THE TRANSACTIONS

AND

JOURNAL OF THE PROCEEDINGS

OF THE

DUMFRIESSHIRE & GALLOWAY

NATURAL HISTORY

AND

ANTIQUARIAN SOCIETY.

Session 1863-1864.3



EDINBURGH:

PRINTED BY R. AND R. CLARK, 1864. "When I would beget content and increase confidence in the power, and wisdom, and providence of Almighty God, I will walk the meadows by some gliding stream, and there contemplate the lilies that take no care, and those many other living creatures that are not only created but fed by the goodness of the God of nature, and therefore trust in him."—ISAAC WALTON.

"When a man has succeeded at length in cultivating his imagination, things the most familiar and unnoticed disclose charms invisible to him before."—Stewart's Essays.

"It is my duty, if I find myself unequal to the severity of my usual exercises, to devise slighter subjects of employment, which can be resorted to in the time of necessity."—CHALMERS' LIFE.

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JOURNAL OF THE PROCEEDINGS

OF THE

Dumfriesshire & Galloway Natural History and Antiquarian Society.

This Society was instituted on the 20th November 1862, by a Meeting of Gentlemen interested in the cultivation of Natural History and Antiquarian Research.

Dr. GILCHRIST of the Crichton Institution explained and stated to this meeting, that for some years past the question had often been asked why it was, that while over Scotland and elsewhere natural history and allied societies were vigorous and successful, none such existed among ourselves, and it was proposed that a circular, explaining the objects to be pursued, and asking counsel and aid to establish a society for the investigation of Natural History and Antiquities, should be issued to those known to be interested in such matters.

To enable them to do this, a preliminary Committee was appointed, consisting of Dr. Grierson, Thornhill; Drs. Dickson and Gilchrist; and Mr. Gibson, Dumfries. These gentlemen met on the 6th September, and drew up and issued the following circular:—

"The intended union may be denominated the Dumfries and Galloway Natural History and Archæological Society, and might have the following objects in view—

"1. To secure a more frequent interchange of thought and opinion amongst those who have a taste for such pursuits.

"2. To concentrate, direct and render available the labours and information of those already engaged in the work.

"3. To elicit and diffuse a taste for such studies where it is yet unformed.

"4. To elucidate the resources of the district in the several

departments of Natural History and Archæology.

"5. To secure means for practically facilitating the study of

these branches of knowledge,

"Sir—Your opinion of the proposed Society, and if possible, your promised aid in its support, will much oblige.—I am, Sir, your obedient Servant,

"J. Gilchrist, Secretary pro tempore.

"Crichton House, Dumfries, 6th Sept. 1862."

The replies to the circular having been universally favourable to the scheme, a second meeting of the preliminary committee was held on the 4th November, Dr. Grierson in the Chair, when it was proposed and agreed to, that as abundant encouragement had been afforded to the committee to proceed, a meeting shall be called for the purpose of endeavouring to constitute a Society, and to transact such other business as may be deemed necessary.

The circular was as follows:--

"The preliminary committee appointed to consider the propriety of establishing a Natural History and Antiquarian Society for Dumfriesshire and Galloway, having sent circulars to parties supposed to be interested in such an object, and having received answers of such a character as to warrant them in taking further steps for its establishment, beg to state, that a meeting will be held in the Mechanics' Hall on Thursday the 20th, at 8 P.M., for the purpose of appointing a permanent committee, and transacting such other business as may be deemed necessary.—I am, Sir, your obedient servant, "J. Gilchrist, Secretary pro tempore.

"Crichton House, Dumfries."

This, the initiatory meeting as already mentioned, was held on the 20th November, and Mr. M'Diarmid having been requested to take the Chair, and the proceedings of the preliminary committee having been explained, as has been just detailed, it was agreed by the gentlemen present—Mr. Aird, Mr. M'Diarmid, Dr. Gilchrist, Mr. Thorburn, Mr. M'Ilraith, Mr. Gibson, Mr. Caldow, Mr. M'Dowal, Rev. Mr. Goold, Dr. Dickson—to form themselves into a society for the prosecu-

tion of the objects stated in the first circular of the preliminary committee, and to be called The Dumfriesshire and Galloway Natural History and Antiquarian Society.

The preliminary committee reported, that having succeeded in the objects of their appointment, they proposed to terminate their labours by suggesting the following List of Office-Bearers to the Society for its first year:—

President.

SIR WILLIAM JARDINE of Applegarth, Bart.

Vice-Presidents.

Dr. GRIERSON, Thornhill. Dr. GILCHRIST, Crichton Institution.
Mr. M'DIARMID, Dumfries.

Secretaries.

Dr. Dickson and Mr. M'Ilraith.

Treasurer.

Mr. W. G. GIBSON.

Committee.

Rev. Mr. Gray, Mouswald. Rev. M. N. Goold, Dumfries. Mr. Corrie, Procurator-Fiscal. Dr. Borthwick. Mr. C. Harkness, Writer. Provost Caldow, Maxwelltown.
Mr. Symons, Writer.
Dr. Stewart, Crichton Institution.
Dr. Grierson, Southern Counties
Asylum.

Mr. Hogg, Draper.

The above list being unanimously approved of, a Committee was appointed, consisting of the Vice-Presidents, Secretaries, Treasurer, Mr. Thorburn and Mr. C. Harkness. They were directed to meet and draw up rules to be submitted to the next Meeting of the Society, and to make inquiries for a place in which future meetings could be held.

Mr. Adamson; Mr. H. Gordon; Mr. Macdonald, Rammerscales; Rev. Wm. Fraser, Colvend; Mr. Heron, Duncow; Dr. Moffat; Mr. Dudgeon, Cargen; Rev. Dr. Menzies, Keir; Dr. Lewis, Dalbeattie; Rev. William Gordon, Ruthwell;* were elected ordinary Members.

^{*} See the Dates of Admission and Address of Members, separate list.

Miss Mitchell, Montrose; Mr. Croall, Montrose; Mr. Joseph Parker; Mr. H. T. Wake; Capt. Anderson; Dr. J. C. Browne, Derby Lunatic Asylum; Dr. A. Mitchell, Depute-Commissioner of Lunacy; were elected corresponding Members.

December 4th, 1862.

Mr. M'DIARMID in the Chair.

The Committee appointed at the previous Meeting of the Society submitted the draft of a set of rules, which having been read and revised, were approved of, and ordered to be engrossed in this Minute.*

- 1. The Society shall be called "THE DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY AND ANTIQUARIAN SOCIETY."
- 2. The objects of the Society shall be to secure a more frequent interchange of thought and opinion among those who cultivate Natural History and Antiquities, to elicit and diffuse a taste for such studies where it is yet unformed, and to afford means and opportunities for promoting it; the resources of Dumfriesshire and Galloway for such objects being particularly kept in view.
- 3. The Society shall consist of Ordinary, Honorary and Corresponding Members. The Ordinary Members shall be persons resident in the County of Dumfries and in Galloway, present and admitted at the Meeting of the 20th November 1862, and those who shall afterwards be proposed for admission by an Ordinary Member, and be admitted at an Ordinary Meeting of the Society by a ballot, in which three-fourths of the Members present vote for the admission. The Honorary and Corresponding Members shall consist of Gentlemen not residing in Dumfriesshire or Galloway distinguished for attainments connected with the objects of the Society, who shall be proposed and admitted at an Ordinary Meeting.
- 4. The Ordinary Members shall contribute annually the sum of 5s., payable in advance, to the funds of the Society, or such other sum as shall from time to time be fixed upon as the annual contribution of Ordinary Members.

^{*} These first rules were again revised at the opening of the Session 1863-64, and are printed here as then agreed upon, and as they now stand the rules of the Society.

- 5. The Office-bearers of the Society, who shall be Ordinary Members, shall consist of a President, three Vice-presidents, two Secretaries and a Treasurer, holding office for one year only, but being eligible for re-election without any intermission; and a Committee of Ten Members, the three Members of the Committee standing at the top of the list going out annually, and not being eligible for re-election without the intermission of one year.
- 6. The Ordinary Meetings of the Society shall be held on the first Tuesday of each month, for the purposes of the Society, and at the Meeting on the first Tuesday of November of each year, the Office-Bearers for the following year shall be chosen by a majority of votes of the Members present.
- 7. Field-Meetings shall be held during the Summer months on the first Tuesday of each month, the arrangements for which shall be made by the Committee.
- 8. Each Member may introduce a friend to any Ordinary or Field-Meeting of the Society, such friends not to be admitted more than twice during the same year.
- The Committee, of which three shall form a quorum, shall elect their Chairman, and shall have the management of the affairs of the Society, subject to the supervision of Ordinary Meetings.
- 10. One of the Secretaries shall keep a Minute-Book of the proceedings of the Society, and a register of the Members, Ordinary, Honorary and Corresponding, and shall read a Report of the Society's proceedings at the end of each Session.
- 11. The Treasurer shall collect and take charge of the annual subscriptions and funds of the Society, and make payments therefrom under direction of the Committee, and shall annually submit to the Committee an account of his intromissions; and the Committee shall audit the same, and report to the Annual Meeting on the first Tuesday of November.
- 12. Alterations or repeals of the foregoing Rules, and new or additional Rules, shall only be made by three-fourths of the Ordinary Members at any Meeting of the Society, of which notice shall have been given at the previous Monthly Meeting.
- 13. The Ordinary Committee shall have power to call Special Meetings of the Society.

Mrs. Adamson, Irish Street; Mr. Aitken, Painter; Mr. W. Scott, Castle Street; Mr. Crombie, Architect, all of Dumfries;

Mr. Stark, Troqueer Holm; Mr. Thorburn, Barnkin, were elected ordinary Members.

 $\operatorname{Mr.}$ R. Gray, City of Glasgow Bank ; Dr. Herder, were elected Corresponding Members.

January 6th, 1863.

Mr. M'DIARMID in the Chair.

This may be considered as the first regular Meeting of the constituted Society.

Rector Cairns, Dumfries Academy; Mr. Jackson, Nith Place; Mr. Hastings, Taxidermist; Mr. William Allan, Druggist; Dr. P. Murray; all of Dumfries. Mr. Lennon, Crichton Institution; Mr. Mackenzie, Barn Hill; Mr. Cordiner, Fraserford; Rev. G. Laing, Penpont; Rev. William M'Donald, Burnhead; Rev. James Hutton, Manse, Closeburn; Rev. H. Barclay, Manse, Dunscore, were elected ordinary Members.

Mr. James C. Whyte Douglas; Dr. C. F. Sloane, Ayr; Rev. William Grant, Ayr; Professor Harkness, Cork; Professor Ogilvie, Aberdeen; Mr. William C. Aitken, Birmingham; Mr. James Keogh, Troon, were elected corresponding Members.

The following communications were read:-

The Rev. William Fraser, Colvend, read the first paper submitted to the Society, "On the re-discovery of *Scutellaria minor* on Laggan Hill, Colvend."—See *Transactions*.

Mr. Fraser took the opportunity of congratulating the members on the success which had thus far attended their meetings, and of expressing the hope that the Society now constituted would in future be the "rallying point" for the zoologist, botanist, geologist, archæologist and the scientific and literary men of Dumfriesshire and Galloway.

On Anthoccros punctatus. By Mr. Croall, Sunnyside. Montrose. Communicated by Dr. Gilchrist.

Anthoceros punctatus, a rare cryptogamus plant found by Mr. Croall at Marykirk, Kincardineshire. It occurred in two localities; one in a barley-field, on the naked spots between the grain and other vegetation. The other was in a pasture-field, where it also occurred upon the naked spots. In both localities the plant was noticed in the month of October; in a week or two after, and in November, the fructification appeared. "It was generally about an inch, occasionally nearly two inches, in height, and when mature, split almost to the base, displaying the central columella, to which the bright yellow spores were attached." Specimens were exhibited.

On the Habits of the *Pomarine Skua*. By Mr. Hastings, Dumfries.

A specimen was exhibited, shot near Glencaple Quay.

He remarked that the only specimens killed in Dumfriesshire or Galloway which had come under his notice as a preserver of birds for the last thirty years, was that now exhibited, and another which was killed about the same time by a lad, who struck it with a stick while fighting with a common gull in a field in the parish of Kirkmahoe.

On the Antiquities of the Stone, Bronze and Iron Periods, found in Dumfriesshire, by Mr. Gibson, Treasurer. Illustrated by specimens and drawings.

Dr. Grierson, Thornhill, after some remarks on the origin of species, with a special reference to the theories of Lamarck and Darwin, exhibited some varieties of the Rat, Mole and Weasel, illustrating the modification of colour, and the importance of attending to such modification in reference to its value as a specific character.

