supposed original course of the Cairn there is a farm which to this day bears the name of Cairnhall.

The fact of this tradition being so definite, so long established, and so persistent as many of us here know it to be, almost seems to establish a kind of *prima facie* presumption in its favour; but it may be pointed out that those arguments in support of it to which I have just referred have less in them than might at first sight appear. It is no uncommon thing for the smaller of two uniting rivers to give its name to the product of their union. The Teith is a much larger and finer river than the Forth, and yet it has to yield its name to its weaker rival. So too with the Missouri and the Mississippi. Then as to the Old Water, Sir Herbert Maxwell has pointed out that we have here an instance of a mistaken etymology due to a resemblance in sound of two entirely different words. Speaking of the name as it appears on the Ordnance Map, he says: "A common Gaelic word for a stream is *allt*; this coincided in sound with the broad Scots 'auld;' apparently those who advised the English surveyor thought it more genteel to write 'old,' and the real significance is completely hidden by a forced interpretation." With regard to Cairnhall, it may be remembered that there is a Cairn Mill on the Scar, in the parish of Penpont, far away from any possible former course of the Cairn; so too much need not be made of that point.

Whether the diversion of the river in the way the tradition states was physically possible I do not profess to be able to say, but must leave that to those better acquainted with the topography and geology of the district. Whether, too, as I have heard it said, the tradition finds confirmation in certain ancient charters or title deeds I am also unable to say, for I have not had the opportunity of examining them. But some time ago I had

occasion to look into the *Liber de Melros*, which is a collection of all the charters of the famous abbey on the Tweed, and is one of those splendid volumes edited for the Bannatyne Club by the late Mr Cosmo Innes. Here I came upon the original grant of the lands of Dunscore to Melrose, and as this, besides being of great local interest otherwise, does seem to throw light on the tradition of which I have been speaking I should like now to quote its words to you. The granter of the lands is a lady, Affrica, the daughter of Edgar, and the great-grand-daughter of the powerful chieftain Dunegal, who, in the reign of David I., ruled over Nithsdale from his seat at Morton Castle. Affrica's charter was granted in the reign of Alexander II. (1214-1249). After the usual beginning, in which she says that she was induced to make this grant for the repose of the souls of the late king and of her own ancestors and successors and for the salvation of her own soul, Affrica proceeds to specify the boundaries of the land which she bestows on the monks:—"I have given and conceded to God and to St. Mary of Melrose and to the monks serving God there in free, pure, and perpetual charity, one-fourth part of the land in the territory of Dunscore, that, namely, which lies between Dercongal and a certain rivulet which is called Pollogan, according to its proper marches. And besides, from Pollogan, by a rivulet which descends from the moss to the west and so from the moss by a rivulet which descends to the ford of the Cairn towards Glenesslan and so by the Cairn towards the east as far as the rivulet which is called Pollocostertan and so upwards as far as Crossengarrianch, which is the march between the land of the canons of Dercongal and Derengorran ascending by the road as far as Durreswan, and thence descending by a heap of stones to a certain ditch, and from that ditch descending almost straight to the before-mentioned rivulet, namely, Pollogan." What are we to make of these strange and uncouth names, which have all or nearly all disappeared from the face of the earth and from the memory of man? Not very much certainly, but yet perhaps something. The first sentence is plain enough. Affrica gives the land which lies between Dercongal or Holywood (for this is the old name of the monastery of Augustinian Canons which had already been erected there) and the stream called Pollogan. The prefix Pol means (I suppose in Gaelic) a stream. It is the very word that has been corrupted into our Scotch word Pow, which occurs in such names as Pow-

foot and Newabbey Pow in this district, not to speak of the Powburn in Edinburgh. Pollogan, then, is the Logan Pow, clearly the Laggan Burn, up whose valley the road from Auld-girth to Dunscore runs. The district, then, between the lands of Holywood, which probably extended to the modern parochial boundary, and the Laggan was included in this grant. And this is confirmed by the fact that at a much later date we find Melrose Abbey granting to members of the family of Kirkpatrick of Ellisland certain rights over the properties of Laggan, Edgars-toun, Milliganton, M'Cheyneston, M'Cubbinton, Kilroy, and Farthingwell, all of which, I believe, are within the limits thus marked out in Affrica's charter. But when we come to the second part of the charter we find greater difficulties. I cannot find any perfectly satisfactory solution of the puzzle which it presents, and would now with the greatest diffidence and full submission to the authority of those who know the district better than I do, make the following suggestions. Besides the country between Holywood and the Laggan, Affrica gives a tract of land whose boundaries are very minutely specified. Beginning at the Laggan the boundary goes up to the moss along the course of a small rivulet. This, I take it, must be the moss, a part of which still exists in the high land to the south-west of Dunscore village. From thence a rivulet leads down to "the ford of the Cairn towards Glenessland." A very small stream is marked on the map crossing the road between Craig Free Church and Poundland and falling into the Cairn lower down. This may be the rivulet referred to, which was evidently so small that it did not possess a name. Then following the Cairn "to the east" we come to the burn which passes Killyleoch. This may be the Pollocostertan of the charter, and this finds confirmation in the fact that Killyleoch and Bessiewalla, both of which are on or near its banks, belonged at a later date to Melrose Abbey. Up this burn the boundary ascends to Crossengarriauch, "which is the march between the land of the canons of Holywood and Derengorran." In a later charter this is spoken of as "the cross which is called Crossengarriauch." So evidently there was here erected, perhaps on the wayside, a prominent and well-known cross. Is it possible that there is still a trace of this to be found in the name of the farm of Corse or Corsefield, situated at the top of the hill just where, from the words of the charter, we should expect the ancient landmark to have stood? From thence

by points that cannot now be easily identified—a heap of stones, a ditch, &c.—the boundary finds its way back to the Laggan at the point from which it started. But however interesting this mass of topographical detail may be for its own sake, I fear I have lingered too long over it, and I must now point out the bearing which it has upon the tradition regarding the diversion of the Cairn. You will notice that mention is made of the Cairn in this charter and of a ford in it towards (*versus*) Glenessland. But those of you who know the district will remember that this, the lower end of Glenessland, the place where Glenessland Burn falls into the Cairn, is *below* the point where the Cairn is said to have been diverted. If the tradition be true there was, when the land came into the possession of the monks of Melrose, no Cairn in the neighbourhood of Glenessland at all, and as it flowed through a loch at its nearest point there could be no “ford of the Cairn” within several miles. And yet here, in the charter which gives the land to the monks, the Cairn is described as following the same course as it follows to-day.

A later charter describes what is evidently the same, or virtually the same, tract of land, but begins this time not at the Laggan but at Crossengarriauch.

After describing the boundary from Crossengarriauch to the Laggan it goes on: “And by Pollogan, ascending as far as the royal road, which leads from Dercongall (Holywood) to Glencairn, and by the same road as far as the ford in a certain ditch which is called Athenweran, and as the same ditch descends to a certain footpath which leads to the ford of the Cairn, and by the river Cairn, ascending as far as a certain rivulet, which is called Pollehoustergan, and by the same rivulet, ascending as far as the before-mentioned cross, which is called Crossengarriauch.” I confess I can make nothing of this description. The perplexing point is that which speaks of ascending the Cairn from the ford. In the former charter the boundary follows the Cairn “towards the east,” which, of course, is descending, and if the word were descending here it might be possible to identify Pollehoustergan with the Pollecostertan, even although a little violence were used in the process; but the word is undoubtedly “ascending” in the text, and I can only leave the tangle for some more skilful hands to redd up.

There is only one more document in the Book of Melrose which in any way bears on our tradition, and that is one which,

had it stood by itself, might have lent countenance to it. It is a charter of King Alexander II., in which he gives to the monks of Melrose "the lake of Dunscore, in the valley of the Nith, and the pennyland which belongs to the said lake, and whatever is contained within the said lake and land." This, if it stood alone, *might*, I say, lend countenance to the theory that in the thirteenth century there was a lake in the valley of the Cairn. It is true it is called the valley of the Nith here—but that is clearly used in a wide sense, for the same designation is employed in the title of the two charters we have already been considering, which deal explicitly with the valley of the Cairn. The granting of the lake too, to the monks of Melrose might also lend countenance to the tradition that these same monks afterwards drained a lake on their property. But it seems to me that the phrase in the first charter of which I have spoken, about the ford of the Cairn "(looking) towards Glenessland," is, so far as it goes, positive evidence that the Cairn in these days followed the same course that it follows now, and consequently that there was then in all probability no loch in its course. It must be remembered, further, that there is another loch in the parish of Dunscore, viz., that at Friars' Carse, which is on land which we know belonged to Melrose Abbey, so this might quite well be the lake of the charter.

The general conclusion, then, seems to be that, so far as the monks of Melrose are concerned, the great engineering work of which our traditions speaks was not carried through, and did not need to be carried through. Whether it was carried through at an earlier date than theirs is, of course, another question which I have at present no means of answering.

The following is the text of the extracts from charters, of which translations are given in the foregoing paper:—

I. CARTA AFFRICAE DE VALLE DE NITH.

"Universis Christi fidelibus hoc scriptum visuris et auditoris Affrica, filia Edgari, salutem in Domino. Noverit universatis . . . me . . . dedisse et concessisse et hac mea carta confirmasse Deo et ecclesiae Sanctae Mariae de Melros et monachis ibidem Deo servientibus in liberam, puram, et perpetuam elemosinam unam quartam partem plenarie villae in territorio de Dunscore, illam scilicet quae jacet inter Dergungal et

quendam rivulum qui dicitur Pollogan per suas rectas divisas; et practerea de Pollogan per rivulum qui descendit de mussa versus occidentem, et ita de mussa per rivulum qui descendit in vadum de Carno versus Glenesclan, et ita per Carnum versus orientem usque ad rivulum qui dicitur Pollocostertan, et ita sursum usque ad Crossgarriauch quod est meta inter terram canonicorum de Dercongal et Derengorran ascendendo per viam usque Durreswen, et inde descendendo per cumulum lapideum usque in quendam sicum, et ab illo sico fere recte descendendo usque in rivulum antedictum, scilicet Pollogan." . . . (Liber de Melros 200, p. 182).

II. CARTA AUFRICAE DE VALLE NITH.

" . . . Noverit universitas . . . me . . . dedisse et concessisse et hac mea carta confirmasse Deo et ecclesiae Sanctae Mariae de Melros et monachis ibidem Deo servientibus, in liberam, puram, et perpetuam elemosinam, quandam partem terrae meae in territorio de Dunscoer quae continetur infra has divisas; scilicet, a cruce quae dicitur Crossgarriauch quae est meta inter terram canonicorum de Dercongal et Derengorran, ascendendo per viam usque Durreswen, et inde descendendo per cumulum lapideum usque in quendam sicum, et ab illo sico fere directe descendendo usque in quendam rivulum qui dicitur Pollelogan, et per Pollelgan ascendendo usque ad regiam viam qua itur de Dercongal usque ad Glencarn, et per eandem viam usque ad vadum cujusdam sici quod dicitur Athenweran, et sicut idem sicus descendit usque ad quandam semitam quae ducit ad vadum de Carn, et per fluvium de Carn ascendendo usque ad quendam rivulum qui dicitur Pollehoustergan et per eundem rivulum ascendendo usque ad prenominatam crucem quae dicitur Crossengarriauch." (Liber de Melros 201, p. 183).

III. DE LACU IN VALLE DE NITH PRO PITANCIA.

"Alexander, Dei Gratia, Rex Scotorum omnibus probis hominibus totius terrae nostrae salutem. Sciant presentes et futuri nos . . . dedisse et concessisse et hac carta nostra confirmasse Deo et Beatae Mariae de Melros et monachis ibidem Deo servientibus et in perpetuum servituris, lacum de Dunscoer in valle de Nyth et denariatam terrae quae pertinet ad eundem lacum et quicquid continetur infra eundem lacum et terram." (Liber de Melros 203, p. 185).

19th January, 1900.

MR JAMES BARBOUR, V.P., in the Chair.

New Members.—Captain Campbell-Johnston of Carnsalloch; Messrs John Tocher, Chemist; Robert Service, Nurseryman; M. H. McKerrow, Solicitor.

Donations and Exchanges.—Proceedings of the Academy of Natural Science of Philadelphia, Part II., April-Sept. 1899.

COMMUNICATIONS.

The Meteorology of 1899.

By the Rev. Mr ANDSON.

Barometer.—The highest reading of the barometer in 1899 was recorded on 26th January, when it rose to 30·732 in., and the lowest at 4 p.m. on the 29th December, when it fell to 28·377 in., showing an annual range of 2·355 in. The latter was the lowest reading since 1886, the next lowest having been 28·380 in. in 1891. Although this depression was so abnormal, it was not accompanied by so violent a gale of wind or so heavy a rainfall, in this district at least, as might have been expected. But the wind having been from the east, it was more severely felt on the eastern coasts. The gales in the early part of November, which were from the south and south-west, were much more tempestuous, and attended by far heavier rainfalls, although the barometer readings were mostly above 29 in., and only once went down to 28·98 in. The mean barometrical pressure for the year (reduced to 32 deg. and sea level) was 29·922 in. This is higher than the mean of the last twelve years by 0·091 in., 29·922 in., as compared with 29·831 in. The months in which the means were highest, exceeding 30 in., were May, June, July, August, and November. And these were all favourable months in point of temperature and weather on the whole, excepting May, which was cold and wet. The lowest monthly mean was in January, which had twenty-three rainy days, and the next in September, which had twenty-two.

Temperature in shade, 4 feet above the grass.—The highest temperature of the year occurred on the 2nd August, when a maximum of 85 deg. was registered. The lowest or absolute minimum occurred on the 15th December, when a reading of 13

Abstract of Meteorological Observations at Dumfries, 60 feet above Sea Level.