Dr. Gilchrist read a few notes communicated by Dr. Moffat, Millriggs, on a discovery made by him of what appeared to be the remains, or rather the debris, of old armour, found in a drain near the source of the Corrie Water. Dr. Grierson and Mr. Gibson were requested to examine and report upon Dr. Moffat's communication at a future meeting of the Society.

DONATIONS TO THE COLLECTION OF THE SOCIETY.

Portion of Wild Boar found in Lochar-moss, 15 feet below the surface.—Mr. Thorburn of Burnkin.

Adder Bead. From the parish of Terregles.—Dr. Dickson.

Fragments of supposed ancient armour found at Corrie.—Dr. Moffat, Millriggs.

February 6th, 1863.

Mr. M'DIARMID in the Chair.

Rev. Joseph Anderson, Glencairn; Rev. J. Underwood, Irongray; Mr. S. Gordon, Stationer, Castle Douglas, were elected Ordinary Members.

Dr. W. A. Brown, Commissioner in Lunacy, Edinburgh, was elected a Corresponding Member.

The following communications were read.

On the microscopic structure of some of the *Crustacew*, and other animals and plants, by Mr. Keogh, C.M., Troon. Illustrated by drawings and microscopic preparations. Read by Dr. Gilchrist.

Mr. M'Diarmid brought before the meeting the recent discovery of what were supposed to be human bones, in the roof of a building adjoining the ruins of Newabbey, of which it seems at one time to have formed a portion. He regretted, that although the discovery may have been of little consequence, and was certainly much exaggerated, that no scientific investigation had been undertaken.

The Secretary intimated that all communications to be read before the Society, or at least the titles of such communications, must be intimated to him a week before the appointed evening of meeting. DONATIONS TO THE COLLECTION OF THE SOCIETY.

Collection of Zoophytes from Montrose Bay.—Miss Mitchell, Montrose.

Microscopic Crustacea.—Mr. Keogh, Troon.

Cast of the Arms of Sweetheart Abbey.—Mr. James Foulds, Kirkbean.

March 3d, 1863.

Mr. M'DIARMID in the Chair.

Mr. Alex. Stratherne, Glasgow; Mr. J. Bryce, LL.D., Glasgow; The Rev. F. O. Morris, Nunburn Holm Rectory, Yorkshire; The Rev. J. S. Burnet, Canada, were elected Corresponding Members.

The following communications were read:-

Dumfries in the olden time. By Mr. Stark, Troqueer Holm.

He remarked that the sketch which he had given might be regarded as an outline, to fill in the details of which by papers communicated from time to time by different Members, might be appropriately regarded as an aim and object of the Society.—See *Transactions.*

On the Death's Head Moth, Acherontia atropos. By Dr. Grierson, Thornhill.

The principal points alluded to were, the cry or sound emitted by the moth, which he considered was caused by the folding and unfolding of the proboscis; the comparative rarity of the species in Dumfriesshire, or at least the liability of the caterpillar to be attacked by other insects, a fatality which extends more to certain species than others, and especially the tribe of moths to which the Death's Head belongs. Several specimens were exhibited collected in Upper Nithsdale.

A communication was made by Dr. Grierson, with reference to the examination made by himself and Mr. Gibson, at the request of the Society, of the remains of ancient armour, found by Dr. Moffat at Corrie Water; and notes by Mr. A. Stratherne were read; but that gentleman not having then seen the fragments, a satisfactory conclusion had not been arrived at. The Meeting requested Dr. Grierson and Mr.

Gibson to continue their investigation, and communicate with Mr. Stratherne.—See *Note, Transactions.*

Mr. Corrie, Procurator Fiscal, brought before the Society the discovery of a large number of coins and other interesting relics, which had been recently found near Cannobie by a man while ploughing. He had not yet received them, but would endeavour to afford the Society an opportunity of examining them before forwarding them to exchequer.*

Dr. Grierson, in illustration of the mildness of the season, exhibited specimens of seventeen species of plants in flower in the open air, and made a few observations on the difficulty of naturalizing plants, and the speciality of self-naturalization of some plants. As an illustration he mentioned the Minulus lutea, which grows wild, or in a self-naturalized state, in great profusion by the sides of the Minyhive Road, and in various places in the neighbourhood of Thornhill. Also the White Butter Bur, which had established itself in several places on the banks of the Nith.

April 7th, 1863.

Sir W. JARDINE, Bart., President, in the Chair.

Mr. Robt. Scott jun.; Mr. R. B. Carruthers, Dumfries; Mr. J. Jackson, Aimesfield; Rev. D. Hogg, Kirkmahoe, were elected Ordinary Members.

The President made some remarks on the objects and advantages of the Society, throwing out various suggestions for securing its existence, and alluding especially to the advantage which would be gained by the publication, at the close of the year, of a report embodying the result of its efforts, and containing an abstract of the more important papers read during each session. He thought it advisable that the in-door meet-

^{*} These are now in the Museum of the Society of Antiquaries of Scotland, in Edinburgh. The coins were of Alexander III., John Baliol, and Edward I. and II.

ings of the Society should terminate with the next, or May meeting, and that summer excursions should then commence.

The following communications were read:-

On a Submerged Forest in Galloway. By Dr. A. Mitchell, C.M.

The observations were confined almost entirely to the number of large trunks of trees found imbedded in the banks of the Cree near Newton-Stewart, and the peculiarity of the locality in which they were found.*

On some of the rarer Lepidoptera of the district. By Mr. William Lennon, Crichton Institution. Read by Dr. Gilchrist. Some fine and carefully-prepared specimens were exhibited.—See Transactions.

May 5th, 1863.

Dr. GRIERSON in the Chair.

The Rev. Robt. Wishart, Thornhill; Mr. Mitchell, Courier Office, Dumfries, were elected Ordinary Members.

Mr. G. C. Dybdahl, Copenhagen; and Mr. M'Ilraith, Canada, were elected Corresponding Members.

The Secretary reported that the Council had met Sir W. Jardine upon the 30th, relative to the management of the summer excursions, and the manner in which the proceedings and transactions of the Society might be most fitly embodied and preserved for its use.

As the publication of these proceedings would be of great importance to the Society, and would enable them to exchange their Transactions with other kindred bodies, the President proposed to undertake the printing of the Transactions of the Society during its first session, and present them to the Members as his contribution for the first year, and requested that the Minutes should be placed in his hands for that purpose, and to enable him to prepare an address to be read at the next Anniversary Meeting. This was agreed to.

^{*} This paper had been previously read before the Antiquarian Society of Edinburgh. The locality will be visited in the summer excursions of the Society, and further reported on. It is extremely interesting.

It was arranged that the first out-door excursion of the Society should be held upon the 2d of June, at Braehead, in the parish of Kirkmahoe, having for its chief object the examination of a cave which had never been explored.

The following communications were read:—

On the Relationship of the Genera of Ferns, indigenous to Britain and Denmark; the scarcity of this order of plants and their comparative diffusion in the two countries. By Mr. T. C. Dybdahl of Copenhagen, C.M.—Mr. Dybdahl was introduced to the Meeting by the Chairman.

Jottings of the Forty-five. By Mr. M'Diarmid.

The jottings were chiefly the reminiscences of Mr. Maxwell of Carruchen, of his escape, and its incidents, after the defeat.

On the supposed origin of vitrified forts, with a description of that of Craigphadrich in Inverness-shire. By Dr. Aitken. Was read by the Secretary.

On the Fructification of *Himanthalia lorea*. By Mr. Croall, C.M., Montrose. Read by Dr. Gilchrist.

The Chairman made an oral communication regarding a supposed ancient stockade recently discovered. He observed, that about five weeks since, a man drowned himself in a tarn about two miles north of Sanquhar. In order to recover the body, the water was drained off, when it was found that a small island in the middle of the loch or tarn was artificial, and had been constructed of stakes with stones between, and had been approached by a zigzag line of steppingstones. It was thought that the loch might be altogether artificial, forming, as it were, a moat or fosse to the little fort. Dr. Grierson was requested to procure further information, and report at a future meeting.

This closed the business of the evening, and with it the first Winter Session of the Society.

LIST OF MEMBERS

OF THE

Dumfriesshire & Galloway Natural History and Antiguarian Society.

SESSION 1862-63-

FOUNDATION MEMBERS.

Dr. T. GRIERSON, Thornhill.

Dr. J. GILCHRIST, Crichton Royal Institution.

Dr. J. Dickson, Dumfries.

Mr. W. G. GIBSON, Dumfries.

Mr. WILLIAM M'DIARMID, Irish Street, Dumfries.

Mr. M'ILRAITH, Standard Office, Dumfries.

Mr. J. THORBURN, Writer, Castle Street, Dumfries.

Rev. WILLIAM GRAY, Manse, Mousewald.

Rev. M. N. GOOLD, U.P. Manse, Dumfries.

Mr. T. CORRIE, Procurator-Fiscal, Dumfries.

Dr. Borthwick, Dumfries.

Mr. C. HARKNESS, Writer, Castle Street, Dumfries.

Provost Caldow, Palmerston, Maxwelltown.

Mr. J. Symons, Writer, English Street, Dumfries.

Dr. H. G. Stewart, Crichton Royal Institution, Dumfries. Dr. S. GRIERSON, Southern Counties' Asylum, Dumfries.

Mr. W. Hogg, Draper, Dumfries.

Mr. T. AIRD, Mountain Hall, by Dumfries.

November 20th, 1862.

ORDINARY MEMBERS.

Mr. S. Adamson, Writer, Irish Street, Dumfries. Mr. H. GORDON, Writer, Dumfries.

Mr. Macdonald, Rammerscales, by Lockerby.
Rev. William Frazer, Manse, Colvend.
Mr. Heron, Duncow, by Dumfries.
Captain Anderson, Dumfries.
Dr. Moffat, Millriggs, Hutton, by Lockerbie.
Mr. P. Dudgeon, Cargen, by Dumfries.
Rev. Dr. Menzies, Manse, Keir, by Dumfries.
Dr. Lewis, Dalbeattie, by Dumfries.

Rev. William Gordon, Manse, Ruthwell, by Dumfries. Corresponding Members.

Miss Mitchell, Montrose.
Mr. Alexander Croall, Sunnyside, Montrose.
Mr. Joseph Parker, Brompton, Cumberland.
Mr. H. T. Wake, Scotby, near Carlisle.
Dr. J. C. Browne, Derby Lunatic Asylum.
Dr. A. Mitchell, Depute-Commissioner in Lunacy, Edinburgh.

December 4th, 1862.

ORDINARY MEMBERS.

Mrs. S. Adamson, Irish Street, Dumfries. Mr. J. Afrken, Painter, Dumfries. Mr. W. Scott, Castle Street, Dumfries. Mr. Alexander Crombie, Architect, Dumfries. Mr. J. Stark, Troqueer Holm, by Dumfries. Mr. T. Thorburn, Barnkin, by Dumfries.

Corresponding Members.

Mr. R. Gray, City of Glasgow Bank. Dr. Herder, Lunatic Asylum, Worcester.

January 6th, 1863.

ORDINARY MEMBERS.

Rector Cairns, Dumfries Academy.
Mr. T. Jackson, Writer, Nith Place, Dumfries.
Mr. Hastings, Taxidermist, Euglish Street, Dumfries.
Mr. William Allan, Druggist, Dumfries.
Dr. P. Murray, Buccleuch Street, Dumfries.
Mr. W. Lennon, Crichton Royal Institution, Dumfries.

Mr. J. MACKENZIE, Barnhill, by Dumfries. Mr. T. Cordiner, Frazerford, by Dumfries. Rev. G. Laine, Manse, Penpont, by Dumfries.

Rev. WILLIAM M'DONALD, Manse, Burnhead, Penpont, by Dumfries.

Rev. J. Hutton, Manse, Closeburn, by Dumfries.

Rev. Mr. Barclay, Manse, Dunscore, by Dumfries.

Corresponding Members.

Mr. J. C. Whyte Douglas, Belle-isle-en-terre, Cotes du Nord, France.

Dr. C. F. SLOANE, Ayr.

Rev. W. Grant, Free Church Manse, Ayr. Professor Harkness, Queen's College, Cork.

Professor Ogilvie, 29 Union Place, Aberdeen.

Mr. W. C. AITKEN, Birmingham.

Mr. James Keogh, Troon.

February 6th, 1863.

ORDINARY MEMBERS.

Rev. Joseph Anderson, Manse, Glencairn. Rev. Thomas Underwood, Manse, Irongray. Mr. S. Gordon, Stationer, Castle Douglas.

CORRESPONDING MEMBER.

Dr. W. A. F. Browne, Commissioner in Lunacy, Edinburgh.

March 3d, 1863.

CORRESPONDING MEMBERS.

Mr. ALEXANDER STRATHERNE, Sheriff's Chambers, Glasgow.

Mr. J. BRYCE, LL.D., High School of Glasgow.

The Rev. F. O. Morris, M.B., Nunburnholm Rectory, Hayton, York.

April 7th, 1863.

ORDINARY MEMBERS.

Mr. Robert Scott junior, Castle Street. Mr. R. B. Carruthers, Druggist, Dumfries. Mr. J. Jackson, Aimesfield, Writer, Dumfries. Rev. D. Hogg, Manse, Kirkmahoe, by Dumfries.

May 5th, 1863.

ORDINARY MEMBERS.

Rev. ROBERT WISHART, Manse, Thornhill. Mr. MITCHELL, Courier Office, Dumfries.

Corresponding Member.

Mr. M'ILRAITH, Canada.

August 4th, 1863.

ORDINARY MEMBERS.

Mr. Harley, Cowhill, by Dumfries. Mr. Maxwell, Breoch, by Dumfries. Mr. Munn, Mathematical Teacher, Dumfries Academy.

Mr. A. FORSYTH, Charlotte Street, Dumfries.

Corresponding Members.

Dr. LATHAM, Cambridge. Mr. P. Gray, 2 Temple Street, Whitefriars, London.

FOREIGN MEMBERS.

Rev. J. S. Burnet, Canada. G. C. Dybdahl, Copenhagen.

DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY AND ANTIQUARIAN SOCIETY,

In account with Mr. W. G. Gibson, Treasurer.

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Examined and found correct,

J. GILCHRIST. WM. MILRAITH.



ADDRESS OF THE PRESIDENT,

SIR W. JARDINE, BART., LL.D., F.R.S., F.L.S.,

ETC. ETC. ETC.

1st December 1863.

Gentlemen,—The ordinary business of the Meeting being concluded, it now devolves upon me, as your President, to address a few words to you at the termination of this the first year of our existence as a Society, and the commencement of our Second Session.

But, first, let me thank you for the honour you have conferred in again placing me over you. I have already expressed my opinion that the higher office-bearers of the Society should change; but taking into consideration its position, and that we have just passed our year of trial, it was perhaps judged rightly that for the next session no change should be made. Next year you will act differently, it will conduce to our well-working; it is only fair that others, well-qualified, should share the honour of presiding, and it will be greatly to our advantage that we should hear, in the yearly addresses of the members who may be selected to fill this office, different views on the important subjects that may be brought under our notice.

Before making any remarks on the subjects that should be pursued, and that ought in future to interest us, I shall shortly bring before you what has taken place and been accomplished during the past year. Your Secretary, at last Meeting, gave a general outline of what had been done in the Winter Session, and this will appear in more detail when our proceedings are printed. I shall therefore confine myself to a short notice of our summer excursions, especially as these will take a very important place while carrying through the History of the district under our charge. I had not the satisfaction of being present at the two first excursions, and my information is taken from the Secretary's notes.

The first excursion took place, according to arrangement, on the Society's day, the first Tuesday of the month "June." The place appointed for the meeting was at a cave on the farm of Braehead, in the parish of Kirkmahoe. For a day or two previous workmen had been employed, through the kindness of Mr. Jeffray the tenant, in removing an accumulation of rubbish and stones which had been collected from the adjoining fields, and thrown into the burn exactly at the supposed entrance. Unfortunately a clearance was not completed, and the meeting was obliged to delay operations until a future occasion, but satisfactory evidence having been obtained that a cave really existed, and that the spot upon which operations had been commenced was the entrance. the sanction of the proprietor, J. M'Alpine Leny, Esq., to pursue the researches was obtained, and full permission has been granted to continue whatever explorations the Society may think fit to make.*

As the locality at which the party assembled was noted for "Snakes," search was made, and six specimens of the slowworm, as it is provincially called, were found. This species, the Anguis fragilis, is not generally distributed over Scotland, and in Dumfriesshire is local, inhabiting only certain places. At Craigie burn, above Moffat, on the stony sides of the hills, it is also found. Thereafter the Society visited different places of interest near, especially the old Castle of Dalswinton, and the famous "Cummin's ash," the age of

^{* &}quot;Our hill streams have in several places formed 'hermit-fancied caves' for their naiads out of the living rock, in the most curious style; and there is a cave at Crofthead of Dalswinton which deserves to be mentioned."—New Statistical Account of Dumfriesshire, p. 53.

which is supposed, by tradition, to be above 400 years. It was measured and found to be twenty-one feet in circumference at three feet from the ground. Dalswinton Loch, where the late Mr. Miller made his experiments upon the application of steam to the propelling of boats, a power now so wonderfully worked out, and enabling our Society (whether by water or land) to meet together from distant points. The only plant of real interest met with in the excursion was the Orobanche major,* a parasite on the broom, and consequently local. Doronicum pardalanches, Anchusa sempervirens, and Vinca minor, were found in the Dalswinton woods, but most probably, almost certainly, were outcasts from the garden.

Thanks were voted to Mr. Jeffray for his kindness in aiding the party in their researches, and the next meeting was appointed for the seventh of July, to explore Morton and Closeburn.

The Society accordingly met at Thornhill, and examined the natural history and antiquarian collection formed there by Dr. Grierson. The party then set out for Morton Castle, a fine old baronial edifice situate on a lacustrine bank, and listened to an interesting paper, prepared by Dr. Grierson, on the history of the castle and the great leading events of the times in which the families, to whom it has successively belonged, have played their parts.

From Morton Castle the party proceeded in a southern direction until they struck the Cample Water near the point whence it emerges from the silurian hills, in which it has its source, and enters upon the sandstones of Middle Nithsdale. On the banks of the Cample a line of basalt was noticed at various points, and at one of these it had assumed the columnar form, the only instance of this structure as yet known in Nithsdale. At another point the basalt is seen to overtop a sandstone cliff, down which the rivulet descends. The Gatelan bridge and adjoining quarries were also visited, with

^{*} Smith. The O. rapum of Babington's Manual, p. 235.

the Crichope linn and glen, when time being exhausted the party separated. Saxifraga hypnoides, Epilobium angustifolium, Cryptogramma crispa, and Ophioglossum vulgatum, were found during the excursion.

On August the 4th, the coast line of the Solway between Colvend and Douglass Hall was the range fixed upon to be examined. Many of the party took the morning train from Dumfries to Dalbeatie, where an omnibus was in waiting, which conveyed them to Barnbarroch. Here they were met by Mr. M'Diarmid, the Rev. Mr. Fraser of Colvend, and others who had undertaken to conduct the party. One of the first objects of interest was the examination of a so-called ancient or vitrified fort overlooking the estuary of the water of Urr. The site is upon an eminence, and on this, and among the debris on the sides, were found pieces of slag, and runtogether fragments of the rocks of the district, shewing that on the summit of this knoll fires had been kindled for some purpose, and that there had been heat sufficient to vitrify or melt the rocks around. Copper ore is found in the vicinity, and various old levels and mining indications exist, and the ore itself within these few years has been attempted to be commercially mined. The hills around were, and are still, partially covered with brushwood, the material in early times used for smelting; and there can be little doubt that this was one of the positions to which the ore was formerly carried and rudely smelted, perhaps supplying part of the material for some of those ancient weapons constantly turning up around. Several of these so-called forts exist also in the neighbouring country, and this examination to ascertain their true use will be profitable to the Society; and if they are proved to be ancient smelting-places, it may lead to the closer examination of a district where metals are now believed to be in too small deposit for profitable working.

The party then went round the coast. It is very precipitous,

but in most parts can be walked round below on the recess of the tide. On the most inacessible parts various sea-fowl breed, and at one promontory a colony of cormorants (*Phalacracorax carbo*, Linn.) had not yet carried off all their young. The raven and peregrine falcon used to have their eyries here, and it was also a breeding-station for the red-legged crow (*Pyrrhocorax graculus*); none of the latter were seen during the excursion, and it was said they had been driven from their haunts by the jackdaws which nest in numbers in the fissures of the rocks, and among the ivy and yew which in many parts cover them.

The Botany of this coast is very rich and varied; Shakspere's samphire, Crithmum maritimum, so local in Scotland, is abundant on all the cliffs, and in their caves grew Asplenium marinum equally plentiful. The following plants were also observed:—Carum verticillatum; Habenaria viridis; Arcnaria verna and rubra; Parnassia palustris, common; Drossera anglica and rotundifolia (D. longifolia grows in several localities, such as Auchensceoch Loch, but was not observed now). Helianthemum vulgare; Triglochin palustre and maritimum; Hypericum elodes; Carex extensa, salt flats, not common; C. flava; distans; Carlina vulgaris; Raphanus maritimus, rare; Aster trifolium; Scutellaria galericulata; Malva moschata, plentiful; Astragalus glyciphyllus; Ulex nanus, in flower; Rubus exsius.

The excursion for September had been arranged to meet at Cargen, to examine the fine mineralogical collection there, and to explore the Mabie hills and woods; but a severe domestic affliction in Mr. Dudgeon's family prevented the meeting.

The October meeting, the last of the summer excursions, took place on Tuesday the 6th, in Annandale. I had the honour of meeting the Society on that day, and conducting them over a district familiar to me, but even

yet not quite mastered. The day was most favourable. We assembled from various points on Gotterby Hill, an eminence at the end of one of those long ridges of sandstone and drift which frequently stand in the middle of similar valleys. From this an extensive view north and south is obtained, to the northward shewing the Moffat range of hills, closing the upper part of the valley, and giving from their watershed the streams that accumulate to form the principal river Annan. On the south the lower part of the valley is laid open, and in favourable days the Solway sparkles clear like a lake between Skiddaw and the other English hills. The upper Annandale basin is separated from the lower by a meeting of the silurian sides, and the gorge at Dormont is cut through the older rock, which at one time formed a barrier, damming up the water, upon what are now alluvial lands. On the giving way of this gorge these low lands were drained, leaving the series of lochs at Lochmaben as basins, too low for the water to be entirely drawn off. Many of the other hollows nearly drained, became marshes, gradually filling up and producing peat, and these in after changes were again silted over with the present alluvial soils. There is a most instructive lesson to be studied here.

Corncockle Quarry was the first object for investigation, and fortunately some tracks of footmarks had been recently exposed. Several species of animals must have walked over the sands before they became hardened into stone, or were raised to their present angle of about 36°; but hitherto no trace whatever of any organic remains has been discovered, although anxiously watched for. The cover of the quarry is a tenacious clay, locally called till, filled with stones of various sizes, but few reaching that to which we could apply the term boulder. This has been considered as glacial drift, and it must have been carried over the sandstone beds after they were upraised in a semi-fluid state, as their edges are now horizontally cut off and smoothed, at the same time deeply

furrowed in the direct line of the valley; while the stones in the drift above are not rounded, but are smoothed, and planed, and scratched in the direction of their axis. This sandstone is now considered by the most competent geologists as the equivalent of the *permian* rocks of other districts.

Some ancient works in an adjoining moss—the "Spedlings Flow"—were next visited. Attention had been directed to these about two years since by the discovery of what was thought to be a fireplace, by parties casting peats. It was a circular platform of flat stones, bordered in front with rudely formed wood, placed in the moss about six or seven feet below the surface. Quantities of charcoal were found around, and of bones, chipped or smashed, but so small that they could not be identified. On farther examination the stones were supported upon rude beams of wood (oak), covered over with a layer of ("rice") brushwood, birch and hazel, which was again covered with a layer of bracken (Pteris aquilina). Upon uncovering some part of this structure before the Society inspected it, a continuance of transverse beams regularly laid was displayed, covered by their brushwood and fern. The beams were morticed and cut by metal tools. Beyond a few large flat stones, no relics of any kind, either of metal or of pottery, have yet been found.

The attention is naturally directed to the LAKE DWELLINGS, now creating so much interest; but whatever this structure may have been, the beams and brushwood were laid upon the moss ten feet deep below. It may have been softer than at present, or the access may have been more marshy, but when they were placed it could not have been in the condition of a loch. I will not allow peat to be cast from this part, and in spring, when the weather dries, will have it farther uncovered; and the members may think it worth their while to revisit it.