1899.	BAROMETER.				THERMOMETER. In Air and Protected.				HYGRO- METER.		Deductions. Glaister's Tables 2nd Ed.		WINDS.							RAIN.					
	Highest in Month.	Lowest in Month.	Monthly Range.	Mean reduced to 32 degs. and Sea Level.	Maximum.	Minimum.	Monthly Range.	Mean Maximum.	Mean Minimum.	Mean Temperature.	Dry Bulb.	Wet Bulb.	Dew Point.	Humidity. Saturation = 100.	N	NE	E	SE	S	SW	W	NW	Calm or Variable	Number of Days it blew in certain Directions.	Number of Days it Fell.	Amount in inches.
Jan.	30.732	28.790	2.032	29.704	52.0	18.8	33.2	43.4	32.7	38.0	37.6	36.9	36.0	94	2	1	4	5	10	3	4	1	23	5.27	
Feb.	30.545	28.810	1.735	29.795	55.0	20.0	35.0	46.5	33.7	40.1	39.3	37.5	35.2	86	2	2	3	4	5	4	2	3	13	3.35	
Mar.	30.533	28.935	1.598	29.990	64.0	19.0	45.0	48.8	34.7	41.7	41.9	39.7	36.9	85	3	2	1	2	11	7	3	1	15	4.59	
April	30.225	28.957	1.268	29.746	60.0	27.0	33.0	51.8	38.1	45.0	44.3	42.2	39.7	84	2	4	1	4	3	5	5	1	18	3.25	
May	30.550	29.300	1.213	30.018	71.0	31.0	40.0	57.4	39.8	48.6	48.8	44.9	40.4	73	1	7	8	2	2	7	2	1	14	3.44	
June	30.541	29.436	1.105	30.054	84.0	43.2	40.8	71.6	50.1	60.8	60.0	55.6	51.7	74	1	2	5	4	2	5	6	3	2	12	2.44
July	30.487	29.060	1.075	30.062	81.6	47.0	34.6	69.2	54.1	61.6	60.1	56.9	54.1	81	0	3	2	2	3	11	3	7	0	18	2.17
Aug.	30.443	29.620	0.763	30.078	85.0	45.0	40.0	74.3	52.2	63.2	62.0	58.2	55.0	78	0	4	3	6	2	6	7	2	1	10	1.69
Sept.	30.225	29.163	1.048	29.764	76.0	35.0	41.0	62.6	45.2	53.9	52.3	49.7	47.1	82	0	1	1	1	1	9	12	4	1	22	3.05
Oct.	30.440	29.389	0.999	29.998	63.3	26.0	37.3	56.7	39.3	48.0	46.3	44.4	42.3	87	2	1	2	3	5	7	6	4	1	13	2.72
Nov.	30.713	28.987	1.726	30.011	58.0	28.0	30.0	51.8	42.5	47.2	47.3	45.5	43.6	88	0	2	1	2	3	13	7	0	2	16	5.52
Dec.	30.465	28.377	2.088	29.833	53.0	13.0	40.0	40.5	31.4	36.0	34.6	33.5	31.8	90	0	2	8	6	1	3	5	4	2	15	3.19
Year	30.732	28.377	2.355	29.916	85	13	72	56.5	41.1	48.6	48.5	46.2	43.7	83	13	31	36	39	34	91	65	40	16	189	40.86

deg. was recorded. The annual range thus amounted to no less than 72 degs. It is worthy of remark that August had not only the highest single-day temperature of the year, a distinction which most frequently falls to June or July, but that it had also the highest monthly mean, viz., 63.2 deg., which was fully 5 deg. above the average for that month. August was an unusually warm and dry month, with a good deal more than the average amount of sunshine. And this was true also, although not to the same extent, of June and July. On no fewer than eleven days in August the thermometer in the shade registered readings of 80 deg. and above, and only on a very few nights did the minimum readings fall slightly below 50 deg. The mean maximum for August was 74.3 deg., and the mean minimum 52.2 deg., which gives the monthly mean of 63.2 deg. There were other four months in which the mean temperature was in excess of the average, viz., June with an excess of over 2 deg., July with an excess of $1\frac{1}{2}$ deg., October with 2 deg., and November with fully 5 deg. The excess was thus in all about 16 deg. On the other hand, the months in which the mean fell short of the average were April with a deficiency of 2 deg., May of 4 deg., September of $1\frac{1}{2}$ deg., and December of 3 deg. This gives an aggregate deficiency of fully 10 deg., which was more than counterbalanced by the 16 deg. of excess. Hence the name temperature of the year is, as might have been expected, above the average, although not to the same extent as last year. The mean annual temperature, calculated on an average of 12 years, is 47.5 deg. Last year it was 49.5 deg., which was one of the highest of the 12. This year it was 48.6 deg., which is rather more than 1 deg. above the average. There were more than the usual number of warm days during the summer—days with a maximum of 70 deg. and above. There were only two in May, which was a cold month; but there were sixteen in June, fifteen in July, twenty in August, and four in September—in all, 57. The number of nights on which the temperature fell to and below the freezing point was eighteen in January, with an aggregate of 61 deg. of frost, fourteen in February with 56 deg., eleven in March with 56 deg., October had six nights with 18 deg., November only three with 4.3 deg., December eighteen with an aggregate of 114 deg. of frost. As August was the warmest, so December was by far the coldest month of the past year, the monthly mean of which—viz., 37.4 deg.—was 3 deg. below the

average. The absolute minimum of 13 deg. on the 29th of that month was the lowest December reading since 1886, and the lowest in any month since the extreme frost in February, 1895, when the thermometer went down a little below zero. On both occasions the river Nith was frozen over; but in December last this condition lasted but a brief period, and the ice was not so strong as to be safe for skating or curling. On the whole, the year was a favourable one in point of temperature. Had it not been for the comparative coldness of April and May, and the spells of severe frost in the second and last weeks of December, it would have been one of the warmest years of the period of observation.

Rainfall.—The number of days on which rain or snow fell during 1899 was 189 (rain 181, snow 8). This is a little above the average, which may be reckoned at 177. The heaviest fall in 24 hours was registered on 28th March, and amounted to 1·80 in. It occurred in connection with a south-westerly storm of considerable severity. But there were two other months in which the fall for 24 hours exceeded 1 in., viz., on 28th June and 3d November, on each of which days it amounted to 1·01 in. So heavy a fall as 1·80 in. in 24 hours, amounting as it does to 180 tons of water per acre, is very rare in this district. For the most part it is only two or three times in a year that it amounts to or exceeds an inch. The total fall for the year was 40·86 in. This exceeds the average of 12 years by fully 5 in., the mean for that period being 35·57 in. The rainiest month was November, which had a record of 5·55 in., by far the greatest part of which, however, fell in the first two weeks, and was followed by extremely fine weather in the second half of the month. I have noted that on the 4th November the Nith was in very heavy flood. Not only were the Sands flooded, but the water rose as far as the new buildings in Friars' Vennel, and in Nith Street as far as the junction with Irish Street. The depth of the river as shewn by the gauge at the New Bridge was about 12 feet. The rainfall of January was very little short of that of November, amounting to 5·27 in. Twice in that month the barometer fell below 29 in.—on the 12th, when it went down to 28·550 in.; and again on the 21st, when the lowest reading was 28·976 in. The month as a whole was stormy and wet, with strong southerly and south-westerly gales, and moderate temperature until the last week, when a spell of sharp frost was experienced. The driest as well

as warmest month of the year was August, with a record of only 1·69 in., and 10 days on which it fell, as compared with a mean of 4·16 in. The months in which the rainfall was in excess of the average were January, February, March, April, May, and November, with a total excess of about 10 in. The months in which there was a deficiency were July, August, October, and December—total deficiency, 5 to 6 in. It was in the summer months of July and August that the largest deficiency occurred, and although September shewed a slight increase it was more than counterbalanced by the deficiency in October. There were two periods which might be described as periods of partial drought. The first was between the 25th of May and the 17th of June, 24 days during which there was only once a slight shower, which measured no more than one hundredth of an inch, on the first day of June. Notwithstanding, the rainfall of June as a whole was up to the average, the latter part of the month having been characterised by frequent showers. The second period was between the 29th July and the 26th August, during which there were only five days on which any rain fell, and only to the amount of four-tenths of an inch.

Hygrometer.—The mean of all the readings of the dry bulb thermometer for the year was 48·5 deg. It is worthy of note that this almost exactly corresponds with the mean temperature of the year, which was 48·6 deg., as calculated by a different method, viz., by taking the mean of all the maximum and minimum readings. The readings of the dry bulb thermometer are taken twice a day, at 9 A.M. and at 9 P.M., and it is the mean of these which brings out a result differing by only one-tenth of a degree from the mean of the maxima and minima. This shows how nearly these different methods bring out the same result, and the coincidence is not fortuitous. It is only what is to be expected, so that the one may be considered as a verification of the accuracy of the other. The mean of all the 9 A.M. and 9 P.M. readings of the wet bulb thermometer was 46·2 deg., which makes the dew point 43·7 deg. and the relative humidity for the year (saturation being equal to 100) 83. This is slightly above the average annual humidity, which was to be looked for, when we take into account the slight excess both of rainfall and of the number of days on which it fell.

Thunderstorms, &c.—I have noted thunder and lightning six times during the year—once in February, once in May, twice in

June, once in August, and once in November. And thunder without lightning twice. A very marked solar halo was seen on the 22d October, and lunar halos pretty frequently. Hail showers were noted in January, February, March, April, and May.

With regard to the wind directions, the south-westerly was as usual the most prevalent. It blew on $95\frac{1}{2}$ days of the year. The next in point of frequency was the westerly, with 64 days. The north-westerly came next with 40 days; then south-easterly with $39\frac{1}{2}$; easterly with $35\frac{1}{2}$; southerly with $31\frac{1}{2}$; north-easterly with $30\frac{1}{2}$; northerly with 14; and calm or variable with $14\frac{1}{2}$ days.

A paper by Dr E. J. Chinnock, entitled "Ptolemy's England," was read.

9th March, 1900.

Rev. Mr ANDSON in the Chair.

Donations and Exchanges.—Bulletin of the Geological Institute of Mexico; Smithsonian Report, 1897; Report of British Association Meeting at Dover.

COMMUNICATIONS.

1. *On the Nesting of the Nightjar in Glencairn.*

By Mr JOHN CORRIE, Moniaive.

It may be of interest to record a well-authenticated instance of the nesting of the Nightjar in Glencairn, Dumfriesshire. I was previously aware that the bird occurred in the district, but, so far as my knowledge goes, this is the first time that it has been discovered nesting.

My earlier records of the occurrence of the species are as follows:—

1. A single specimen seen hawking for moths in my own garden towards nightfall in the summer of 1888.

2. Bird heard uttering its distinctive churring cry during a night-fishing excursion to Knocksting, a small loch situated on the border of Kirkcudbrightshire.

3. An immature specimen, found in a garden on the outskirts of Moniaive, brought to me for identification, 23rd September, 1896.

These, and a reported occurrence of the bird near Craigdarroch in day-time, are all the records known to me. None of

them, it will be noticed, furnish proof that nesting had taken place in the parish, although the presence of a young bird in September might be accepted as fairly conclusive evidence that a nest was at that time in the neighbourhood. In the present instance the proof is absolute, for one of the parent birds has been seen, the nest site examined, and the young handled. The facts are as follows :—

On the 8th August last it was reported to me that a cuckoo had been found nesting on the open moor near Girharrow, and that two young birds were in the nest. As a pair of young cuckoos in the same nest is an unusual, although, I believe, not an unprecedented occurrence, my interest was aroused, and I at once commenced inquiries. These had not proceeded far before I found reason to conclude that the bird described to me as a cuckoo was in reality a nightjar. Subsequent investigation established this beyond all reasonable doubt.

I first of all called at Girharrow, which is on the Auchencheyne estate, about a mile and a half distant from Moniaive as the crow flies. Here the wife of the shepherd informed me that the young birds had left the nest, but she kindly offered to guide me to the hollow on the hill where the nest had been found. This offer I gladly accepted. Although no traces of an attempt at nest-construction were visible, the precise site could easily be distinguished by a few pieces of broken egg-shell lying in a slight depression of the ground. The neighbourhood of the nest was singularly bare and exposed, and it is evident that the bird depends upon close imitative colouration, rather than cover, for protection. Believing that the birds would not be far off, a sharp look-out was kept, and, less than a score of yards from the nest site, one of the parent birds, evidently the female, rose quite close to us, and commenced a fluttering, broken-winged sort of flight across the heather. I soon recognised that the object the bird had in view was to lure us away from its young, and I remained near the spot where the bird rose. Here a careful search was made, but to no purpose. The shepherd's wife having meanwhile returned to the cottage, I concealed myself, field-glass in hand, behind a friendly rock. After waiting patiently, in anything but a comfortable position, for fully a quarter of an hour, I had the satisfaction of seeing the female bird return to a spot in the near neighbourhood of the place where we had first seen her. I at once followed, and, although the bird took wing

at my approach, I soon discovered a young four or five days old fledgling crouching on the heath. The young bird was covered for the most part with soft downy feathers of a tawny hue, although the wings were already beginning to show the characteristic brown barring of the mature bird. The colouration generally was in marked harmony with the surroundings. During the time I was occupied in examining the interesting youngster, the parent bird continued to hover near me, uttering an incessant "Wheet, Wheet!" a note in which solicitude and anger were curiously blended.

Later on I had an opportunity of interviewing Mr Davidson, shepherd, who was the first to discover the nest. He says the discovery was purely accidental. Chancing to pause on his walk across the hill, he saw the bird sitting at his feet, and wondered why it did not take to flight. It was only when he stooped to examine the bird that he discovered its secret.