I last week visited Dowalton Loch, in Wigtonshire, perhaps the most remarkable and interesting discovery in Scotland in modern times. There the structures, somewhat analogous, had been placed either in a lake supported by piles, or on a shaky quagmire island, surrounded by water. The time to examine the structure carefully was too short; but upon the transverse beams we found the same layer of (rice) brushwood, birch and hazel, covered again, in this instance chiefly with heather, but mixed with fern. Metal tools had also been employed to form and mortise; and a fire-place or kitchen-midden had been discovered where the remains of animals, sea-shells, etc., abounded.

The transition from the *Moss Dwelling* to the old Spedlings Castle was but a step for the party; but how long was the interval between the two works? In the latter we come to the substantiality of more modern building in *nine feet* thick walls, and the massive iron barricades of the windows, built in when they were built. Sometimes we have the old superiority claimed, whether for right or wrong, of imprisonment in the keep or dungeon—a structure which, if once got into, could not be escaped from, being formed narrow at top and widened at bottom; and from its position to the stair (turnpike), illustrating the *trap*, so graphically described as closing the fate of Amy Robsart.

From the season of the year, no plants of any interest were picked. Andromeda polifolia was found common in the mosses, but was now out of flower. The same cause acted upon the entomology, which, at an earlier season, would have been found attractive. The evening was spent, I trust, agreeably, and giving fresh inducement for excursions in prospect.

I shall have occasion to bring before you that Societies have their rising and falling, and their vicissitudes; so also is it among our members. Even in this our first short year, we have lost of those that originally joined us. One of our members has passed away, and we have to lament the loss of William Bell Macdonald of Rammerscales. He combined the

attributes of a fine temper and disposition with a readiness to join in any recreation, or amusement, or research, and to assist the party as best he could, rejoicing to instruct and give information. But we shall miss him especially in our antiquarian researches, where he would have materially given us help, and brought to bear his great learning and scholarship upon many of the questions of ancient history that will come before us. We shall miss Macdonald. His extensive library, I am glad to say, is to remain intact, and I am sure members will still enjoy its use.

And now, gentlemen, having run shortly over the doings of your first year, I would wish to call your attention to a few points which may bear upon and be profitable for a new institution to consider.

Since the time that the arts and sciences began to be cultivated, "Societies" for their promotion sprung up; that is, men associated themselves together for the purpose of mutually inquiring into, and discussing those subjects to which they had been directing their attention. In those early days when the conveyance of information was so dilatory; when the intercourse by letter occupied weeks or months before the interchange of opinion could be effected, or the reply to a simple question obtained; a meeting of scientific men once in a quarter or half year was of infinite importance. Thus it was that the Royal Society of London became established sometime in the beginning of 1600. The Meetings took place in the houses or lodgings of the "gentlemen," and in 1660 they met and constituted themselves a Society, "for the promotion of all kinds of experimental philosophy." Rules were draw up, and office-bearers were appointed, and one shilling weekly was subscribed to defray the expense of "their experiments." This assemblage soon attracted the attention of Europe; it received a royal charter; and admission to it now stands the one most coveted as a mark of scientific attainments.

example was followed in the other capitals of Great Britain and Ireland; while numerous splits-off from the parents receive almost equal encouragement, and there are very few of the more important county towns that have not now their Scientific Societies. But all of those have had their waves of success, and even our great Societies have been swayed by the energy of some of their members, or the importance of some subject brought forward by them; but whether rising or falling, their utility remained unchallenged. As time wore on places of less importance must also have their Societies. The advantage of learning and information was more appreciated, and most of the larger towns in Scotland now have their Society, library and museum. These are not always conducted upon the best principles, but the will is nevertheless shewn, their utility acknowledged, and by-and-by the details will become improved.

The old manner of teaching Natural Science was by means of indoor lectures, illustrated sometimes by rich collections of specimens, but at others by an assemblage of trash and monstrosities, supposed in the minds of the expositors to represent nature. At the beginning of the present century some innovations were made in this system, and, if I am not mistaken, it was the late Professor Jameson, of the Edinburgh University, who first ventured to take his class to the field, and explain the mineral characters of the rocks around Edinburgh. The example was followed soon after by the private lecturers on botany, and later still by Professor Graham of the University. Edward Forbes during his short career made extensive excursions. Professor Allman takes his class out to Dredge; and Professor Balfour, not satisfied with often exploring the flora of Great Britain and Ireland, two years since took his class to Switzerland.

In 1832 it struck the mind of the late Dr. Johnston of Berwick, that a Society for the general investigation of Natural History would work as well in the field as a class; that a country could be most advantageously so explored; and that besides the utility of such investigation, parties were brought together and kindred tastes kindled and encouraged; and so was founded the Berwickshire Naturalists' Club. This has continued until now with some waves of success and depression; it has accumulated a large amount of local information, circulated by means of "Transactions," which are quoted and looked up to as the most reliable authority for subjects within their range. It is curious that Scotland, generally so ready to take up whatever is really useful, should not have availed herself of the border hint, but that southward similar Societies have raised themselves and prospered, doing a large amount of useful outdoor work and having a large community of members. It gives me satisfaction, then, to think that this and the neighbouring county have at length come forward, and that while, on the one hand, they have acted on the old plan of winter meetings to read papers and discuss the subjects there introduced, they have at the same time combined outdoor summer excursions. A most wise arrangement, and if, in future years, conducted with energy and system, we shall ere very long do much to record the present as well as to recall some of the past history of these counties.

The range that this Society has undertaken is of large extent and importance, and there is, perhaps, no district in Scotland that can surpass it in variety and interest. A country stretching from a sea-shore to an elevation of above 3000 feet must possess a wide zoological and botanical range, while the surface and natural characters of the country itself are extremely varied, and include rich cultivated lands and lowland woods; moss and muir, and natural woods of the wildest description; sea-shore low, sandy, sludgy, rugged and precipitious; lochs lowland as well as upland and alpine; its ancient history rich in antiquarian remains, and in monastic, feudal, and border traditions.

The value of a Society such as ours in recording the

present state of the country and its productions can scarcely be overrated, and it would have been of much use to our present working had some such existed at a much earlier period. Nearly all parts of Great Britain have undergone, and are still undergoing change, within the last fifty years more than previously rapid and complete.

Early population and the chase, for food or safety, dispersed the larger wild animals known historically to have inhabited the country, and Bos primogenius, the wolf and the black bear, or the beaver, exist no longer. The range of the red deer, formerly extending over all our province, and much farther south, is now far to the northward. Of our wild fowl, the crane and bustard are extinct. The capercailzie was extirpated. The whole tribe of water-fowl have been materially reduced, and some will shortly fail entirely. Extension of the area of cultivation of itself would interfere with the state and numbers of the wild animals and plants, but when, as within the last twenty years, all the modern discoveries and appliances of chemical, mechanical and engineering science have been brought to bear, their influence has been so great, as almost entirely to change the natural characters of a district, and to drive away or extirpate many of the original animals and plants.

But while population and cultivation, wealth and luxury, act as destructive agents, their influence acts also in various other ways. The modern rage for "sporting," and for taking large tracts of land in the wilder parts of the country, for the sake of the game found upon it, and the preservation of the game by destruction of so-called enemies, has played a twofold part, by destroying some species almost entirely, and allowing others to increase to an extent prejudicial to many interests. The recommendation of a so-called gamekeeper is, that he should be an "accomplished trapper," a first-rate "vermin killer;" almost every animal or bird, not something like a grouse or blackcock, pheasant or partridge, comes within the de-

nomination "vermin," and with the exception of the fox and otter, which are preserved for other purposes, are all killed. The birds of prey which associated so well with the wild landscape, are now scarcely to be heard or seen. In Dumfriesshire, the common buzzard and peregrine falcon are now very rare. And what is the consequence? other species—the natural check having been removed—have increased to such an extent as to become really injurious. We may instance the increase of the common wood-pigeon; the flocks have now become so large, that when they attack a field of turnips, they do as much harm as preserved rabbits. In Berwickshire an association has been formed for their destruction, and in one year alone eight thousand were killed in various ways. Upon a Highland estate lately, the field mice increased to such an extent, that they destroyed young plantations by gnawing the bark of the young trees; the proprietor was recommended to forbid his gamekeeper to kill the owls, and it might have been added to preserve the kestrels.*

But while injury is done, benefit also arises from wealth and luxury. Valuable introductions may be instanced in the case of the turkey, pheasant, guinea fowl; carp and various fishes; among timber, the larch. Wealth is now endeavouring to introduce many fine trees and plants which may turn out of great importance. Acclimatisation societies are doing much to import species of animals and birds that will suit this climate; and comparatively private associations, such as the Oregon expedition, and that now working in Vancouver's Island and British Columbia, have introduced many hardy plants, and will continue their exertions.

The plantation of waste lands, and larger extent of young wood, has also had its influence; some birds frequenting open localities have disappeared, giving way to others not formerly known, which appeared as the woods grew.

^{*} In 1856, 21,981 head of vermin were killed; in this was included 2132 stoats, 1942 weasels, nearly 300 owls, and 231 kestrel hawks.

Commerce and agriculture have also been the means of introducing many species, some of them not always useful. A fresh-water shell (Dresscina polymorpha), a northern species, has been introduced into many of the English canals and waters. A most noxious plant, Anacharis alsinastrum, has lately found its way to this country, and its growth is so rapid that it has in some instances filled up canals and stopped the navigation. Ballast from foreign vessels emptied on the shores has introduced many plants not before known. Foreign wood has introduced both plants and insects. Foreign field and garden seeds have also borne their part; the dodder (Cuscuta), sometimes so hurtful to the crops of clover, is one of these; and foreign hay is another carrier of seeds. Now, the geographical distribution of animals and plants, and their mode of getting or of being transported from one place to another, is a very interesting inquiry, and in the questions and speculations of the present times it is assuming a wide importance; to all these changes, both of former and present days, the members of the Society must direct their attention.

As already stated, the combination of indoor meetings in winter, and country excursions in summer, I think is an excellent arrangement. One of the primary objects of the Society is to elucidate the history and resources of the district within its range, and without the latter this could not be done. In winter I do not think our papers should be restricted to British or local subjects. The comparison of the works of man—whether buildings, weapons, or utensils for the field or home, or of works of art—will be found most useful wherever they may come from, and many of our members may go to far-off countries, and observations on the productions of these will often open up a more varied discussion; but in the publication of our proceedings and transactions, beyond the title or a very short abstract in the former, we should confine ourselves to papers relating to local history and productions only. I would wish them to be a record of the condition now of our

province, and a chronicle of what we can yet rescue of its ancient history. In endeavouring to carry out this, I hope to be able before next year to submit to you a plan, that at a very small expense indeed, this may be accomplished. This year your little trial volume shall be my charge, and my contribution to the Society, as I think it one of some importance to give us a standing with other similar associations.

While at this part of my address, and before alluding to our country excursions, there are two other points I would shortly notice. To carry out the history of our province, we should look to the formation of a local library and collection. I do not mean that we should at once rush into the purchase of books, or that we should stuff or preserve large animals or common things. We have neither funds nor space, but both should be kept in view. Of late years there has been a considerable number of papers, published in different periodicals, relating to the geology and zoology of the district. The authors will readily send us these; and when the object is known you will find books will accumulate. Rare specimens may occur in the departments of zoology, botany, and geology, or the typical specimens referred to in some paper should be kept to serve as a beginning; but in both I would admit of nothing that did not come under the denomination of strictly local, or connected with local societies. Thus the papers or transactions of other societies may be admitted when received in exchange for our own, or bearing upon some analogous custom, or of a specimen illustrating the variation or some point in the history of one collected by ourselves. But it should be urged as an absolute rule, that all foreign specimens be rejected, otherwise we shall have the little space we may hereafter possess wasted by insulated specimens that in your possession can illustrate nothing. It is the experience of societies that general collections are encumbrances, and in most instances get destroyed for want of care, or they are dispersed. Within these few years the really fine and valuable collection of the Zoological Society of London, chiefly presented by the late N. A. Vigors, a first-rate scholar and naturalist, and containing many unique things from our scientific exploratory voyages, has been sold. That of the Entomological Society has also been sold, and the greater part of that belonging to the Linnæan Society was sold during the last month, because there was not sufficient space to keep what had been presented to them. The collection of the Royal Society of Edinburgh is now undergoing the same process.

In the summer excursions of the Society, while the zoological and botanical products are not neglected, it will be a chief object to examine the mineralogy and geology. And I will suggest, that, during our excursions, notes of what is observed should be taken down. The exact habitats of rare plants noted, so that we shall gradually make up our flora. The same in regard to entomology. And it would be profitable, at the ensuing meetings, that a short report of the previous excursion should be read. Various opportunities will occur for this. Within our range we have, besides, various building materials of great excellence, lime and coal. Of metals, we have gold in small quantity, silver, lead and iron in work, copper and antimony. Of minerals, sulphate of barytes, etc. There is no commercial speculation so precarious as mining, and large sums of money have been sunk or lost by the employment of parties not qualified, or otherwise interested, or by gentlemen taking upon themselves to judge without sufficient experience. Antimony was formerly worked in Eskdale. Copper has been attempted to be worked in the Moffat range. In Galloway, iron is at present worked, and there are elsewhere numerous indications of both iron and copper, too small to work profitably; but these districts require yet to be minutely surveyed. Coal is always a mineral much coveted, and various attempts have been made in Dumfriesshire to find it away from the known fields. These attempts have been unsuccessful, and money has been expended which a

knowledge of geology would have prevented.* In two instances the attempts were made by sinking in the silurian rocks, deceived by the black shale beds; and in one case the mining party was so ignorant as to sink his shaft into the edges of the beds.

The age of the drift which covers large areas of the country, the raised ridges which in some part of Dumfriesshire bear the name of "kaims," is another point of interest; and a closer examination of this deposit, and a search for anything organic, or that would indicate the presence of man or the older animals, will repay the inquirer.

A close examination of our peat mosses must be undertaken. Here we have an extensive area deposited under various circumstances; and while the finding of the remains of our ancient animals may be calculated upon, the point of greatest interest for the attention of the members is the mode of the deposition and increase of the thickness of the peat, and the time the deposits have taken to accumulate. It is well known to many whom I address that the Antiquity of Man is occupying a large portion of scientific inquiry as well as of the general public attention, and that proofs of man's greater age, at variance with the formerly received chronology of the Mosaic account, by some of our highest geological authorities are set down as finally established. Now this opinion is based upon the position and the length of time supposed to be occupied in the formation of various deposits,† and among others that of Peat. The lower part of

^{*} Professor Buckland in his graphic way, when taken to a would-be coalfield, exclaimed, "They have been working in the *cellars* when they should have been searching their *garrets*."

[†] Mr. J. Prestwich, in concluding a lecture at the Royal Institution, 26th February last, stated, "he considered that more time and better data were required to make a sure estimate; nevertheless, he was satisfied that the evidence, as it exists, does not warrant the extreme length of time so frequently supposed;" and "the evidence, as it stood, seemed to me as much to necessitate the bringing forward of the extinct animals towards our own time, as the carrying back of man in geological time."—Meetings, Royal Institution, February 1864, pp. 9, 10.

the valley of the Somme, now so celebrated by the discovery of flint instruments, the work of man, from above Amiens and below Abbeville to the sea, is filled with peat, in some places above 30 feet in thickness; and the calculations made by M. Boucher de Perthes give the time for the formation of this thickness of peat to be "so many tens of thousands of years," that even Sir Charles Lyell doubts, and says, "we must hesitate before adopting it as a chronometric scale;" and he adds, "yet by multiplying observations of this kind, and bringing one to bear upon and check another, we may eventually succeed in obtaining data for estimating the age of the peaty deposit." And it is to the above suggestion that I would wish most especially to direct your attention. Calculations of somewhat similar kinds have been attempted upon unascertained data. The recession of the Falls of Niagara, and the time required for cutting through the rocks between Queenstown and the present position of the Falls; the growth of coral reefs; the deposition of the silt in the Delta of the Nile, or in the alluvial plains of the Mississippi, or at the mouths of the great American and Indian rivers, may be attempted to be calculated, but we have no recorded facts that would enable us to build as certain the time which they would bring out. Peat is under the same conditions, and is formed under very varied circumstances - sometimes in comparatively small basin-like cavities, where much would be carried down from the wash of the sides or watershed around-sometimes a lake, with a vast accumulation of substance carried by its feeders, becomes partially drained,* changes to a marsh, and at last grows peat upon its surface. Similar results would occur by the breaking of some river gorge, which would drain the lake-like expanse in the valley above, and peat accumulates here rapidly, there slowly; and in these circumstances it is in later times generally found covered by some gravel or fine

^{*} A lake in England lately drained has twenty-one feet of peaty mud. See also Dowalton Loch, and its sea of peaty mud.

silt carried over it by the tributary streamlets that flow into the river, now the main outfall. And what becomes of the great accumulation of peat that from one to six feet thick caps the summits of the mountain-ranges that border Alpine valleys? It is furrowed throughout into gullies, and the winter's storms daily wash it down into the chief stream of the valley, where it is collected as mosses in the bays, fills up and forms the base of meadows where the water runs sluggish, and some is carried down even to the sea. But the time for the accumulation of peat is just as varied as the circumstances of the localities where it is formed or deposited; and it is only by seeing "how these bear upon and check each other" that we can arrive at any certain results. There are very great opportunities for studying this within our range, and I trust they will be taken advantage of.

And next we come to the olden history and antiquities. In this department much has been lost and much ruthlessly destroyed and wasted, but a great deal is yet remaining. The discovery of weapons, implements, and works of art, formed by the hand of man, in conjunction with the remains of animals that lived anterior to any historic tradition of their existence in caves, and formations to which great age has been ascribed, has invested this branch of research, and the various weapons and implements of the stone and iron ages, with more than usual interest, as upon the first is also chiefly based the theory of the great antiquity of man; and we cannot too closely study, and compare together, all the forms of manufacture that occur most carefully with the position and conditions in which they are found. Next in order, perhaps, are the ancient lake dwellings discovered in different parts of the world, so far distant as New Guinea, and in various lakes in Europe and Great Britain. Within our own range, upon the draining of Carlinwark Loch, Kirkeudbrightshire, in 1765, various erections of both stone and wood were brought to light; and when the lochs within our range shall have been carefully examined, it is certain, from indications already observed, that structures of some kind will be found. While close upon our boundary, in Dowalton Loch of the neighbouring county, descriptions of structures of exceeding interest were brought before the late meeting of the British Association by Lord Louvaine. In this loch, bronze implements and ornaments of both metal and earthenware have been found, teeth and the bones of different animals; and when the soft state of the bottom will allow of a closer examination, other discoveries will doubtless be made. There appear to have been different levels in the water of this loch; and, Lord Louvaine suggested that these may have been caused by the growth of peat impeding the outfall of the loch; and, as Sir Charles Lyell remarked, that if the antiquarian "could determine a proximate date to the lowest of these dwellings, and the ornaments that were found there, it would throw light on one of the most interesting questions of chronology, the rate of the growth of peat."

The shores of our bays and estuaries have also yet to be searched for "shell mounds."* The interest created by the examination of the kjokken möddings (kitchen middins) of Denmark, has called recent attention and search for similar accumulations in Scotland. Hugh Miller relates, that among "a tract of sand dunes on the shores of the Cromarty Firth, immediately under the northern sutor, in a hillock of blown sand, which was laid open about eighty years ago, by the winds of a stormy winter, there was found a pile of the bones of various animals of the chase and horns of deer, mixed with the shells of molluscs of the edible species."† But this

^{* &}quot;Shell Mounds of Malay Archipelago." These were situate about four or five miles from the sea on sand ridges, probably formerly the boundary of narrow estuaries running up from the sea. They contained "cockle shells," and at the bottom of one mound, containing 20,000 tons of shells, a human pelvis was found, and other human remains and implements were obtained from the Chinese diggers.—Athenacum, 8th March 1862.

⁺ Sketch-book of Popular Geology.

year the attention of the Rev. George Gordon, of Birnie, was directed to the subject, and several shell mounds, somewhat resembling those found in Denmark, were discovered on the shores of the Moray Firth. A description has been given of those and some others, for the purpose of directing attention to the subject, by John Lubboch, Esq.,* who had also visited and examined the Danish heaps. In these Scotch mounds, unlike the Danish, remains of pottery were seldom found. A few ornaments of bronze have been discovered; one or two bones, apparently fashioned for some purpose; some small bits of flint; the bones of domestic animals; but the accumulation of shells formed the chief contents of the mound, all edible and common, and known, with one exception, to inhabit the neighbouring seas.†

These lake buildings and shell mounds, as far as discovery goes, are just beyond tradition. Metal tools had then been used, as the wood structures often plainly indicate; but tradition, either oral or otherwise, is wanting, or so slight as scarcely to be founded upon; they form the link between the older historic period and the time when stronger and more elaborate buildings were erected; and by endeavouring to join these and to compare all together, and to hunt up such traditions and relics as may still be in the possession or recollection of parties ignorant or thoughtless of their interest and value, we may yet come to find a reliable date for those erections upon which so much is based. The field here is most ample, and although history and antiquities have mostly been looked upon as branches of study distinct entirely from natural history or geology, it is far otherwise. The early history of man and his habits, as well as that of the animals that existed wild around him, cannot otherwise be traced; and the

^{*} Nat. Hist. Review, July 1863, p. 415.

[†] The exception is Tapes decussata, not known now in the Moray Firth, and according to Mr. M'Andrew having Caernarvonshire as its most northern range.

large wood of our mosses and alluvial lands, where it would be in vain to expect trees of similar size now to be matured, tell us that some difference in circumstances existed, though we cannot yet trace what that was.

It may be said that working out such subjects as I have alluded to, by a scientific association, will only be to gratify the pride or curiosity of its members, and will not be productive of any real good to their neighbours, or utility to mankind. We think such an assertion would be entirely unfounded.

It is possible that some of our minds may be so wedded to technicalities as to be incapable of forming profitable deductions from the facts gained; if such was the case, others will be found to utilise the facts which we elicit; but whether or not, without the truth and facts nothing can be done. Besides, the mind of man requires recreation. He has been ordained to follow out professions requiring great and long exercise of mind, or continued bodily exertion. Both must have change and rest; and there are few men, whether engaged in politics, or the government, or professional, or artizans, who have not some pursuit—such as the various branches of literature and science, sports of the field, etc.—which they now and then take up, different from their acknowledged vocation. With the majority these may be useful, or at least not injurious; but in too many instances gambling, dissipation and sensuality take their place, and for a short time give a supposed relief to the mind or body. Legislation has done much to repress those vices, tempted by, and incident to idleness, weariness and faulty education; but from the difficulty of finding innocent and at the same time interesting substitutes, the attempts at reform have not effected all that was desired. But advance is gradually making, and public libraries and institutions are assisting. An association of men for the investigations of the objects pointed at by this Society, will tend to turn their thoughts into different paths; the new views obtained will

keep the minds employed with subjects both curious and useful.

There is another object to combat besides those ordinary vices. A kind dignitary of the English Church has observed, that a wide-spread spirit of scepticism pervades in many instances the scientific publications, the popular periodical literature, the daily journals, and even the theological writings of the present day. In these, the subjects "are cleverly adapted to suit the habits and tastes of classes. So that alike in general society, and in the pastoral work, every clergyman (I would add every man), must be prepared wisely and effectively to defend the faith."* The very titles of some of our highest scientific works, unintentionally in most instances, point to doubts, for instance :- "Geological evidences of the Antiquity of Man, with Notes on the ORIGIN of Species by Variation." "ORIGIN of Species by means of Natural Selection." "Evidences of Man's place in Nature." "The Negro's place in Nature;" and many more such. The Geological evidences of man's antiquity, as I have shewn you, rest in great measure on data not proved by facts, and this is over and over again acknowledged by the author. The question of the Origin of Species would throw aside the fiat of Creation, and the Development Scheme that of design or adaptation of structure. In all the controversies on Man's place in Nature, and whatever may be the position in which parties place the negro,† it seems to have been forgotten, or at least lost sight of, that the animal structure, high or low, was planned on the same uniform principle; that it was modified (or homologated), to suit the peculiar place the animal had to

^{*} Bishop of Durham, quoted from the Times, 14th April 1863.

^{+ &}quot;The savage lives a life without a future or a past, without hope or regret, and dies the death of a coward and a dog, for whom the grave brings darkness and nothing more."—"No; the negress is not a woman: she is a parody of woman, a pretty toy, an affectionate brute, that is all." The above is one of the latest opinions of the negro, "after mature study and reflection."—Savage Africa, pp. 263, 307.

fill, or, in other words, that there was a fore-design. It was of no consequence whether the structure of man's brain was most nearly allied to the gorilla or any other animal, and systematists might place him with the monkeys and bats or elsewhere, as their scientific crotchets might lead. But, as far as man's animal place is concerned, there is no great difficulty, not of a higher organization in one sense (although the volume of his brain is always larger comparatively), but constructed on the same plan, he stands typical of the position he holds, and while he cannot swing like the American monkey, or climb like the gorilla, they cannot walk erect like cosmopolite man. His other characteristics come under another class. MAN ANIMAL is one thing: far different is MAN, into whose nostrils God breathed the breath of life; MAN speaking, intellectual, sinning, and redeemed. This is a question we must look into fearlessly, but with the greatest study and care.