The nest was visited several times subsequently, both by him and by other members of his family, but the bird never appeared to be alarmed, and was always reluctant to leave its eggs.

It is a matter for satisfaction that a species, which occurs so sparingly, was permitted to rear a brood in safety. Mr Davidson's conduct calls for commendation, and my personal acknowledgments are due both to him and to Mrs Davidson for their courtesy and kindness.

2. *Regarding the Origin of the Ruthwell Cross.*

By Mr JAMES BARBOUR.

The popular account of the origin of the Ruthwell Cross derived from tradition affirms that on being conveyed by sea from some distant country it was shipwrecked at a place called Priestwoodside, in Ruthwell Parish, and the pillar, so destined it was thought, was erected there. Subsequently the monument was removed from its original site for conveyance to the interior, and by way of propitiation for the success of the venture a widow's oxen were engaged, and put to the yoke. After proceeding some way, however, the tackling gave way, and the cross stranded. It was re-erected on the spot where it fell, and a place of worship was reared over it, which became the church of the Parish.

The point I desire to direct attention to is the idea of the foreign origin of the Cross contained in the tradition, and still prevalent. It is a common way of accounting for the presence of works without a history, and possessing merit superior apparently to any effort of local skill as this is.

I propose to submit some considerations which tend, I think, to give support to the opposite view. These refer chiefly to the material of which the Cross is cut, and its similarity to the rock native to the locality. Should the stone be found to agree with that native to the place, the reasonable inference would appear to be that the Cross was sculptured in the neighbourhood of the spot where it stands, as it is unlikely that the material would be exported in order to its being worked elsewhere, more likely the sculptor may have come from abroad.

The Rev. Dr Duncan, and Professor Stephen, of Copenhagen, evidently incline to regard the material of the Cross as having been taken from some not very distant quarry. The former, to whose care the preservation of the monument is largely due, speaking in support of an opinion that the Cross was executed at two different periods, says:—"The column is formed of two separate blocks of sandstone, both of them probably taken from the neighbouring hills, but evidently from different quarries; for although they are both of a coarse texture and of a reddish colour inclining to grey, such as is to be found in the vicinity, the upper stone is distinctly of a deeper hue than the other."

It is to be observed in this connection that the peculiar variation of the colour, spoken of by Dr Duncan, is a distinguishing characteristic marking the native rock.

The testimony of Professor Stephen is as follows:—"The stone," he says, "is a hard red grit found near Dumfries, some miles away, and might have come by sea. The Ruthwell Railway Station appears to be from the same quarry. The stone of the Bewcastle district is not the same. The style of the sculpture also is different. Neither are the runes alike."

Although the stone of the Ruthwell Railway Station bears a considerable degree of resemblance in some respects to the Cross, it differs materially in respect of the colour, which is light red. The stone was taken from Drumlanrig tunnel and conveyed to Ruthwell on the railway, as Mr M'Kune, railway inspector, who assisted at the quarrying of it, informs me.

But there is no occasion for supposing that the material of

the Cross was carried from so distant a place as Drumlanrig, or even from the neighbouring hills about Ruthwell, as suggested by Dr Duncan. Rock fulfilling the required conditions is obtainable in the immediate vicinity.

Having occasion recently to examine another interesting and important historical monument in the same parish—the old Castle of Comlongon, standing not far from the Cross—I was struck with the appearance of the freestone forming the dressings, which is of a character I had not observed in other buildings in the district. The blocks vary both in colour and texture, but some of them seem to agree exactly in these respects and otherwise with the material of the Cross. It has not been ascertained where these were got, but as field stones about are of similar rock it may be inferred that the quarry was a local one. On further inquiry it was ascertained that during the construction of the Glasgow and South-Western Railway one of the contractors worked a quarry at a place about 300 yards north of the Ruthwell Station, the position of which is still apparent from the remaining debris. A fragment of stone obtained at this place is found to exhibit all the characteristics of the rock out of which the Cross is formed, as will appear from the following details:—

The rock composing the blocks of which the Cross is built distinctly differs in colour and in general appearance from the common Dumfriesshire red stone. It is a hard sandstone, of coarse texture, and a purplish grey colour, marked with glimmerings of mica. A peculiarity already alluded to in connection with Dr Duncan's description consists in a difference of the hue of the upper and lower blocks forming the shaft. The upper block is stained blood-red, but the stain does not pass quite through the stone, and one face retains the general hue, a circumstance which Dr Duncan has evidently failed to observe, and which disposes of the suggestion that the blocks were taken from different quarries, and of the theory that the Cross is of two different periods. The formation of the stone is chiefly silica cemented with oxide of iron; the predominance of the latter occasions the blood-red stain described. Lime appears to be absent.

In comparison with the Cross, the piece of stone obtained at the quarry near the Ruthwell Railway Station is perceptibly darker in colour and also perhaps closer in texture; but these

apparent differences are not greater than may be accounted for by the bleaching and wasting incident to the Cross through the long exposure to which it has been subjected. The Cross itself, apart from the red stain, varies in both respects, and partly at least through unequal weathering. The piece of stone before referred to is of the same formation as the Cross. Although bastard limestone occurs in the district, which was worked at one time, no evidence of lime is found in its composition, and it exhibits at one end a spot of the peculiar blood-red stain which marks so conspicuously one of the pieces of the Cross.

The facts stated are, I submit, fairly conclusive of the stone having been obtained from a local quarry; and it follows that in all probability the Cross was sculptured and first set up in the vicinity where it stands.

It would be interesting could some clue be discovered regarding the author of so famous a monument. Professor Stephen's interpretation of words said to have been inscribed on the top stone is certainly suggestive in this connection—"Caedmon made me" is the rendering. According to the professor it applies to the runic inscriptions on the sides of the Cross; but considering the ancient usage of inscribing the artist's name on such works, and the ordinary and natural signification of the words, it seems at least as likely to apply to the Cross itself.

In closing the paper I may be permitted a word of reference to the sculptures. They are artistically worked, and the treatment of the subjects appears to be well developed. On one side of the base, for instance, there has been a representation of the Crucifixion. It is greatly defaced, and in part quite obliterated. So far as discernible it shows, in the centre of the picture, a large cross with the crucified Christ, of which only the limbs remain. On one side may be traced, I think, indications of a smaller cross. At the foot of the cross were a group of figures. The moon or the sun shorn of its splendour appears in the firmament in allusion to the passage—"And when the sixth hour was come there was darkness over the whole land until the ninth hour." Heavy folds of drapery frame the picture on either side, the inner edges converging at a point in the centre, and parting widely at top and bottom as if by violence, according with the Scriptures—"And the veil of the temple was rent in twain from the top to the bottom."

3. *The Roman Name for Birrens.*

By Dr CHINNOCK.

At the end of my paper on the Roman Roads in Britain I asked if anyone could explain the meaning of the Roman name for Birrens—*Blatum Bolgium*. After long search I find that the late Dr Edwin Guest (*Origines Celticae*) has suggested that it means the “Field or District of the Belgians.” In the second Road given in the Antonine Itinerary, the three last stations are called Luguballia, Castra Exploratorum, and Blatum Bolgium. Camden, the first of British Antiquaries, identified *Luguballia* with Carlisle, and no one has since disputed the correctness of his decision. *Castra Exploratorum*, or the *Scouts’ Camp*, was first identified with Netherby by Horsley, and this is now recognised to be correct. Since his time an inscription has been found at Netherby which speaks of a riding school for cavalry (*Equestris Exercitatoria*), an establishment peculiarly suitable for the Scouts’ Camp. All competent authorities, British and foreign, now identify the last Station, *Blatum Bolgium*, with Middlebie or Birrens. About two miles from the site of the Roman Station is that of the strong British fortress called Birrenswark or Brunswark. *Bryn* is the Welsh for a *hill*. At Birrens several altars have been dug up dedicated by soldiers of the second cohort of the legion of the *Tungri*. This shows that the Roman Emperor stationed that legion at Birrens. The *Tungri* were a tribe of the *Belgae*, a nation which inhabited the country now known as the north of France and the kingdom of Belgium, from the Seine to the Rhine. The modern town of *Tongres* in Belgium derives its name from the *Tungri*. The *Belgae* were also sometimes called *Folgae* or *Bulgae*. The name *Blatum Bolgium* was evidently derived from some native or British appellation which was adopted by the Romans. Now there are four dialects still extant of the old British or Celtic language—the Gaelic, the Irish, the Manx, and the Welsh. I consulted the Gaelic, the Welsh, and the Manx dictionaries at Dr Williams’ library in Gordon Square, and at the library of University College, but there is no such word to be found with the appropriate meaning. In Gaelic there is the word *blat*, meaning a *flower*, but this will not answer our purpose. I went to the British Museum and consulted O’Reilly’s Irish Dictionary, and there I found what I wanted. *Blu* means “a town, village,

place of residence, a green field." *Blar* means "a plain, a field" *Blath* means "a field." The Roman name *Blatum Belgium* then means "the field or the town of the Bolgae or Belgae." The Roman emperors stationed a legion of their Belgian subjects there, consisting of the tribe of the Tungri and, maybe, other Belgians. The natives called the station the "*blath* or *blat* of the Belgians," and the Romans latinised the word into *Blatum Belgium*, or the "Belgian Settlement."

20th April, 1900.

MR JAMES BARBOUR, V.P., in the Chair.

New Member.—Mr Alexander L. Davidson, Clarencefield.

Donations and Exchanges.—Transactions of the Cardiff Naturalists' Society; Proceedings of the Natural Science Association of Staten Island; Boletín del Instituto Geológico de Mexico, No. 13.

A paper on "The Artists of the Ruthwell Cross" was read by Mr A. L. Davidson.

18th May, 1900.

MR ROBERT MURRAY, V.P., in the Chair.

New Members.—Miss Cresswell, Nunholm House; Mr James Laidlaw; Mr William Carswell.

Donations and Exchanges.—The Transactions of the Marlborough Natural History Society; Bennett's Contributions towards a Flora of Caithness.—III.

COMMUNICATIONS.

The Vegetable Enemies of Mankind.

By Professor SCOTT-ELLIOT.

Dr Johnson defines an enemy as "a person who regards you with malevolence," and Daniel Webster as "a person actuated by unfriendly feelings, one who hates, wishes injury, or attempts to do injury." It is not in this sense that any plant can be said to be an enemy to mankind; but only in the sense that for the sake of its own protection or benefit in one way or another, it is

endowed with qualities which may be productive of injury to man or to other creatures that are useful to him.

The first example given by Professor Elliot is that of a fungus which infests the corn plant, living inside the leaf and stem, and with its delicate food-sucking threads bores among the live cells and absorbs food from them. This is said at times to have done immense damage to the corn fields of America and also in Cape Colony. When it is considered how large a part of the food supply which this country needs comes from America, it will be seen how much injury may be done to ourselves as well as to the States by crop failures occasioned by the prevalence of this destructive fungus and other plant diseases. The entire loss in that country from these causes has been estimated at 150,000,000 dollars annually. Then we have a large class of plants which are poisonous. The oleander, a lovely garden shrub, is one of these. All parts of it are poisonous. The cyclamen, one of the most beautiful of flowers, is another. The corms or fleshy bodies at the foot of the stem are of poisonous quality, although it is said when cooked they are no longer hurtful. The poor man's weather-glass, so called from its closing its petals in damp or wet weather, which produces bright-crimson or dark-blue specks of flowers in the stubble, is another example. The arum-maculatum, or wake-robin, is also poisonous—supposed to be so for its protection from pigs and wild boars, which are given to grubbing up and eating the underground creeping stem. The upas tree of Java (*Antiaris toxicaria*) was at one time the subject of much exaggeration by a Dutch surgeon, who described it as fatal to other plants or animals and birds in its neighbourhood or coming near it, but which, nevertheless, has a poisonous property residing in its bark which produces frightful irritation, and the juice of which is used as one of the ingredients of poisoned arrows. Other well-known poisonous plants are *scabiosa succisa*, or Devil's bit, which produces violent inflammation of the mouth and tongue; *digitalis purpurea*, or foxglove; aconite, strychnine, strophanthus seeds, Calabar bean, and Muavi bark. At the same time it is well known that some of our most valuable medicines are derived from these poisonous plants when administered in minute doses. The fungus which causes dry-rot in houses or ships, and sometimes works havoc in woods by attacking live timber trees, is a very destructive agent; but it has important uses also in its proper place, its design being to break up dead

logs and turn them into soil, which it accomplishes by boring into the wood, and so disorganising it that it becomes soft and powdery and falls rapidly into earth. Another and very large and important class of plants, which may in some sense be described as enemies of mankind, is the class of weeds, the number and adaptability and hardness of which, in the midst of all attempts to keep them down, is proverbial. The original curse upon man after the fall was—"Cursed is the ground for thy sake. Thorns also and thistles shall it bring forth unto thee." Some of them, like coltsfoot and bishopsweed, fight underground. The long, deep-buried roots and stems spread below the surface and steal a march upon their neighbours, and often go so deep as to be beyond the reach of the gardener's spade. In old days in Scotland the guil or gul (*chrysanthemum segetum*) used to be one of the most troublesome pests, so much so as to be made the subject of legislation— "Gift thy fermer put any guile into the land pertaining to the King or to ane Baron, and will not clenze the land, he sould be punished as a traitor, quha leads and convoys ane host of enemies."—Stat. Alex. II., c. 18 (Jamieson's Dictionary). It was said that this weed used to cover five times as much space as the corn in a cornfield. Unlike the weeds which spread beneath the surface, and have roots which send out fresh stems, the couch grass throws out long overground runners, which send out fresh roots and thus multiply the plant. These are more easily removed by the harrow or rake, or killed by ploughing deep into the soil. But the plant is by no means useless, affording, as it does, nourishing food to cattle.

There is another class of weeds, the seeds of which are endowed with properties which enable them to spread over a wide area, and to multiply their kind by taking root in places at a distance from the original plant which gave birth to them. Of this kind are those with delicate hairs or feathery projectors attached to them which are caught by the wind and sent flying away in different directions. The humble weeds of America are specimens of this kind, and among ourselves the dandelion and the thistle are familiar examples. Provision is thus made for bare spaces of ground, which man has left uncultivated, being speedily clothed with an abundant vegetation.

There are certain grasses which approach nearer to one's idea of a vegetable enemy than anything else. The

fruit ends in a long tail, which has the property of curling itself up when the air changes from moist to dry. The point of the fruit is hard and sharp, and when it falls or is blown upon a sheep's back the tail catches in the hairs of the wool, and by the corkscrew twisting which takes place the sharp point is forced into the skin of the sheep, and sets up inflammation, which often kills the animal. Examples of this kind are *Stipa capillata*, which is common in Russia. A North American species is *Stipa spartea*. Another is *Aristida Hygrometrica* in Queensland, and *Heteropogon contortus* in New Caledonia. The Harpagophyton or Harpy plant of South Africa is almost as bad, but with this difference, that its spiney fruits get into the mouths of grazing cattle and produce laceration, or into the hoofs of the puny buck or the antelope with a similar result. Other plants become a nuisance to mankind on account of their taking to the water and interfering with his navigation. Of these the Sudd of the Upper Nile is the best known. It is not one plant, but a matted and felled mass of many species, of which the Papyrus, Pistia, Stratiotes, &c., form a part. Steamers have their wheels choked, and even large and powerful ones are sometimes caught and kept helpless among the weeds. Another numerous class of plants which may be termed vegetable enemies are those which are possessed of stinging properties. The most familiar example of this kind is the common nettle (*Urtica dirica*), everywhere abundant, but particularly near human habitations, or on waste ground of their former sites. The stinging apparatus is a hair with a sharp point, which breaks off and pours the venom, purmic acid, into the skin. Notwithstanding this peculiarity it is a useful plant. Young tops of it are good as a vegetable for making soup. Pigs and fowls are fed on it. The seed yields a species of oil, and the whole plant is said to be a stimulant in paralysis. There are other species of the same genus, the stem of which is more severe than that of the common nettle. One of these is *Urtica stimulans*-Java, the smart of which lasts 24 hours, and even produces fever. Still worse is "*Urtica Urentissima*"—the Devil's leaf—of which the pain lasts 12 months, and sometimes proves fatal. A very lovely tree in Australia—"Laportea Miroidies"—has large and beautiful dark green leaves, twelve to fifteen inches long, which sting so severely as to be dangerous to horses. It is said that even the common fig leaf produces irritation. Probably the worst enemies of all to mankind are

certain associations of plants which cover vast stretches of ground, and are of no obvious use to anyone. No part of the world is free from enemies of the kind. Here we have the peat bog, *Sphagnum*. Another is the prickly pear in South Africa. In Queensland there are vast areas covered by the Brigalow Scrub, *Acacia Narpaphylla*. Even worse is the Spinifex—so-called—not the botanists' true Spinifex, which is a harmless and useful grass, used to bind and fix the drifting sand, but *Triodia pungens et irritans*. The stiff, hard, and spiny leaves make tracts of the country almost impassable, and indirectly have caused the death of many explorers. Another similar grass—*Fertuca Alpestris*—is a pest in the Southern Alps. In the first stages of man's progress the forest and swamp were his deadly enemies. Even now there are enormous areas of the world forest clad, especially in Africa. Our own country was once to a large extent in the same condition, but the remains of the Caledonian forest are too much altered by the progress of agriculture and the continual cutting down for firewood, and other useful purposes, to enable us to form any accurate idea of what the forest meant to our ancestors. Hence it is obvious that as man develops and multiplies, the forest or most of it, at least, must fall, just as it has fallen in Britain. Yet here we again come to the curious blend of good and evil. Without forest on the hills to hold, suck up, and restrain the rainfall, we should have on all the low grounds periods of destructive floods, varied by other periods of still more destructive drought, and for us who live in towns the glimpses of the woodland and wild nature are an absolute necessity. Morally and spiritually, as well as physically, it is necessary to go occasionally to the desert to recognise on what our life depends, to see the beauty which is so infinitely more satisfying than the strong structures of cities, and to sympathise with our relations beyond the seas.

A paper by Dr Chinnoek on an "Origin of the Itunic Alphabet" was read.

FIELD MEETINGS.

The first field meeting for the season took place on the 9th of June. The programme for the day was a drive from Castle-Douglas, embracing Threave Castle, the reputed site of an old Abbey near Glenlochar, Balmaghie Church, and Croft moat, but the state of the weather seriously curtailed it. The Dumfries party reached Castle-Douglas in a downpour of rain, where they were joined by Dr Reid, of Balmaghie, and Mr Inrie, architect, and drove at once to Abbeyyard, reputed to be the site of an old Abbey, and marked as such on an old Ordnance Survey map. No trace, however, now remains of such a building, if one ever existed. Crossing the Dee at Glenlochar Bridge, the party next proceeded to Balmaghie, where they inspected the church and churchyard, the former of which dates from 1794, and has recently been improved and enlarged, having a handsome pulpit of carved oak, and behind it a Rood screen of similar character, the gift of Mr Graham Hutchison of Balmaghie, who also presented two stained-glass windows flanking the pulpit; while at the opposite end is another beautiful three-light window, the gift of a brother. The church contains mural tablets commemorative of former ministers, the most noted of whom was the Rev. John McMillan, founder of the modern Cameronian Church, whose incumbency of Balmaghie extended over 26 years, in the beginning of last century, during all but the first three of which he was maintained in the benefice by the parishioners in the face of a sentence of deposition by the Presbytery. The only remarkable thing about the churchyard is that it contains the tombs of three martyrs who suffered in the times of the persecution. The party were afterwards hospitably entertained in

the manse, and drove back to Castle-Douglas, constrained by the unfavourable weather conditions to forego the remainder of the projected round.

The only other field meeting held during the summer took place on the 30th June, when the Lochrutton Loch was visited. The primary object of this excursion was to make an examination of the crannog in the loch, and with this in view the party was accompanied by Dr Munro, of Edinburgh, the distinguished authority on lake dwellings, and the author of several works on this and other subjects of antiquarian interest. The crannog is on an artificial island near the west shore of the loch, now almost completely overgrown with vegetation and trees. Unfortunately, the water was too high to permit of proper investigation, but sufficient evidence was found of the fact that the island was the site of an ancient lake dwelling. After slight digging, a stone hammer-head and several pieces of glazed pottery were unearthed, while by a preliminary investigation in more favourable circumstances, conducted by Mr Barbour, architect, the crossing of two of the black oak beams composing the structure had been uncovered, and a hearth with charcoal and brushwood exposed. It was accordingly resolved to have a more thorough investigation at some subsequent period when, by the lowering of the water in the loch, the conditions were more favourable.



Account of the Excavations at Birrenswark, and description of the Plans and Sections.

By JAMES BARBOUR, Architect, F.S.A. Scot. (Plates III.-VIII)

[Extracted by permission from The Proceedings of the Society of Antiquaries of Scotland, Vol. XXXIII.]

Birrenswark Hill, in the parish of Hoddum, lies three miles north of the Roman station of Birrens, and ten as the crow flies from end of Hadrian's Wall, at Bowness, in Cumberland. Its base is about 700 feet above sea level, and the summit rises to an altitude of about 920 feet, the highest point reaching 939 (Plate IV.). The hill is isolated, its sides are steep and at places precipitous, and the summit is a nearly level plateau. Owing to the peculiarity of configuration and commanding position, it forms a conspicuous and remarkable feature of the landscape; and the summit affords extensive prospects of the country in all directions, the English hills, the Solway, Bowness, and Birrens being within view and a number of Scottish counties overlooked.

At a place like this it is not surprising that evidences should be found of military occupation; and the remains of artificial works of this description, grouped about the hill, are not less unique than the hill itself.

The remains, as will be seen by referring to the accompanying plan (Plate III.), consist of a number of works lying round the base of the hill, and of others on the hilltop. Of the first are a large camp of rectangular type on the south side of the hill; another of similar character, but smaller, on the north side; remains of an entrenched roadway, AB, at the east end, for communication between these; a small fort, C, at the west end of the hill; and an enclosure, D, at the east end; also the minor adjuncts, E and F, on the plan.

The south camp contains a small rectangular redoubt, G, at the north-east corner, and a circular work, H, at the west end.

A circumvallation likewise extended apparently round the base of the hill on the east and south, one end joining the north camp, and the other the west fort. It is yet continuous from the north camp to the east enclosure; between the east enclosure and the south camp, where the site is partly under cultivation, only a fragment, K, is left; west of the south camp the line is again traceable some way, L, and at its junction with the west fort. These, together with the north and south camps, would

embrace two-thirds of the circuit of the hill. Over the remaining one-third there is no trace of entrenchment, and such would hardly be required. The hill there is skirted by land still marshy, although elaborately drained, which would, there is little doubt, be impassable formerly, and the ascent which starts out of it is steep and difficult to climb. In this way the marsh and artificial works together would entirely circumvallate the hill.

In the middle of these works rises the elliptical truncated cone of the hill, the top of which is a large fort, shaped after the outline of the plateau. The west end of the fort is cut off by a transverse rampart so as to form a pear-shaped enclosure, M, within which, towards the west, is a small fortlet, N.

It is a circumstance to be noted that the three larger works are each environed with fortifications provided with gateways on the several sides, and are independently complete and defensible.

With the view of throwing light on vestiges so extensive and apparently important, the Council of the Society of Antiquaries resolved to institute exploratory excavations, and accordingly operations were begun on 20th June last. Three workmen were employed, and sometimes four, under the superintendence of Mr Alexander Mackie, as Clerk of Works; and after three months' labour the investigation had been carried through and was brought to a close.

Obviously, in this case, the excavations must bear an exceedingly small proportion compared with the extent of the surfaces presented for examination. The south camp covers over 13 acres; the area of the north camp is nearly 8 acres; the hilltop fort measures 17 acres; and the total area within the circumvallation would extend to not less than 100 acres. The ground actually turned over in the course of carrying out the exploratory operations, on the other hand, little exceeds an acre in extent. One inference to be drawn is, that the seemingly rather sparse collection of relics recovered must be multiplied many times to represent the volume of objects probably scattered over the unopened ground.

The excavations were directed chiefly to testing the accuracy of General Roy's plan and of the Ordnance map; ascertaining the character and structure of the ditches, ramparts, and gateways; and examining the interior areas for vestiges of work, and for evidences of occupation. The relation the several works bear one to another was also kept in view.

The following operations were conducted:—Sections were made through the entrenchments at a number of places; several of the gateways were excavated, and trenches were cut longitudinally and across the interiors of the enclosures. The interior of the redoubt in the north-east corner of the south camp was wholly uncovered of earth, and in the centre of the camp a considerable extent of ground was opened in making search for a prætorium.

In proceeding to examine the several works in detail, according to the evidence afforded by the exploratory excavations, the nature of the site may be first alluded to. According to the Ordnance Geological Map the rock formation at the base and sides of the hill is Old Red Sandstone, and at the plateau top it is porphyrite. While at the hilltop the rock is harder, it also lies for the most part at the surface or nearly so, and the depth of soil increases gradually lower down. It is suggested that the formation described and other conditions to be noticed in due course may have imposed some of the irregularities of the plan, and variations in the design of entrenchment, which the encampments exhibit; and the constructive methods discovered, wherein stone is largely applied, were probably influenced through the abundance of such material to be readily got by quarrying on the spot.

THE SOUTH CAMP.

This camp, apparently the most important of those at the foot of the hill, lies at its south base. Its surface is slightly undulatory, and steeper at some places towards the north, and according to section X.Y. (Plate IV.) the altitude rises about 70 feet between one side and the other.

The Ground Plan (Plate III.).—The outline of the ground plan may be described as a distorted rectangle, having the sides approximately rectilinear. Some of the divergences from geometrical form of outline exhibited seem, as before suggested, to have resulted from practical considerations, as, for instance, at the south and east sides, where the rampart follows an abrupt elevation of the ground. The south line is straight but for a slight deflection northwards at the west end, and the east side runs in an even course up to its junction with the redoubt; the angle, however, at the south-east corner of the camp is acute. The north boundary, so far as the line lies between the two out-

most gateways, is also straight, but beyond these points it deflects southwards, slightly to the west, and markedly towards the east. The west defence is pushed forward at the centre, forming a knee, from which on either side it runs in a straight line to join the north-west and south-west corners of the camp respectively; and the deflection is just sufficient to admit the small circular work, H, within the camp without impinging on the rectangle of the area, as it might be defined by a straight line drawn from the extremities at the rear of the rampart. That this is not accidental is further evidenced by the way in which the circular work fits in with the side of the street and with the rampart, which shows a perceptible shoulder concentric with its circumference. All the corners of the camp are rounded.

The dimensions over all, including the redoubt, are:—On the south, 900 feet; on the north, 850 feet; on the east, 600 feet; and on the west, 700 feet; average length, taking into account the forward bend at the west, 900 feet; and width, 670 feet. The interior length extends approximately to 840 feet, and the width to 580 feet.

Three entrances give access to the camp from the north, the centre one being about 50 feet wide, the others 35 feet. Each is guarded by a quasi-circular mound or tower, about 60 feet in diameter at the base. These mounds are known locally as "The Three Brethren." The interspaces, it should be noticed, are equal, evidencing that the work was not set out without line and measure. Central gateways occur also at the south, the east, and the west, each guarded by a traverse, but of oval form.