It gives me satisfaction to see clergymen becoming members of our Society. Many recreations are considered unsuitable for the minister. He as well as others requires recreation; and none can be more suitable for him, or indeed for any one, than the study of the works of God. When scepticism comes through science, how much is it needed that every clergymen should cultivate the branches of science, and especially natural history and geology. The cheap publications of the day give to the multitude a diluted essence, sometimes adulterating the views of its author, or "speciously," a smattering of subjects which suggest questions, not always prompted by the best motives, and which the minister must either answer or say he cannot.

I have thus endeavoured to place before you a few of the objects that I think should engage your attention. There are many more that would occupy more time than we now have at disposal, and I may leave some for another anniversary. We have set out upon a cruise of mutual improvement and instruction. The interchange of thought and opinion among

our members, if done in right spirit, will assist in working out the great problems of Nature, and in arriving at their right solution. On our voyage, let us remember that we are on a search after truth. In our discussions let us take care not to get into personal or acrimonious arguments. Let us continually bear in mind that the works of God cannot be contrary to the Word of God, and that if we may not always be able to understand or read them aright, so much the more do we require humbly and carefully to study them. If we attend to these things, we shall never strike upon the reefs and shoals of temper, or improper controversy, or over-wisdom, but shall come safely into harbour year after year, with increased riches and greater knowledge.



TRANSACTIONS.

ON THE RE-DISCOVERY OF Scutellaria minor ON LAGGAN HILL, COLVEND. By the Rev. JAMES FRASER.

Read 6th January 1863.

I MAY be permitted to express my satisfaction and pleasure, that the attempt to establish a Dumfriesshire and Galloway Natural History and Antiquarian Society has been successfully made, and that we are here assembled together on the first night of its Meeting, and forming the nucleus of what we fondly hope will in future years be a rallying point for the Botanists, Geologists, Antiquarians and Scientific men generally of the counties.

There are some things which unite men naturally, and bind them together in a common brotherhood, irrespective of rank, or country, or profession. Religion is one of these, and it is the chief. Science is another. Similarity of tastes and of scientific pursuits draws together men of all ranks and of all professions, and makes them friends even before they are acquaintances. This is true. But while men throughout the whole world feel acquainted with those who, like themselves, are lovers of science—those whom they know only by name or through their writings-it seems every way desirable that those who are living in the same country, or in the same neighbourhood, within an accessible distance of one another or of a common centre of rendezvous, such as Dumfries, should know each other personally, and be able to communicate orally with each other on topics of mutual interest. "Iron sharpeneth iron; so a man sharpeneth the countenance of his friend," Solomon tells us. The same result is produced

by the friendly acquaintance and intercourse of scientific men with each other. The love of their respective studies, hobbies shall I call them, is strengthened; their flagging zeal is fired anew; and much useful information is communicated and preserved which else might be lost. There is no doubt that many interesting and important facts in Natural Science and in Antiquarian lore are lost, and have been lost to Science. from the want of such Associations as we have this night united together to form. I conceive that one chief object of this Society is to collect and to preserve these facts, not as nummies are preserved, to be hid out of sight, but to be brought again to light, and made available from time to time in adding to the stores of Science. For Science is essentially cumulative in its character, being made up in the first instance of numberless minute facts, which are afterwards generalized, and these generalizations are either strengthened. or overturned, or modified, by additional facts brought to bear upon them.

With these views as to the object of such a Society as ours, I am now, at the request of your excellent Chairman, Dr. Gilchrist, to bring under your notice a small botanical discovery which I made in my parish of Colvend, some eight or ten years ago. I have discovered in Colvend many rare and interesting plants, and so have other botanists before me, but one of the latest is that of Scutellaria minor, which grows in a bog on the south side of Laggan Hill. The species are found within the Tropics, in the Temperate Zones, and even on the borders of the Arctic and Antarctic Circles. Of these there are only two indigenous to Britain, the S. galericulata and the S. minor; and they are both found in Colveud. The former grows in many places among the shingle along the sea-shore, and by the sides of the lochs in the parish. The latter I have only discovered in one place, but I should think it will be found in other stations in Colvend, and throughout the hilly and moist

parts of Galloway. It is comparatively small, grows with a trailing rather than an erect habit, and may on this account be often overlooked; the more so that it does not flower till late in the season, August and September. Still it cannot be a plant of frequent occurrence anywhere, for Dr. Balfour told me he had never gathered it but once.* Professor Arnot of Glasgow had never seen it growing, neither had the late Professor Henslow of Cambridge, so I cannot but regard it as an acquisition within the bounds of our Society.

This station, found last year about this time, had been known some thirty years before, but had been lost sight of. In Sir William Hooker's interleaved copy of his Flora Scottica, now in the possession of Professor Arnot, I was surprised to find marked on the blank-leaf opposite the S. minor, as a station for it, "Laggan Hill, Colvend." This circumstance proves the importance of such an Association as ours, to treasure up these and such like discoveries; and I do hope that when the whole province included in our range has been fully botanized, we shall have the satisfaction of seeing a flora of the two counties, Dumfriesshire and Kirkcudbrightshire, which I venture to think will be found as rich and varied as the flora of any portion of Scotland.

Note of the Antiquities of the Stone, Bronze and Iron Periods, found in Dumfriesshire and Galloway. By Mr. Gibson, Treasurer to the Society.

Read 6th January 1863.

As it will be important for the Society to possess and preserve a correct note and record of the antiquarian remains that have been found at various times within its range, I now submit the following list of those belonging to the three periods above indicated, which have occurred to my own observation.

In every parish in Dumfriesshire and Galloway, numerous

^{*} Professor Balfour collected this plant abundantly in 1843 near Glenluce.

cairns or tunuli have from time to time been removed. The contents of these are very similar, viz., fragments of bones, stone hammers, celts, urns, etc., and in some cases the personal ornaments of the ancient inhabitants of the district during this early period. The antiquities of this period are not so numerous as those of the succeeding ones, the reason for which may be, that the inhabitants were not so numerous at this time, and these implements being of stone when found were thrown aside as of no value; such was the case with the stone hammer No. 1, which was discovered lying upon a stone dyke on the farm of Whitehall, parish of Kirkmahoe. Upon inquiry, it was ascertained that some years before a cairn had been removed from the field in which it was found, and I have no doubt of its being found in the cairn, and laid upon the dyke merely as a curious stone.*

No. 2 was found on removing a cairn on the farm of Lands, parish of Tynron.

No. 3 was found on removing a cairn in the parish of Penpont.

No. 4 was found last month by some railway surfacemen, while removing the remains of a large cairn in a field near Auldgirth Bridge, parish of Kirkmahoe.

No. 8 is a flint celt found last year, along with some bones, in a cairn, in the parish of Keir. The stone celts were unquestionably weapons of war; of which the following may be regarded as sufficient proof. Upon the removal of a large cairn on the moor of Glenquicken, Kirkcudbrightshire, the workmen came upon a stone-coffin of rude workmanship, and, on removing the lid, they found the skeleton of a man. The smaller bones crumbled to dust on exposure to the air, but the larger bones, being more compact, were taken out, when it was discovered that one of the arms had been almost

^{*} Nos. 1 to 4 and 6 to 8 are in the collection of Dr. Grierson, Thornhill. Nos. 5, 9, and 10 in Mr. Gibson's collection. No. 12 in the possession of James Heron, Esq., Duncow.

separated from the shoulder by the stroke of a stone celt or axe, a fragment of which still remained in the bone; the celt had been made of greenstone, similar to many that have been found in various places in Scotland. In the same cairn was found a ball of highly polished flint three inches in diameter, and the head of an arrow also of flint.

No. 9 are specimens of adder beads or bead stones, numbers of which have been found in this district. Of their use various opinions have been given; one plausible theory is that they may have formed the collar of honour of some old barbarian chief, as they are frequently found in considerable quantity by the side of male skeletons in cairns.

There are many unopened tumuli, supposed to be of this period, in the moors in Kirkmahoe, the examination of which might employ some of our summer excursions.

The Bronze Period in Dumfriesshire and Galloway has furnished many fine specimens, viz. celts, swords, spear-heads, rings, tripods, etc. etc.

The celt No. 5 was found on removing the foundation of one of the arches of the old bridge of Dumfries.

No. 6 was found in the parish of Closeburn.

No. 7 was found in Durisdeer parish.

The general characteristics of these partake more of carpentering tools than weapons of war, or they may have been employed in destroying fortifications.

The bronze tripods Nos. 8, 9, 10, are examples of the many fine specimens that have been found in Dumfriesshire. A very fine one was found lately in forming the Dumfries and Lockerby Railway, on which a rude attempt had been made to mend a hole in the bottom. This one, as well as many more found in Dumfriesshire, was taken by the authorities and sent to the Edinburgh museum.

Nos. 11, 12, are twelve very fine bronze spears, found on the farm of Drumcoultern, parish of Kirkguneon, belonging to Mr. Heron of Duncow; there are thirteen of them, and they are all of different shapes.

The bronze swords and implements of war found in the cairns and graves of this period are broken in two, and lying by the side of the skeleton. Wilson, in his Archæology of Scotland, after describing the opening of a cairn in Galloway, in which was found a bronze sword broken in two lying by the side of the skeleton of the ancient warrior, says, "From such discoveries we are led to infer, that one of the last honours paid to the buried warrior was to break his well proved weapon and lay it at his side, ere the cist was closed, or the inurned ashes deposited in the grave, and his old companions in arms piled over it the tumulus or memorial cairn. No more touching or eloquent tribute of honour breaks upon us amid the curious records of ages long past. The elf belt and the stone axe of the older barrow speak only of the barbarian anticipation of eternal warfare beyond the grave; of skull breakers and draughts of bloody wine, such as the untutored savage looks forward to in his dreams of heaven. But the broken sword of the buried chief seems to tell of a warfare accomplished, and of expected rest. Doubtless the future which he anticipated bore faint enough resemblance to the life and immortality since revealed to man, but the broken sword speaks in unmistakeable language of elevation and progress, and of nobler ideas acquired by the old Briton, when he no longer deemed it indispensable to bear his arms with him to the Elysium of his wild creed."

Of the antiquities of the Iron Period, Dumfriesshire and Galloway have furnished many fine examples. On the opening of a tumulus in the parish of Kirkpatrick Fleming, along with an urn of elegant workmanship were found several iron rings, each about the circumference of a half-crown; a similar discovery was also made in Annandale—these frail memorials are supposed to be the money of the Britons of the first century. In a field on the farm of Corrieknows, near Annan,

quantities of ancient arms were found, consisting of swords about two feet long, edged on one side to the handle, and on the other for the half length of the blade; long spear-heads; horse-shoes, some of which were entirely circular and others curiously turned in at the heel. The farmer who found them had them all with the exception of a bronze celt turned into implements of husbandry.

A very remarkable discovery of ornaments, bronze rings, bridle-bits, and other portions of horse-furniture, was made in a moss at Middleby, Annandale, in 1737; the whole of which were secured by the zealous Scottish antiquary Sir John Clerk, and are still preserved at Penicuick House.

One of the most beautiful personal ornaments of this period ever found in Scotland was discovered by a labourer while cutting turf in Lochar Moss, about two miles to the north of Cumlongan Castle. There is an engraving of it, along with the bronze vessel in which it was discovered, at page 449 of Wilson's Archæology; at page 458 is an engraving of a bronze bridle-bit found in a moss near Birrenswerk Hill, Dumfriesshire, a locality rich in the remains of Roman and British arts, and where the traces both of Roman and native intrenchments are still visible. In the valuable collection of antiquities at Hoddam Castle, there are three Roman altars, found at Birrens in the parish of Middleby, the largest of which is in the very finest state of preservation, and is figured at page 398. Such are a few of the Antiquities of the Stone, Bronze, and Iron Periods that have been found in Dumfriesshire and Galloway.

Sir Thomas Browne says, "Large are the treasures of oblivion. Much more is buried in silence than recorded! and the largest volumes are but epitomes of what hath been! The account of time began with night, and darkness still attendeth it."

On the Finding and Position of the Relics discovered at Corrie Loch. By Dr. Moffat, Millrigs.

Communicated 6th January 1863.