The redoubt, G (see fig. 8), is rectangular, with rounded corners; and an unprotected gateway at the south gives entrance to it from within the camp. The interior dimensions are:—from north to south about 100 feet, and 70 feet from east to west. The work shows a want of alignment with the camp, which, together with other indications of severance, suggests a possible difference of epoch in relation to the main work.

Within the redoubt again is a small square enclosure, lying diagonally in the centre. It measures about 30 feet each way, and the likelihood seems to be that it was superimposed on the original work at a subsequent period. Unlike the redoubt itself and the camp, it is disposed with true orientation.

The small circular work, H, at the west end of the camp

measures 80 feet in diameter, and shows an entrance about 10 feet wide towards the south.

The streets do not remain so definitely marked, except at the gateways, as to allow of the lines being traced with certainty on the plan. Doubtless they would traverse the camp from east to west and from north to south, in connection with the entrances, and there might be others.

It now only remains in connection with the plan to notice the water supply. The supply is derived from a fine spring known as "Agricola's Well," which rises about midway between the east and the west, and towards the north side of the camp. As a rill it flows in a small and slightly wimpling ravine southwards, and escapes through the south rampart at a point a few feet west of the south gate. Before reaching the rampart, however, it passes through a circular basin of some size, artificially made.

The Defences.—The enceinte of the camp is of the common single ditch and rampart type. The ditch is V-shaped, with steep scarp and counterscarp, and at the north side of the camp, where the earth is of less depth, it dips at the bottom into the rock, or debris of rock, 2 feet or more (Plate V. fig. 1).

The rampart is earth-built and in layers. At the base is a bed of finer earth, about 9 inches thick, probably the original soil on the site with that from the area of the ditch added; over this a bed of clay, $1\frac{1}{2}$ to $3\frac{1}{2}$ inches thick, occurs, and above the clay the mound is carried up and brought to its full height with earth and debris, which increases in roundness of grain as it nears the crown, as if applied in the order it was cast from the ditch. Remains, but scanty, of brushwood bonding occur in the earth composing the rampart, and at two places charcoal was found at the base in some quantity.

Probably, as already suggested, the abundance of stone obtainable on the spot may have induced the builders to adopt methods not previously met with in the Society's excavations of insuring for their work the qualities of strength and endurance. Thus the front of the rampart, from the natural ground surface, or lower, upwards to the crest, was found to be faced with a pitching of stone (Plate V. fig. 1); and the ditch, at the north side of the camp at least, is also lipped with stones, and partially so faced on the counterscarp. The pitching of the rampart varies in the quality of material and workmanship, as if skilled and less

skilled workmen were employed, and it is also more disturbed at some places than others. Where in best form and most perfect, the stones, which are flattish and unshaped, do not lie level on the bed, but slope, so that the lower edge of one overlaps the upper edge of another somewhat after the manner of slates on a roof.

At the rear of the rampart, where the ground was opened, a pavement, about 5 feet wide, was usually found, but at one point kerbing takes its place. Generally the pavement is of heavy material and good workmanship, but, as in the case of the pitching, the quality varies.

Allowing for diversities of the kind alluded to, these ramparts exhibit, so far as opened, uniformity of structural detail. The turf was removed at one or more places on each of the several sides of the camp, and in every case stone pitching was disclosed. The sections cut in the rampart at the north side, and a partial cutting at the south, showed lamination similar in each case, but it was not observed at the west side.

In addition to the stone-work before described, a piece of an exceptional kind occurs. Four feet below the crest of the rampart, at the north side of the camp, there is a single stone, measuring $4\frac{1}{2}$ feet by $2\frac{1}{2}$ feet and 5 inches thick, as from the quarry, lying flat (Plate V. fig. 1). It is pierced with six holes under an inch in diameter, and running in a long slanting direction, in which were pieces of charcoal. The holes are apparently natural.

The fortifications of the redoubt at the north-east corner of the camp are of a different type, and consist of a ditch and double rampart (figs. 2, 3, 4), half the earth got from the ditch having been cast inwards and the other half outwards. There is a structural difference also, in so far as the stone pitching is absent. On the other hand, remains of lamination and brushwood, as previously described, are disclosed in both the front and rear ramparts.

Under the inner rampart of the redoubt, at the north (Plate V. fig. 4), is a layer of stones corresponding with those discovered in similar positions at Birrens and Ardoch. It measures 8 feet in breadth in the direction of crossing the rampart, but how far it extends lengthwise was not ascertained. It is of excellent workmanship, and remains in perfect order. The stones are well fitted, and bedded and cemented together with worked clay.

There is also a layer of very thin stones at the base of the outer rampart, which is not indicated on the drawings.

The counterscarp of the ditch between the ramparts at the same point shows a kerbing at the lip of stones two courses high, and lower down there are three courses, the faces of which are splayed to suit the slope. The stones are bedded and jointed with clay.

The most important piece of masonry, however, in this connection consists of two parallel walls crossing the centre of the north rampart of the redoubt (Plate VI. fig. 5). The walls flank a passage, 4 feet 8 inches wide, which is floored with a hard substance, like concrete. Each wall is 3 feet in thickness, and the remains rise at the highest point to 3 feet and extend 24 feet in length. The length northwards is complete, but at the south, where there is a collection of stone debris, the ends are broken off and imperfect. The walls are fairly built, and towards the passage the faces are finished with greater care. The position this structure occupies in the rampart and its passage-like form seem to mark it as a gateway originally, closed by subsequent alterations.

In regard to the dimensions of the fortifications described, those of the camp are larger at the north than elsewhere, partly resulting from the rearward fall of the site, but doubtless also of design, in order to equalise and adapt the defences in view of the opposing higher ground. The width on that side varies from 42 to 58 feet over all, but on the other sides, where the rampart is reared on a natural bank or on rising ground, it is contracted to from 30 to 35 feet. The double rampart of the redoubt and the intervening ditch together measure 48 feet across.

The ditch of the redoubt is much silted up, but the ramparts do not seem to be materially disturbed. The camp ditch is correspondingly silted, but the rampart, although disturbed more or less, continues for the most part in comparatively good form, and at the section (Plate V. fig. 1) it is apparently perfect, or nearly so, as the stone pitching of the face remains in order up to the crown.

The Gateways.—The east gateway of the camp was first examined, and the work consisted in excavating the traverse ditch and clearing away the earth from the rearward area. As disclosed, the entrance measures about 40 feet in width, and the roadway passing into the interior without depression at the

ditch or rise at the rampart, has been surfaced with pavement of heavy stones (Plate VI. fig. 6), of which about one-half remain on the ground, but in a disturbed state. The oval traverse, measuring about 50 feet in length and rising 9 feet above the bottom of the ditch and 3 feet above the paved roadway, remains apparently of the height it was originally. It is pitched all round, like the front of the rampart of the camp, with flat stones; and the well-formed V-shaped ditch fronting and flanking the traverse, 7 feet in depth below the ground surface outside, is also partially faced in the same way.

The gateways at the west end and the south side of the camp are of similar design, and the partial clearing of the earth from the west one disclosed a roadway surfaced with pavement.

The three gateways of the north side of the camp, as previously stated, differ from those just described in so far as the protecting mounds are circular and of larger dimensions, being so designed, it is presumed, in order to adapt them to the particular circumstances of the situation.

With a view to investigate the centre one, the roadway and half the traverse ditch were cleared, and a section was carried from the south side half-way through the mound (Plate VI. fig. 7). The roadway, like those at the east and west, had been surfaced with pavement, of which, however, only a fragment remains. The traverse, or tower, which is built over a rough pavement, exhibits nothing special in the disposition of the earth composing it, but, like the oval traverses, it is stone pitched all round, and seems to be of the full original height. The ditch, which dips 2 feet into the rock, is also partially stone-faced. The mound rises 12 feet above the surface of the gateway, $10\frac{1}{2}$ above the bottom of the traverse ditch, and about 2 above the surface at the outside of the ditch.

Of the two others, the east one was excavated, and discovered to be similar to that just described, and the one on the west, so far as appears, also corresponds.

The Interior of the Camp, as disclosed by the excavations, appears to have been widely surfaced with pavements. The pieces, however, are in such a disturbed and imperfect state as to preclude inference regarding their purpose or meaning. Remains of stone-work exist also all along the margins of the rivulet; the circular basin near the south of the camp, through which the water flows, is stone-faced in thin receding courses,

and there are stone remains adjacent to where the rivulet passes through the rampart. But the most important vestiges of this description were discovered in the centre of the camp, and consist of walling, pavement, and debris, evidently of large and important buildings, &c. (S). The traces were followed 180 feet in length from north to south, but both ends were broken off, and no idea of what the full length or the width might be could be obtained. A part of the front wall, which is sufficiently well defined, measures $2\frac{1}{2}$ feet in thickness, and 30 feet backwards is another marking of a wall of similar thickness. The remains lie on the east side of the main cross street, and 30 feet back from its centre; they block the main longitudinal street, and while not parallel with the former, the front lies at right angles with the latter. The position is very similar to that of the Prætorium at Birrens.

At the centre of the main cross street, and opposite the south end of the remains just described, there is a small fragment of stone-work (T) disposed as a segment of a circle, and measuring about 12 inches in thickness. It is mentioned in relation to another fragment of similar form in the redoubt to be presently noticed.

The interior of the redoubt (fig. 8) showed patches of pavement and a good deal of stone debris, as if the whole area had been so floored; possibly other purposes also may have been served. Two drains disclosed should be noticed as resembling in construction one found within the hill-fort. One starts at the north of the area and runs eastward a short way, and then southwards at the rear of the east rampart; and the other, starting at the same point, with a space of 18 inches of uncut earth between them, runs north-west, and falls into the ditch between the ramparts. The depth is about 4 feet, and the trench is filled with angular quarried stones of good size tumbled in. Towards the west of the area there is a group of four post-holes and the piece of stone-work of segmental form before alluded to, and at the north-east corner is another group of three post-holes. The holes are not sufficiently numerous to define the form of enclosure the posts may have served to support; but so far as they lend themselves in that direction, a circular plan 17 feet in diameter would best fit in with their disposition. The circumference of such a circle applied to the first group would describe the outer curve of the segment of stone-work, pass through three

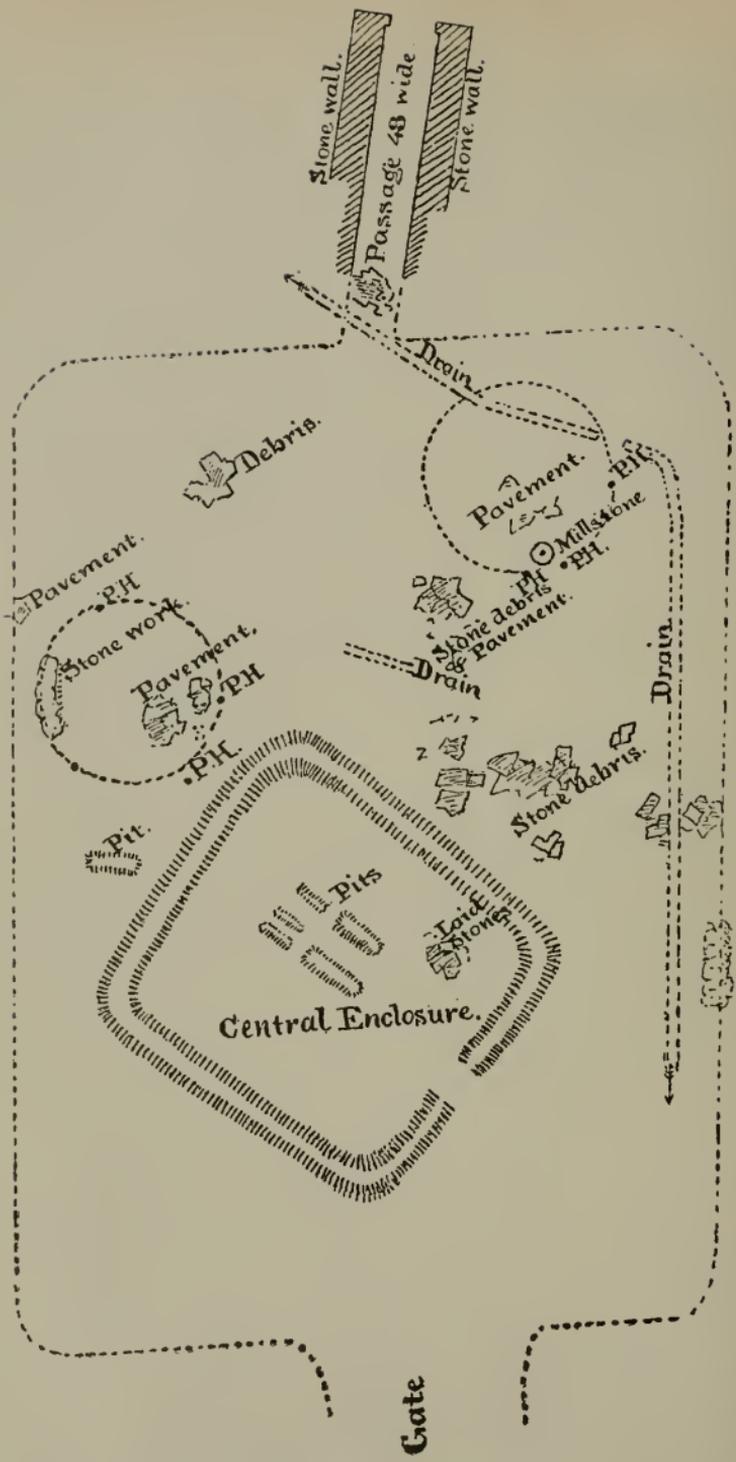


Figure 8—Interior of Redoubt.

of the holes, and leave the fourth outside at a distance of 1 foot, and applied to the last group the circle would pass through all the three post-holes. Within the area of the latter circle a granite under-millstone lies, apparently *in situ*, and near it are fragments as of the upper stone.

It remains in connection with the redoubt to notice a group of small pits, six in number ; five are within the central enclosure, and one is outside. Of those within, two lie side by side with an interspace of 2 feet, and measure 5 feet 6 inches by 2 feet 3 inches, and 7 feet by 2 feet 3 inches respectively ; the remaining three, which measure about 3 feet 6 inches by 1 foot 6 inches, lie immediately west of the two first, and are all disposed lengthwise, due east and west. The one outside the enclosure is similar to the two first described, but shows a little departure from the orientation. The pits, which are about 3 feet 6 inches deep, were filled with soft sandy earth sufficiently distinct from the surrounding till, and in one was a quantity of quarried stones.

The small circular enclosure (H) within the west end of the camp, when examined by cross-trenches, showed a hollowed and saucer-like interior, the deepest part of which reached the rock and appeared slightly sunk into it. A small mound of earth, dressed roughly on the face and rear with stones, surrounds the hollow, rising a little above the outside surface mostly, but at the north it is sunk so that the top falls below the level of the camp floor.

In closing the description of this camp, one or two of the more outstanding characteristics it exhibits may be recalled. In tracing out the ground plan, it seems to have been the design of the builders to utilise whatever advantages the site might afford with a view to securing the greatest strength at the least expenditure of labour, although involving some irregularity of outline. The defences, also, are varied in form and dimensions, and otherwise adjusted according to the particular circumstances obtaining at the several parts of the camp. At the north, where the opposing ground is high, they are larger than elsewhere, and the gate defences appear to be designed specially to meet the requirements of the situation. It is a characteristic that both scarp and counterscarp are very steep ; and in order apparently to sustain the built-up earth in such form, a pitching of stones is

applied to the former, and partially, to the extent presumably found requisite, to the latter also.

The entrances are skilfully designed, so that approach to the interior can be had only through narrow openings on either side, flanked right and left by the rampart and the traverse; and the traverses, while rising but little above the opposing ground, together with the formidable ditches, seem effective barriers.

In regard to the degree of permanency characterising the camp, it has hitherto been classed as a temporary one. The structural details of the fortifications, as before described, do not, however, afford any support for this, but for the contrary view, and the large central buildings and extensive heavy pavements of the interior evidence intended occupation more or less prolonged.

Coming to the evidence of occupation, which is not plentiful, regard must be had to the very small proportion of the area examined, and to the probable disappearance of much in former times. At a point in the interior, opposite the buildings and on the other side of the rivulet, the earth showed abundant traces of charcoal, and more limited traces of it were met with at several other places. A millstone has already been mentioned as lying in the redoubt, where several small fragments of grey pottery, the bottom of a bronze vessel, a whetstone, a piece of slag, and a considerable quantity of iron in shapeless pieces, one of them attached to remains of an oak plant, were also recovered, as were likewise two stone balls, one of them in the east trench, and several leaden sling-bolts. Within the camp were recovered a number of these sling-bolts, ten in one group, others singly, one from the counterscarp of the north ditch, a number of stone balls, singly, an iron spear-head and fragments of another weapon, an iron axe-head and part of another, quantities of shapeless iron, slag, a bronze ring, half of a small stone disc, a bead, a worked flint flake, and a fragment of red pottery, horseshoe of iron, several whetstones, leaden whorl, and two fragments of glass or paste, probably bracelets. The relics will be more particularly described by Dr Anderson.

There has doubtless been occupation, but any idea of the probable duration cannot be inferred. The impression formed on the evidence revealed by the excavations is that a period which might be described as temporary would hardly satisfy the conditions; and there does not, on the other hand, seem to be any

reason requiring the conclusion that the occupation was not of extended duration.

THE NORTH CAMP.

This camp, which lies at the north base of the hill, opposite and out of view of the south one, is partially destroyed, the entrenchments on the north and west sides being almost obliterated. On the south and east, however, they remain in good form, and short returns at the north and west serve to define the lengths of the sides. With the aid of these returns and the marks of the destroyed works remaining, the plan of the camp has been followed (Plate III.). While fairly rectangular, it presents several peculiarities. The line of the north side, starting from the north-east corner, runs westwards nearly half-way, where there is a southward set-off, diminishing the width of the westward area, and giving the appearance of two camps of ordinary proportions but different widths conjoined. The south side also shows a curious inward bend in connection with the west gateway there, which is also peculiar. From the southwest corner the line runs straight but with an inward slant until it reaches the gate, on the opposite side of which there is a corresponding slant, so that the gate recedes rearward, and the divergence is just sufficient to provide for the projection of the traverse, which in this instance is attached to the rampart.

The site has a slight inclination northwards, and part of the north side follows a natural bank, on which the rampart has been built.

The dimensions over all are: length, 1000 feet; width of east portion, 400 feet; and of west part, 300 feet.

There are six gateways, one at the east and west respectively, and two at each side.

The entrenchments unaccountably differ in type, for whereas the single ditch and rampart prevails on the south, east, and west sides, the double rampart with intervening ditch is found on the north.

Generally the works exhibit constructive methods similar to those described as prevailing at the south camp, but they are not always well marked. The layers of finer earth and clay found in the base of the rampart of the south camp were here well marked in one section (Plate VI. fig. 9). The stone pitching of the front, however, is not generally well defined, which may be accounted

for by the circumstance that a great part of the ditch is cut in hard splintery rock, which seems to have been applied partially as a substitute. One section was exceptional (Plate VI. fig. 10). At the rear of the ditch is a narrow berm, and a perpendicular facing of well-built stone-work about 18 inches high, behind which is the earthen rampart.

The rampart of the north side where it is double (Plate V. fig. 11), like that of corresponding form at the redoubt of the south camp, gives no indication of stone pitching on the front.

A pavement similar to that disclosed at the rear of the rampart in the south camp was found here also.

The gateways are all sufficiently distinct, but in the case of the west one on the north side no mark of the traverse remains.

As already stated, the west gateway (Plate III.) on the south side is peculiar. The rampart is pushed rearwards upon the camp, so that the gate stands at the apex of a broad but shallow triangular recess, and the traverse, instead of being as usual a separate mound with a passage on either side, is formed by turning the end of the rampart on the east side of the gate southwards, and swelling it into a beak-like shape with an elevated centre. There is an entrance on the west side of the traverse only. The gateway had a surfacing of gravel over a heavy stone pavement, partly wanting, below which was another pavement of stone-work of some kind. The lower part of the traverse ditch has been quarried out of very hard rock, the northward projection of which may possibly account for the rearward divergence of the entrenchments. Several large detached blocks of stone remain in the ditch.

The other gateways, which appear all to be of one design, have projecting oval traverses similar to those of the east, west, and south gates of the south camp.

In the interior of the camp were discovered at several places pavements, but nothing of definite form.

Apparently, the source of water supply has been a small stream which runs northwards through the camp. It rises under a perpendicular cliff of rock at the north side of the higher part of the hill.

A stone ball and two pieces of iron were recovered at this camp. The excavations in the interior were very limited, and so far little evidence of occupation was discovered.

The Fort at the west base of the hill (C, Plate III.) is peculiar in regard to shape and some other circumstances. The plan, which is inaccurately represented by Roy, and imperfectly at least on the Ordnance Map, is triangular, the base being at the south and rectilinear, but with a knee towards the west end, while the sides are unequal and show an outward curve. The enclosing defences consist of double ramparts and an intervening ditch (Plate VII. figs. 12 and 13), identical in type with those of the redoubt of the south camp and the north side of the north camp, and corresponding also in structure with the former. The interior area is hollowed out so that the floor in the centre is lower than the ground outside, and at the rear of the rampart it is paved or laid with stones, the work being carried some way up the rampart. An opening through the ramparts, towards the east, shown on Roy's plan as an entrance, was examined, but the result was inconclusive.

At the west corner there is a narrow opening in the inner rampart, giving access from the interior of the fort to the ditch; and by passing through and following the ditch a few feet southwards, an opening is reached on the right hand which leads into a narrow passage running westwards a distance of 20 yards. It is 4 feet wide, and the outer ramparts of the camp are carried along it, one on either side. The floor is laid with stones, one of which showed a small cut-out water channel. This seems to have been the entrance.

The finds recovered here—a broken quern and a piece of bracelet of opaque glass—were of the same character as those found in the other camps.

The Enclosure at the east base of the hill (D, Plate III.) is divided into two compartments, and there is an entrance from the south. The shape is not correctly represented either on Roy's plan or the Ordnance map. The enclosing and dividing mound, composed of a mixture of earth and rock debris dug out of the interior, which, as regards the west division, is hollowed out, measures 12 feet across and 2 feet in height. There is no ditch. The west part exhibits no artificial flooring, but the east division, which is on a higher level, is floored with flat stones of irregular shape, well fitted together. The back of this enclosure rests on a natural bank.

THE CIRCUMVALLATION.

Between the north-east corner of the north camp and the east enclosure, D, the line as indicated on Roy's plan remains well marked. There is a ditch in front with a rampart in the rear, built on rising ground. At a section made through the rampart (Plate VIII. fig. 14), a small fragment of moulded and colour-decorated glass, being probably part of a bracelet, was recovered in the earth at the base. A little south of the east enclosure another fragment of the work, K, also shown on Roy's plan, is still distinguishable. It stands on a height, and the interspace, which is a hollow, is so commanded by the works on either side as to suggest that it may have served as an entrance to the fort tress. The continuation of the circumvallation L, from the west end of the south camp towards the west fort, as indicated by a single line on Roy's plan, is also traceable on the ground. The branch ends of the rampart remain, one joining the south camp and the other the west fort, and perceptible lines indicate its prolongation from the south camp some way westwards. A section showed a slight mound outside the ditch and higher ground inside, as if this part had been of the double rampart and intervening ditch type.

Referring to the small rectangular work of three apartments, E, at the east end of the hill, shown on Roy's plan, these and several other similar works (not marked on the plan) were examined, but without result, and it is impossible to say whether they were part of the military works or not. One lies near the south-west corner of the south camp, a group of three of large size are situated some distance south of the same camp, and one of curious design is placed between the west fort and the "Roman Road."

Outside the south-east corner of the north camp is another small work, F. It is circular and about 45 feet in diameter. The interior has been hollowed out, and the earth and rock-shivers therefrom used in building a small enclosing mound about 12 feet wide and 2 feet high.

Roy's plan shows traces of a work, B, starting from the south-east corner of the north camp and extending southwards along the east end of the hill, and after an interval a fragment of a mound, A. The first is discernible, but with difficulty; the second, which remains in good form, was examined and found to be the protecting rampart on the east side of a road which has

evidently joined the south and north camps (Plate VIII. fig. 15). The roadway, which is 10 feet wide and surfaced with flat stones laid as pavement, is cut out of the slope of the hillside, and between it and the rampart is a ditch, the only one in connection with the work; a sandstone ball was recovered from the ditch.

An ancient road passes a few yards south of the west fort, running west and north-west, as indicated on the Ordnance Map. It is known as the "Roman Road." Its surface was exposed at six different places, disclosing stone pavement composed of flat laid quarried stones, but the work was more or less disturbed. At one point the trimmed edging remained, of which, however, the stones were not materially larger than those in the body of the work. The best preserved part showed a roadway about 10 feet wide, with a hollowed continuation or water channel along the side next the hill, 2 feet wide. The work is fairly similar to the pavements within the camps and with the piece of roadway at the east end of the hill before described.

Another piece of road, Q, R, also paved and apparently branching from the last, runs in an easterly direction along the north side of the west fort, and touching the end of its narrow entrance. Marks, not very clear for some way, but distinct further on, can be traced of its continuation to the south-west shoulder of the hill, where it passes by a clearly-marked track round to the main gateway on the south side of the hill fort.

Two conclusions may be suggested as following on the circumstances described. The shape of the west fort may be consequent on its position in the angle between the two roads; and its purpose probably was to serve as a guard-room for the entrance to the fortress, which here apparently branched off the "Roman Road."

HILL FORT.

The hill fort (Plate III.) occupies the whole plateau, measuring from east to west about 1700 feet, and from north to south 700 feet at the west part; while the east part, owing to an abrupt contraction near the middle, is reduced to about 400 feet in breadth. At the point where the contraction is, a depression of the surface crosses the plateau, and another slight hollow occurs near the middle of the east part. The outline is sinuous; in particular, a recess marks the north side at the point where the contraction of the width occurs. One not so deep lies opposite

on the south side, and there are two others on the same side further east, the interspaces being about equal. The sides of the hill are everywhere steep near the top, and at several places the face is perpendicular. A stretch of precipitous rock margin, known as "The Fairy Craig," occurs at the east end of the hill, another at the north side near the point of contraction of width, and at the west end also there is a good deal of rock falling abruptly from the crest. The ascent to the plateau is easiest on the south side.

The Defences.—The plateau is entirely encircled with an artificial rampart, which follows the sinuosities of the crest; and on the south side, where the ascent is not so steep, there is a second line, in front of the first, which also follows the windings of the ground, maintaining, except at the gateway returns, an approximately uniform difference of level, but not an equal distance from the first.

In addition to the encircling ramparts, a mound (O, Plate III.) is built over the crest of the natural bank on the west side of the surface depression before mentioned, dividing off the broader part of the camp at the west end into a separate fort, within which, at the west side, is a small heart-shaped fortlet, N; and at the eastmost recess of the south side, where the slight hollow is, an artificial work, P, crosses the hill in nearly a straight line.

Four gateways afford entrance to the plateau, situated, respectively, one at the west end, one in the recess on the north side, one in the middle recess, and another in the west recess on the south side. The east recess on the south side, although now crossed by the rampart, had probably been a gateway also.