In the month of September last, on crossing the moors on foot, from Millrigs, Hutton, into Eskdale, to the farm of Westside on Black Esk, at the source of the Corrie, a very heavy shower came on, accompanied with a squall; I sought refuge from the storm in a narrow dell, which had once been a corrie and the source of Corrie Water.

A corrie is a small lake between hills: this circumstance gave the name to Corrie, the source of which is at the waterfall boundary between Annandale and Eskdale.

Being sheltered from the blast, I employed the time in walking about to examine the changes which had been produced since I had been there.

I found that a drain had been brought up to Corrie Loch, to let it off, and a covered tile drain had been carried through it.

On examining the outlet, I found that the lake, at a very remote period, had been artificial. A stone wall had been built across (with space open for an off-let), secured outside, with an embankment of clay on the back.

On the east side of the drain, about two yards from the centre, and about ten from the head or northern extremity, I found what I now send to the Society.

After the drain had been cut, the soft mossy bottom had run off, and, to fill up the space, the sides had been sloped down, and laid bare the relics now sent.

On the place where I found them, a fire had once been kindled, which was indicated by the ferruginous clay having a bricky and also an unctuous appearance, dissimilar to the clay around.

I have no doubt on this spot glowed the funeral pile of

some ancient, perhaps Roman warrior, borne hither on his shield, consumed to ashes, helmet on head, and the obsequies concluded by covering the place up by his shield, and throwing a little earth over it with their spears.

The idea is not at all improbable, for there are three Roman Castra stativa within a mile around the spot. One on the same farm, at Carterton; one on Cowburn Hill; a third, the Rye Birren, on Westside farm: all these have a road through them from south to north. On each side are a great number of Scottish encampments, with a circular fosse almost on every hill-top around.

These interesting relics, discovered, as related, by Dr. Moffat, were placed in the hands of A. Stratherne, Esq., Glasgow. That gentleman has taken great pains in examining them, and in having the metals of which they are composed analysed; and he communicated a detailed account, which was read to the Society on 1st March last, its monthly meeting. This account we trust will form a part of the Transactions for Session 1864-1865, and it will be endeavoured then to give representations of some of the parts. Mr. Stratherne states, "I am of opinion that although some of the fragments may be, and I think are, portions of an officer's clypeus, or circular buckler; yet the greater portion, which consists of highly ornamented fillets, now folded and compressed, were parts of the narrow shoulder-straps worn by generals and centurions, and by which the kilt-like extremities of the lorica were suspended."—W.J.

LIST OF LEPIDOPTERA TAKEN NEAR DUMFRIES. BY WILLIAM LENONN.* Read 7th April 1863.

It is generally supposed that there may be found in any county of Great Britain twenty-five or twenty-six butterflies, or diurnal Lepidoptera. I have taken twenty-nine all within a circuit of eight or nine miles of Dumfries, and I have no doubt that one or two more might be found, if the locality was well examined in the proper seasons. Amongst those that I have taken, four may be considered rare or local; they are the

^{*} The nomenclature is taken from Stainton's Manual.

following—Colias edusa, taken at Carlaverock; Thecla quercus, taken at Comlongan; Polyommatus artaxerxes, taken at Dalscairth; Polyommatus alsus, taken at Glenmills.

Colias edusa is seldom taken so far north as Dumfriesshire; in some seasons it is pretty common all round the south coast of England. Thecla quercus, as far as known, has never been captured in Dumfriesshire until I took it at Comlongan four years ago. Polyommatus artaxerxes is another that I have never heard of being taken in this locality until I took it at Dalscairth four years ago. Polyommatus alsus is a very local insect, but generally plentiful where it is found; it is a great favourite with almost all collectors, perhaps on account of its being the smallest of all the British butterflies; it is no doubt a very beautiful little insect when fresh from the chrysalis.

The marsh ringlet, Canonympha davus, is a very interesting butterfly; it is very common in Dumfriesshire, and yet, strange to say, no one up to this time has ever been able to find either the caterpillar or chrysalis. A great many caterpillars are night feeders, and require to be sought at night with a light; if this plan was adopted, perhaps it might be found.

Any one will see, after glancing over my list of captures, that the localities around Dumfries are pretty well represented in Lepidoptera, although it can scarcely be taken as a criterion of the fertility of the district, as many of the localities have been but imperfectly examined.

Colias edusa, Glenhewan, Carlaverock; very rare

Pieris brassicæ, Very common
Pieris rapæ, Common everywhere
Pieris napi, Common everywhere

Anthocharis cardaminis, Common in bogs and edges of woods

Lasiommata megæra,
Hipparchia semele,
Hipparchia janira,
Common everywhere
Whitehill, Terregles
Common everywhere

Hipparchia hyperanthus, In woods and thickets generally distri-

buted

Erebia blandina, Cœnonympha davus Cœnonympha pamphilus, Cynthia cardui,

Vanessa atalanta, Vanessa io, Vanessa urticæ, Argynnis adippe, Argynnis selene, Argynnis euphrosyne,

Melitæa artemis,
Nemeobius lucina,
Thecla quercus,
Thecla rubi,
Chrysophanus phlæas,
Polyommatus alsus,
Polyommatus alexis
Polyommatus artaxerxes,
Thymele alveolus,
Thanaos tages,
Pamphila sylvanus,

Procris statices,
Anthrocera filipendulæ,
Smerinthus ocellatus,
Smerinthus populi,
Sphinx convolvuli,
Chærocampa elpenor,
Macroglossa stellatarum,
Sesia bombyliformis,

Hepialus humuli, Hepialus velleda, Hepialus hectus, Hepialus sylvinus, Hepialus lupulinus, Cossus ligniperda, Cerura furcula,

Comlongan and Carlaverock * Tinwald Downs and Dalscairth Common everywhere Tinwald Downs, Terregles, and Glen-Generally distributed Common at Dalscairth Abundant everywhere Dalscairth and Lochaber Dalscairth and Tinwald Downs Tinwald Downs; not so common as the former Common in Lochar Moss Moloch Glen, Dalswinton; rare Comlongan; rare Tinwald Downs and Dalscairth Common everywhere Glen Mills; I never found it elsewhere t Common all over the country Dalscairth and Glen Mills; not common ‡

Dalscairth; not common
Lochaber; not common
Lochaber and Comlongan
Carlaverock and Lochaber
Castledykes; not common
Near Sandyknowe Tollbar; not common
Crichton Institution Garden
Dalscairth and Lochaber; not common

Glen Mills; not common

Tinwald Downs and Dalscairth

Common at Glen Mills

Common everywhere
Tinwald Downs; not common
Dalscairth; rather scarce
Terregles Meadows; not common
Common everywhere
Dalscairth; not common
Tinwald Downs, Comlongan; not common

^{*} Very abundant in Annandale. In thousands on the moors at the head of Dryfe Water, and extending across Eskdale Muir to the borders of Roxburghshire.—W. J.

⁺ By the river Annan below Spedlings Castle. - W. J.

[‡] Buitle Hill, near Dalbeatie. - W. J.

Cerura vinula,
Notodonta dromedarius,
Notodonta ziczac,
Pterostoma palpina,
Leiocampa dictæa,
Leiocampa dictæoides,
Lophopteryx camelina,
Clostera reclusa,
Pygæra bucephala,
Dasychira fascelina,

Demas coryli,
Orgyia antiqua
Lithosia complana,
Gnophria rubricollis,
Euthemonia russula,
Arctia caja,
Nemeophila plantaginis,

Phragmatobia fuliginosa, Spilosoma menthastri, Spilosoma papyratia, Spilosoma lubricepeda, Lasiocampa rubi, Lasiocampa quercus, Eriogaster lanestris, Pœccilocampa populi, Odonestis potatoria, Saturnia pavonia minor, Thyatira batis, Cymatophora diluta, Bryophila perla, Acronycta psi, Acronycta leporina, Acronycta aceris, Acronycta ligustri, Acronycta rumicis, Acronycta menyanthidis, Leucania conigera, Leucania comma, Leucania impura, Leucania pallens, Leucania lithargyria, Gortyna flavago, Hydræcia petasitis,

Near Tinwald Downs and Lochaber
Kirkconnel, Lochaber, and Comlongan
Tinwald Downs and Terregles Meadows
Near Douay Vale Moss; not common
Dalscairth; not common
Crichton Institution Garden; rare
Commonly distributed
Dalscairth, and near Gastown
Generally distributed
Tinwald Downs and Dalscairth; not
common

Common everywhere
Marchmount; not common
Tinwald Downs; not common
Dalscairth; not common
Abundant everywhere
Tinwald Downs and Dalskairth; not

Lochaber; not common

Whinneyhill; not uncommon Common everywhere Terregles; not common Kirkconnel; not common Common on the heath Generally distributed Lochaber; not common Castledykes; not common Common everywhere Generally distributed Castledykes; not common Terregles; not common Crichton Institution Common everywhere Heath Hall; not common Terregles; not common Terregles; not common Common Sandyknowe; not common Terregles; not common Marchmount Marchmount Common everywhere

Common everywhere Common Kirkconnel; not common Near the Glen Mills; not common Hydræcia micacea,
Hydræcia nictitans,
Axylia putris,
Xylophasia rurea,
Xylophasia polyodon,
Xylophasia hepatica,
Heliophobus popularis,
Charæas graminis,
Cerigo cytherea,
Luperina testacea,
Memestra brassicæ,

Memestra brassicæ, Apamea basilinea, Apamea gemina, Apamea fibrosa.

Apamea fibrosa, Apamea oculea, Miana strigilis,

Miana furuncula, Celæna haworthii, Grammesia trilinea, Caradrina cubicularis,

Rusina tenebrosa, Agrotis valligera, Agrotis puta,

Agrotis saucia, Agrotis exclamationis, Agrotis corticea,

Agrotis nigricans, Agrotis tritici, Agrotis obelisca, Agrotis porphyrea,

Agrotis lucernea,

Agrotis suffusa, Triphæna ianthina, Triphæna fimbria, Triphæna orbona, Triphæna pronuba,

Noctua glareosa, Noctua augur, Noctua plecta,

Noctua rhomboidea, Noctua brunnea,

Noctua festiva, Noctua umbrosa,

Cleora lichenaria, Boarmia repandata, Carlaverock

Comlongan; not common Terregles; rather common Common everywhere

Common Glen Mills

Near Lochar Bridge

Tinwald Downs and Lochaber Whitehill, Terregles; not common

Kirkconnel

Common everywhere

Common

Common everywhere

Tinwald Downs; not common

Abundant everywhere

Common

Common everywhere

Near Clumptown; very rare Terregles; not common

Common

Dalscairth; not common Lochaber; not common

Kirkconnel Moss

Dalscairth; not common

Common Marchmount

Dalscairth; not common Near Tinwald Downs Tinwald Downs; very rare Kirkconnel; not common

Crichton Institution; not common

Kirkconnel Moss Common everywhere Common everywhere Abundant everywhere Abundant everywhere Kirkconnel; not common

Common

Tinwald Downs; not common

Kirkconnel Common Dalscairth

Near Carlaverock Castle; not common

Kirkconnel

Tephrosia crepuscularia, Pseudoterpna cytisaria, Geometra papilionaria, Iodis lactearia, Ephyra porata, Ephyra punctaria, Asthena luteata, Asthena candidata, Asthena sylvata, Venusia cambrica Acidalia rusticata, Acidalia virgularia, Acidalia subsericeata, Acidalia remutata, Acidalia inornata, Acidalia emarginata, Cabera pusaria, Cabera rotundaria, Cabera exanthemata, Macaria liturata, Halia uavaria, Strenia clathrata, Numeria pulveraria, Fidonia atomaria, Fidonia piniaria, Aspilates strigillaria, Aspilates citraria, Abraxes grossulariata, Ligdia adustata, Lomaspilis marginata, Hybernia rupicapraria, Hybernia leucophearia, Hybernia aurantiaria, Hybernia progemmaria, Hybernia defoliaria, Anisopteryx æscularia, Cheimatobia brumata, Cheimatobia boreata, Oporabia dilutata, Larentia didymata, Larentia cæsiata, Larentia olivaria, Larentia miaria, Emmelesia alchemillata, Emmelesia ericetaria,