The encircling and outward ramparts do not in this case stand up materially above the surface in the rear (Plate VII. figs. 16, 17), and to the ordinary observer are not very apparent; but the slight elevation, greener tint, and protruding stones sufficiently mark the position. The encircling rampart may be described as a trimming of the crest of the hill, the artificial work being generally 30 feet wide at the base and 4 feet high in the centre, and the scarp dies into the slope of the hillside. There is no ditch, which is the main differentiating feature of the hilltop defences. Possibly this circumstance is consequent on the builders' methods, but more probably it was compelled by the nature of the site, with its steep scarp and rock structure. The most outstanding characteristic these ramparts present is the

stone pitching of the front. While absent, or partially, at one or two places, it has doubtless been constant, both in the case of the encircling rampart and the outer one on the south side of the hill. The best sections show the work in very complete form, and continuous from the base to the crown. The ramparts here, while not so steep on the front as those of the camps below, equal in this respect the mounds at Birrens. A number of sections made at intervals revealed the inner structure of the mounds. At the east recess of the south side of the hill, the core was found to consist of large stones heaped together. At other two places it was formed of heaps of earth and stone intermixed. These conditions, however, were probably accidents or disturbances, as the other sections all exhibited earth structure; and in one section a peculiar description of bonding occurs, which seems to evidence tenacity on the part of the builders to this mode of treatment, whatever the material at command for the purpose might be. It consists of a row of roundish flat stones, very regularly disposed in a straight line from side to side, and with narrow interspaces, about half-way up the mound (Plate VII. fig. 17).

The mound separating the east and west parts of the plateau is built of earth over a ridge of rock, and shows no intermixture with or covering of stone. It is not more than 2 feet high above the rock.

The gateways are no less interesting than the defences just described. Differing, and necessarily, from those below, they are not less skilfully arranged. Traverses are wanting, but advantage is taken of the recesses in the sides of the hill in which to lay out the approaches so that they are dominated and flanked by the returning ramparts on either side.

Of the west gateway, which is a little recessed, nothing remains but broken pavement. Leading from it is a narrow path, 4 feet wide near the gate, and $2\frac{1}{2}$ feet further away, formed by cutting out the hard rock a depth of 2 feet. It passes west and southwards, round a steep escarpment of rock, on which the enceinte returns.

The north gateway is situated in a deep recess of some width, which is flanked by precipitous ramparted heights on either side. In this case, also, only disturbed pavement marks the structure, and on one side is a fragment of a drain 12 feet in length, with a

channel 12 inches square, sides of stone, and covers of whinstone averaging 30 inches long, well fitted together.

In the historical part of the paper, Dr Christison shows that a well, situated on the north side of the hill, has been described as having been fortified. A spring rises at the base of the precipitous rock-face, a little way east of the north gate, and a piece of rampart, earth-built and stone-faced as before, remains, leading from the gate in the direction of the spring, which was probably the source from which the supply of water for the fort was obtained, as nothing of the kind has been discovered on the hilltop. The runner passing through the middle of the north camp is fed from the same spring.

Of the two south gateways, the east one (Plate VIII. fig. 18), which stands behind a small gorge, shows an oblong pavement floor, trimmed on the straight edges, and measuring $15\frac{1}{2}$ feet rearwards by $9\frac{1}{2}$ feet across, constructed of flat unhewn stones embedded in clay. At the south end marks of walling $2\frac{1}{2}$ feet thick and a square outline are visible, and seem to indicate that the gateway was a stone-built superstructure. The approach is by a narrow way in the bottom of the gorge, which for a length of 20 yards is covered with large stones, very unevenly disposed, as if either they had been much disturbed, or were so arranged with a view to impede progress towards the gate; and it is defended by the double line of rampart returning on either side, coalescing at the gate, and maintaining a higher level, and so commanding and flanking the approach.

The remaining gateway (Plate VIII. fig. 19), being the west one on the south side, was probably the main entrance. The approach is of greater width than the others, the gradient is easier and more uniform, and the roadway is better formed. The roadway is partly cut in the rock, which is dressed to form the surface, depressions being made up with pavement. It curves from the west, northwards, round the east side of a steep escarpment, on the top of which the outer rampart of the fort returns, flanking the entrance on that side. There being no natural flanking on the other side, the builders have supplied artificial defences, consisting of a double tapering mound, carried alongside the roadway. The gateway stands in line with the encircling rampart of the fort, which in this instance has no returning bend. It shows stone foundations consisting of stumps of flanking walls in front of the gate; a threshold, with a

scution on one side and broken walling on the other, from which the opening would seem to be about 4 feet in width; an interior space measuring 3 feet 6 inches rearwards by 6 feet across, marked with fragments of enclosing walls and paved with flat stones. The remains indicate that this gate also was probably a stone-built structure.

The Interior.—The dividing rampart has already been described and the line of artificial work crossing from south to north near the east end has also been mentioned. The latter shows a rounded surface like a roadway, the crown 9 inches higher than the sides, but of soft earth. Under or alongside is a drain of good depth, constructed similar to those found in the redoubt of the south camp, previously described.

In regard to the small west fortlet (N, Plate III.), when carefully surveyed, the plan is found to be symmetrical, and resembles a horseshoe, pointed at the north, and with a base at the south composed of two straight lines, which retire towards the centre and form a re-entering angle (Plate III). No apparent reason for this peculiar shape has been discovered, and it seems as if it were simply fanciful. The extreme length over all from north to south is about 130 feet, and the greatest width is equal to the length. The enclosing mound, measuring about 12 feet across and 3 feet 6 inches in height, exhibits exceptional modes of construction (Plate VIII. figs. 20, 21). On either side is a face wall about 2 feet in height, and varying from 1 foot to 3 feet 9 inches in thickness, resting on the rock surface. The walls are well built of large quarried stones, disposed in courses of one to three in the height, cleft fair and clean on the face, and roughly squared in the joints. While no tooling appeared on the face, unmistakable marks of the mason's pick were discovered on the bed of a displaced stone. The space between the faced walls is filled, and the mound is carried up to its full height with earth, built in layers in the following order: earth mixed with charcoal or decayed brushwood, 6 inches thick; red soil, 3 inches thick; peat or turf, black and very distinct, 2 inches thick; a mixture like iron rubbish, but probably moor-band, 6 inches thick; and the remainder earth, and the surface turf.

The entrance (Plate VIII. fig. 22), which is on the west side, is much destroyed. Its width is about 4 feet, and several flat stones mark the floor.

Another kind of structure has now to be noticed. It is a

tumulus 70 feet in diameter (Plate VIII. fig. 23), standing at the highest point of the middle part of the plateau. While the artificial work at the centre is only $5\frac{1}{2}$ feet high, owing to the fall of the ground it stands 10 feet or more above the level of the outer circumference. A section was opened through the cairn from east to west, when it appeared that the cist had been destroyed. One stone, 4 feet long and 2 feet 4 inches high, remained in position, and five others lay at hand which had evidently belonged to it, also some fragments of charred bone. Orientation does not seem to have been observed; the cist lies nearly parallel with the length of the hill. The construction of the tumulus shows the rock surface under it slightly sunk for the reception of the cist; over the cist was a small mound of clay rounded so as to carry off the water, and above the clay rose the wide, flat cairn of stones, disposed as if in layers concentric with the clay core. The pieces which composed the cist, as well as the smaller and more angular stones making up the cairn, correspond with the description of rock on the hillside, whence it is presumed the material was obtained.

At the east end of the plateau the rock surface seems to have been utilised as a floor, the depressions being levelled up by stone pavement. Stone pavements are very extensive, both at the east and the west parts. Some vestiges, but uncertain, as of walling, were also disclosed. These remains, however, furnish no definite information, further than showing how elaborate the preparation of the camp has been.

Charcoal and fragments of charred bone were plentiful, and generally appearances of occupation were much more abundant here than in the lower camps.

Among the relics discovered were a considerable number of leaden sling-bolts, singly and in groups, twenty at one of the south gates, and twelve at the other; one or two stone balls; scraps of iron not plentiful; leaden whorl, similar to one found in the south camp; at the east end, two small transparent glass discs; in the fortlet, a bead similar to one found in the south camp; two fragments of glass bracelets, one in the substance of the enclosing mound of the fortlet; and outside the fortlet, on the rock, and covered by a stone, a small intaglio.

All the details disclosed by the excavations have now been described, and it only remains to say a word regarding General Roy's plan and the Ordnance map, both of which have proved

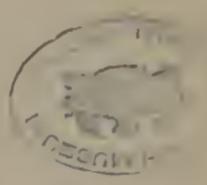
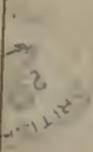
very serviceable in connection with the carrying out of the exploratory works. On the former, many vestiges appear, not indicated on the latter, and which are not now readily observable on the ground. The plan is generally, although not strictly, accurate. The only points requiring notice are the gateways at the south side of the south camp. At the centre there is shown on the plan a projecting return of the fortifications, which does not exist, and which evidently has arisen through joining the line of a modern drain with the traverse of the gate. Two small openings like gates, but without traverse, are shown, one on either side of the centre projection, but no opening exists corresponding with the west one; and in regard to the east one, while an opening for drainage exists, no indication of a gateway could be discovered there.

Two points only need to be mentioned in regard to the Ordnance map. There is no tumulus near the small fortlet at the west end of the hilltop as indicated; and the fort at the east end of the hilltop is at least inaccurate, and it is doubtful whether there is any separate fort here at all.

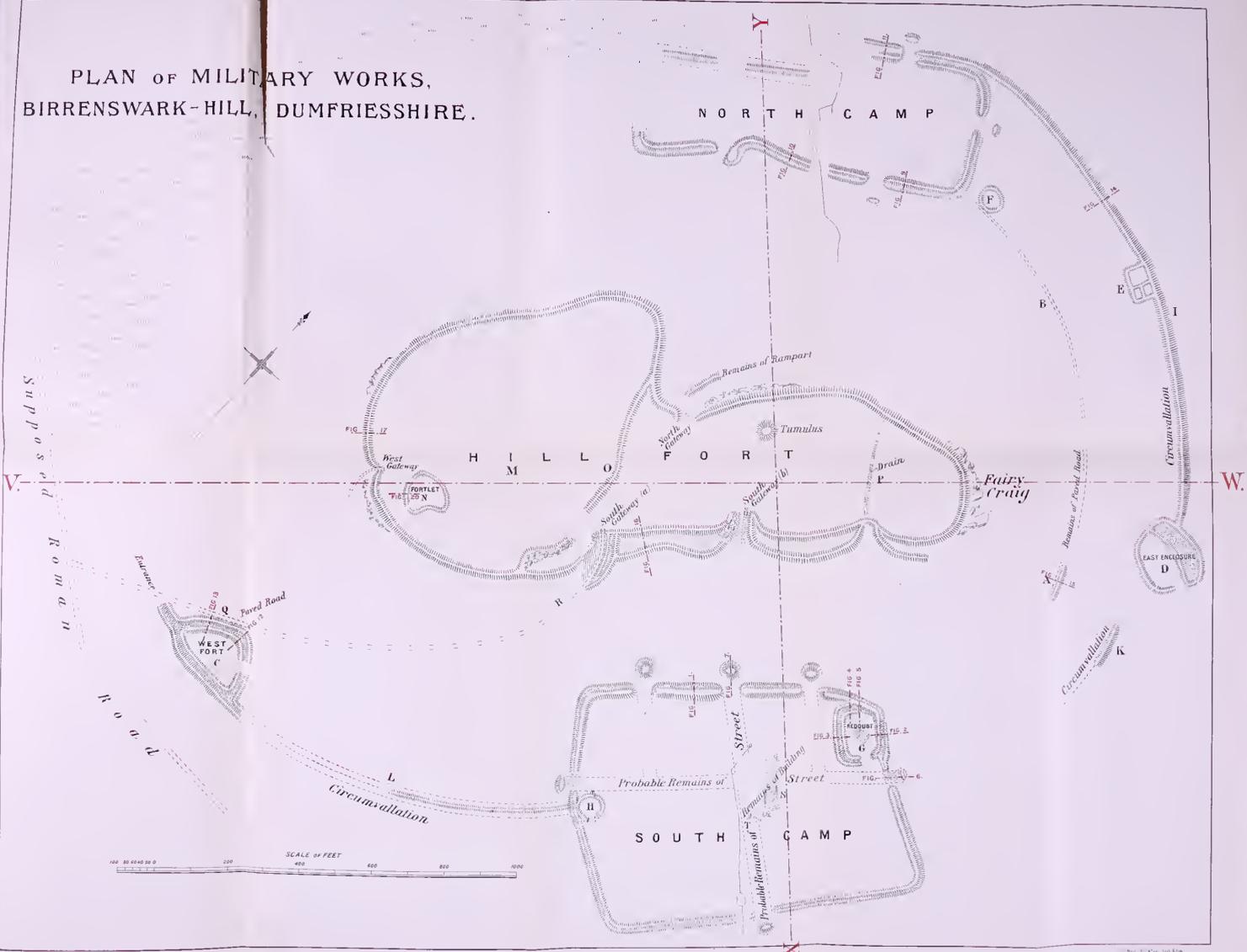
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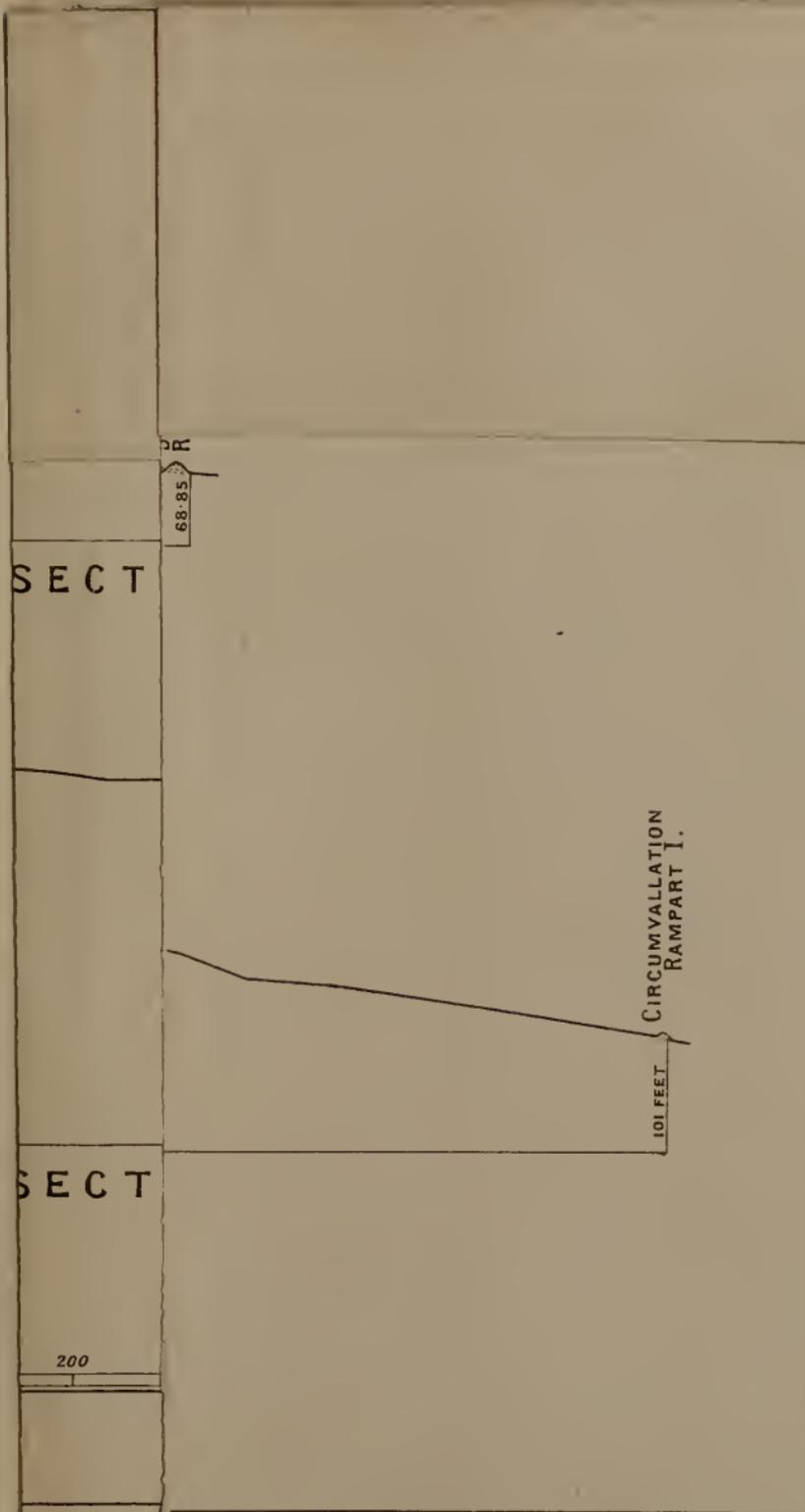




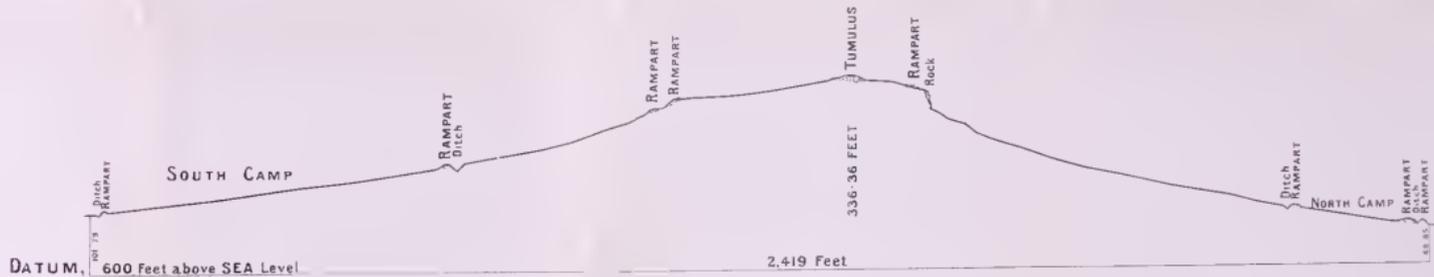
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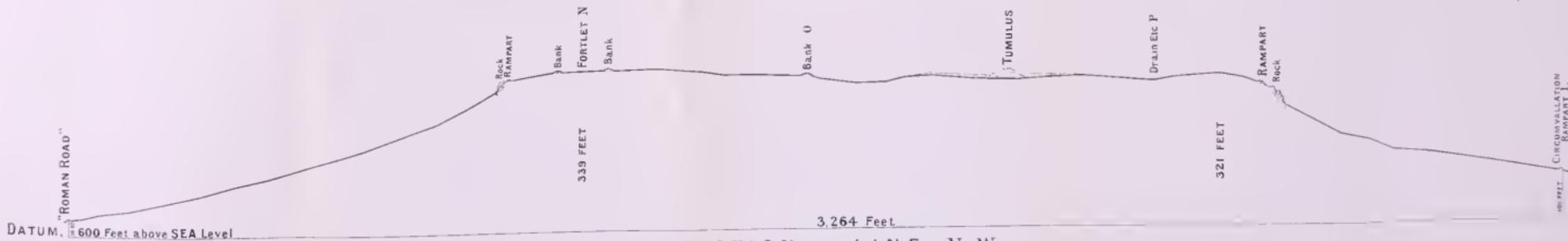
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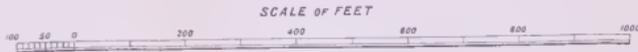
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SECTION ON LINE X.Y.



SECTION ON LINE V.W.



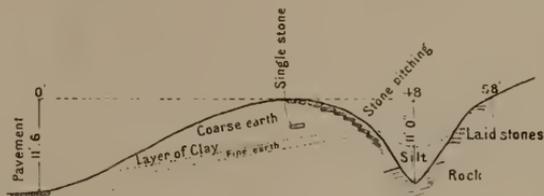


FIG. I. SECTION OF NORTH RAMPART SOUTH CAMP.



FIG. 2. EAST RAMPARTS OF REDOUBT.

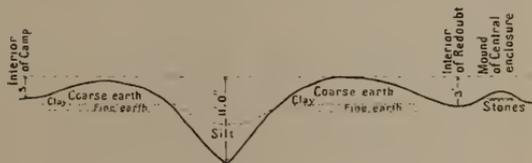


FIG. 3. WEST RAMPARTS OF REDOUBT.

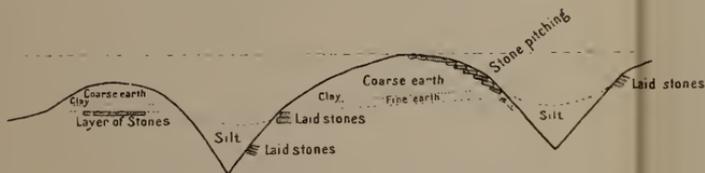


FIG. 4 NORTH RAMPARTS OF REDOUBT. (DOUBLE PART).

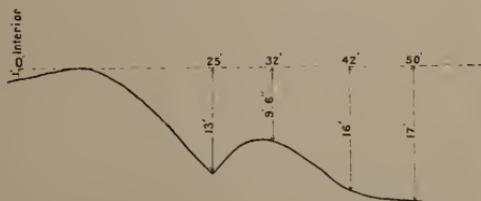


FIG. II. NORTH RAMPART, NORTH CAMP (DOUBLE).



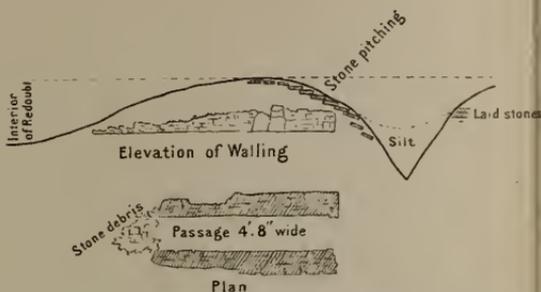


FIG. 5. NORTH RAMPART OF REDOUBT (SINGLE PART)

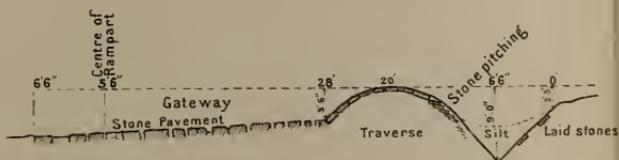


FIG. 6. EAST GATEWAY, SOUTH CAMP.

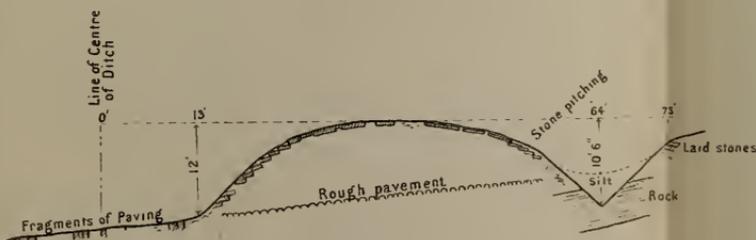


FIG. 7. TOWER OF CENTRE NORTH GATEWAY SOUTH CAMP.

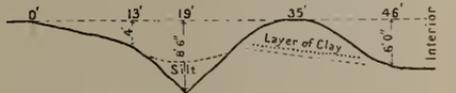


FIG. 9. SOUTH RAMPART OF NORTH CAMP.

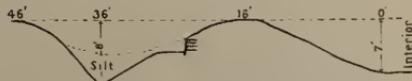


FIG. 10. SOUTH RAMPART, NORTH CAMP.



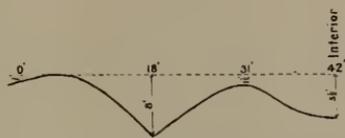


FIG. 12. EAST RAMPART, WEST FORT.

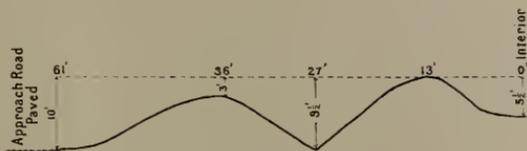


FIG. 13. NORTH RAMPART, WEST FORT.

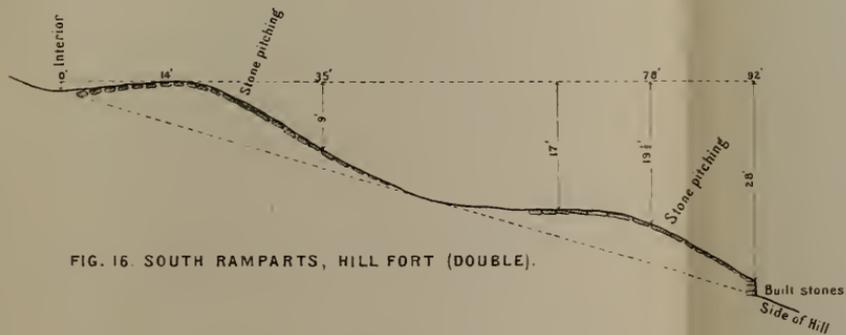


FIG. 16. SOUTH RAMPARTS, HILL FORT (DOUBLE).

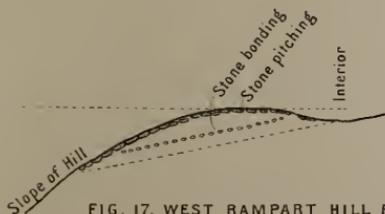


FIG. 17. WEST RAMPART HILL FORT.



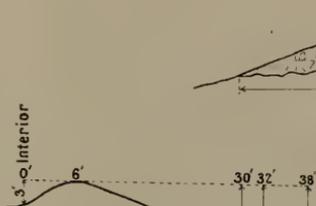


FIG. 14. EAST CIRCUMVALLATION MOUND.

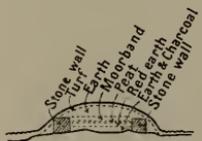


FIG. 20. MOUND OF HILL FORTLET.



FIG. 21. ELEVATION OF MOUND
1/8 inch scale.



FIG. 22. REMAINS OF GATE.
1/8 inch scale.

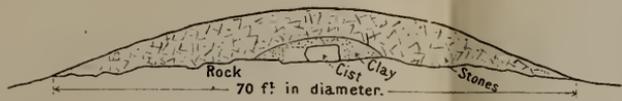


FIG. 23. HILL TUMULUS.

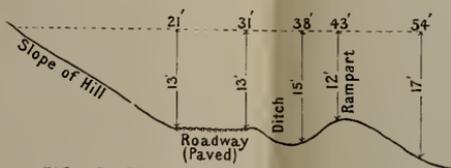


FIG. 15. ROAD ON EAST SLOPE OF HILL.

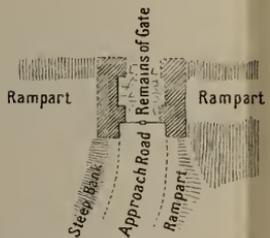


FIG. 19. SOUTH GATE(A) HILL FORT.

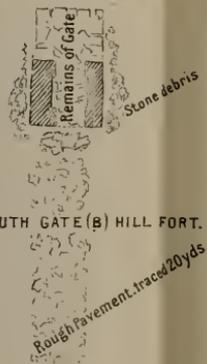


FIG. 18. SOUTH GATE (B) HILL FORT.

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