Dalscairth; not common Carlaverock; not common Near Dalscone; very rare Lochaber Near Tinwald Downs; very rare Terregles; not common Dalscairth Dalscairth Dalscairth; not common Dalscairth; very rare Dalscairth; very rare Tinwald Downs; not common Near Sandyknowe Tinwald Downs; not common Tinwald Downs; very rare Near Tinwald Downs; very rare Common everywhere Lochaber; very rare Common Dalscairth; not common Common everywhere Carlaverock and Dalscairth Tinwald Downs Common everywhere Common Near Tinwald Downs; not common Near Terregles; not common Common all over the country Near Terregles; not common Common Not very common Common Lochaber Common Kirkconnel; not common Common everywhere Very common Lochaber; not common Common everywhere Very common Near Dalscone; not common Near Terregles; not common Very common Dalscairth Terregles; very rare

Eupithecia haworthiata, Eupithecia castigata, Eupithecia satyrata, Eupithecia irriguata, Eupithecia innotata, Eupithecia indigata, Eupithecia nanata, Eupithecia vulgata, Eupithecia absynthiata, Eupithecia minutata, Eupithecia tenuiata, Eupithecia abbreviata, Eupithecia exiguata, Eupithecia togata, Eupithecia sobrinata, Eupithecia pumilata, Eupithecia rectangulata, Lobophora viretata, Lobophora lobulata, Labophora polycommata, Trachea piniperda, Tæniocampa gothica Tæniocampa rubricosa, Tæniocampa instabilis, Tæniocampa opima, Tæniocampa populeti, Tæniocampa stabilis, Tæniocampa gracilis, Tæniocampa munda, Orthosia lota, Orthosia macilenta, Anchocelis rufina, Anchocelis pistacina, Anchocelis lunosa, Anchocelis litura, Cerastis vaccinii, Cerastis spadicea, Scopelosoma satellitia, Xanthia citrago, Xanthia cerago, Dianthæcia conspersa, Polia chi, Miselia oxyacanthæ, Phlogophora meticulosa, Euplexia lucipara,

Dalscairth; very rare Dalscairth; not common Glen Mills; not common Dalscairth; very rare Dalscairth; not common Dalscairth; very rare Dalscairth; not common Rather common Glen Mills; not very common Near the Craigs Dalscairth; very rare Near the Craigs Glen Mills; not very common Glen Mills; not common Whinney Hill; not common Dalscairth; not common Very common Tinwald Downs; not common Near Tinwald Downs Crichton Institution Near Glen Mills; very rare Common everywhere Near Dalscairth Common Dalscairth; not common Near Terregles; not common Common everywhere Kirkconnel; not common Near Marchmount Common everywhere Near Terregles; not common Terregles; rather common Dalscairth Tinwald Downs Common moist places Very common Crichton Institution Garden Common everywhere Dalscairth; not common Tinwald Downs Near Terregles; not common Crichton Institution Common everywhere Common everywhere Common

Aplecta herbida, Aplecta nebulosa, Aplecta advena, Hadena adusta, Hadena protea, Hadena dentina, Hadena oleracea, Hadena pisi, Hadena thalassina, Calocampa exoleta, Xylina semibrunnea, Xylina petrificata, Cucullia umbraticæ, Anarta myrtilli, Hydrelia uncana, Abrostola urticæ, Abrostola triplasia, Plusia chrysitis, Plusia bractea, Plusia festucæ, Plusia iota, Plusia gamma, Gonoptera libatrix, Euclidia mi, Euclidia glyphica, Phytometra ænea, Ourapteryx sambucaria, Epione advenaria, Venilia maculata, Metrocampa margaritata, Elliopia fasciaria, Eurymene dolobraria, Selenia illunaria, Odontopera bidentata, Crocallis elinguaria, Ennomos tiliaria, Ennomos fuscantaria, Ennomos erosaria, Ennomos angularia, Himera pennaria, Amphidasis betularia, Thera juniperata, Thera simularia, Thera simulata, Thera variata,

Near Terregles; not common Common Crichton Institution Garden Castledykes Common at Dalscairth Generally common Common Lochar Moss near Georgetown Rather common Crichton Institution Garden Near Dalscone; not common Dalscone; rare Common at Crichton Institution Dalscairth and Tinwald Downs Tinwald Downs; not common Near Dalscairth Terregles; not common Very common Lochaber; very rare Near Terregles; not common Crichton Institution Common everywhere Very common Common at Dalscairth Dalscairth; not so common Glen Mills; not common Crichton Institution Garden Dalscairth; very rare Glen Mills and Lochaber Rather common Near Tinwald Downs; not common Dalscairth; very rare Crichton Institution Crichton Institution; common Common everywhere Lochaber; not common Crichton Institution; not common Lochaber; not common Terregles; not common Near Terregles; not very common Dalscone and Marchmount Whinney Hill; not common Dalscairth Whinney Hill; not common Rather common

Glen Mills

Thera firmaria, Ypsipetes impluviata, Ysipetes elutata Melanthia rubiginata, Melanthia ocellata, Melanthia albicillata, Melanippe hastata, Melanippe montanata, Melanippe galiata, Melanippe fluctuata, Anticlea badiata, Anticlea derivata, Coremia ferrugaria, Coremia quadrifasciaria, Scotosia dubitata, Scotosia undulata, Cidaria psittacata, Cidaria miata, Cidaria picata, Cidaria suffumata, Cidaria silaceata, Cidaria prunata, Cidaria testata, Cidaria populata, Cideria fulvata, Cideria pyraliata, Pelurga comitata, Eubolia cervinata, Eubolia mensuraria, Eubolia plumbaria, Carsia imbutata, Anaitis plagiaria, Chesias spartiata, Odezia chærophyllata,

Tinwald Downs; not very common Very common Common everywhere Lochaber Rather common Dalscairth; not common Tinwald Downs; not common Very common Glen Mills; not common Very common Very common Dalscairth; not common Very common Glen Mills; very rare Crichton Institution Rigfoot and Tinwald Downs; very rare Crichton Institution Lochaber; rather common Terregles; very rare Near Gastown Terregles; not common Very common Common at Crichton Institution Dalscairth; not common Common everywhere Very common Near Terregles; not common Glen Mills Very common Near the Craigs Near Tinwald Downs; very rare Glen Mills; not common Glen Mills; very rare

DUMFRIES IN THE OLDEN TIME. By JAMES STARK, F.S.A. SCOT.

Read 3d March 1863.

To describe Dumfries as it existed in old times is one of the leading objects of this Society, and will form the subject of many papers from different members. But it is often useful, and may be eminently so at present, to take up a branch of inquiry as a whole. We thus more readily estimate the character of the whole, see the relative value of the parts, and have our attention drawn to special objects for investigation.

The present paper will be directed to the *exterior aspects* of the town as it existed in old times, leaving to other opportunities the "inner life" of the place, should materials be found for that purpose.

The first origin of the town is uncertain. It was made a royal burgh about seven hundred years ago. The effect of this it is not very easy for us in the present day to estimate. It was one great privilege, for instance, to send representatives to Parliament. But this privilege is now extended to towns which are not royal burghs; and, on the other hand, there are royal burghs which have lost the privilege. Then again the royal burghs sent members to the Convention. But the Convention of Royal Burghs was an important body; and its powers were large and undefined. There was also the internal distinction of freemen and unfreemen. And other privileges there were, once highly valued, but now gone or thought little of.

But we may safely state generally, that for a town to be made a royal burgh was then a great distinction. There were not twenty in all Scotland.

The royal burghs at that time south of the Forth, besides Edinburgh, Stirling and Linlithgow, were Lanark, Peebles, Haddington, Jedburgh and Selkirk. To these William the Lyon added Ayr and Dumfries. At this early period, therefore, the town of Dumfries would be of importance as a place of trade, and the head burgh of a district. It was also the site of an old castle or fortress.*

It is beautifully and advantageously situate; and, as a place of trade, has maintained its position amidst many changes for centuries. It is situate on a gentle elevation, skirted on the north and west by the winding Nith, which on the west divides it from Galloway, whence its cattle-markets and connected trades are largely and continuously supplied. On the other sides it was surrounded by

THE TOWN WALL,

the course of which was this,—on the north it ran from the Moat-house in an almost straight line to the Mount on which St. Mary's Church now stands. Here it formed a somewhat acute angle, and afterwards described nearly an oval, till it reached St. Michael's Church,† a little to the eastward of which it turned by a sudden bend towards the Nith, and terminated on the banks of that river, a little to the westward of the place where the Infirmary now stands.

This is the description which is left to us of the town wall; and though not very minute is sufficient to give us an idea of its course.

Near to St. Michael's Church was a port or gate, called the South Port, leading to Caerlaverock and the south. A short way to the south of the Crystal Mount was the East Port; and on the north was the North Port.

The Nith was bridged by the fine old bridge of Dervorgille, four hundred feet in length, or about a quarter

^{*} In a charter from the Crown, supposed by Chalmers, in his Caledonia, vol. iii., p. 135, note, to have passed between the years 1175 and 1189, King William grants to Joceline, Bishop of Glasgow, toftum illum apud Dumfries quod est inter vetus castellum et ecclesiam.

[†] Near to St. Michael's Church on the New Road is a wall which appears to be a portion of the old Town Wall.

more than it is at present, and thirteen and a half feet in mean breadth. And at the end of the bridge as it now stands, three arches having been removed, was a gate or port, where the duties and customs on goods and cattle coming into the town were taken up and brought to account in the Monastery.

The Nith has the usual characteristics of a mountain river, and varies very considerably from time to time, both in bulk or quantity, and flow. These changes would be still more marked in former times, the channel of the river being then broader. There were, accordingly, fords or passages by which the river might be crossed at low water. Two of these, on either side of the bridge, would seem to have allowed entrance into the town, the town wall not being carried on here. But the defenceless state of the town at this place was perhaps a matter of less consequence than the convenience of its being open, the country on the west being friendly as the territory of the lords of Galloway.

Here, then, lay the fair town of Dumfries, with its spacious High Street, stretching like a back-bone and spinal marrow to the parish church of St Michael's, not very much short of half a mile; and crossed after the fashion of an Anglo-Saxon village by the Friars' Vennel to the west, and by a street which, we presume, must have existed in old times, leading to the East Port. This might be what is now Chapel Street, etc.

The principal structures of the town were the Castle and Parish Church, the Market Cross, Council Chamber, and Tolbooth, and the Monastery of Grey Friars, with the Old Chapel and Lady Chapel—all now, it is believed, mere historical antiquities, existing only in books and records, corroborated, it may be, by present names of places, or the discovery of some fragment of the ancient structures.

This circumstance, that so many of the ancient buildings have now ceased to exist, gives a peculiar character to anti-

quarian research here, our labours being in this way, in many cases, directed rather to resuscitate the extinct than to examine the tangible and existing.

THE CASTLE

stood at the top of the High Street, on or near the site of the *New Church*, the ground between the church and the river being the *Castle Gardens*. It was a large and massy structure, and had a command of the whole adjacent country.

Its origin and early history appear to be unknown. But we may reasonably conjecture that it did exist at an early period, and was at least the occasional residence of the old lords of Galloway. Perhaps when Uchtred, in the middle of the twelfth century, founded at Lincluden his Priory of Nuns, it stood as the guarantee for their safety. And the remarkable designation of Alan, probably his descendant, as Alan de Dunfries, which occurs in an early charter, seems to show a very intimate connection with the town. The foundation of a Monastery, with grounds, in the very heart of the town, by Alan's daughter, points the same way, even though we may suppose that the Monastery stood on the site of a still earlier ecclesiastical foundation.

Alan, lord of Galloway, died in 1234. Thirty years after this, Alexander III., King of Scots, received at Dumfries the homage of the then King of Man; and this would probably be in the castle. And from the old Law Book Quon Attach, c. 72, we learn that something in the nature of a parliament or general council was held at Dumfries.

But in 1305, the undoubted fact appears that the justiciars appointed by King Edward of England held their Assize or Circuit Court in the castle, and the red Comyn met his death in the Monastery. A disturbed period of our history followed, and the place was taken and retaken. At length in 1312, when it came into the hands of Bruce, he directed it to be dismantled, to render it unserviceable in the event of its again

falling into the hands of the English. The same thing appears to have been done with Caerlaverock; and Lochmaben, Bruce's town, was made a royal burgh. This was a great blow and sore discouragement to the fair town of Dumfries. And though its great natural advantages enabled it to surmount this and other calamities, the castle ceased from that time to afford a residence for royalty or any place of public meeting.

Accordingly when in the wars of York and Lancaster, Queen Margaret of England fled to this country with her son, the Abbey of Lincluden afforded them shelter, not Dumfries, though indeed they were welcomed there. And it was at Lincluden, not Dumfries, that the great Border meeting under the Earl of Douglas was held for the revision of the Border laws.

When King James IV. came to the circuit court held at Dumfries in August 1504, he put up, as we gather from the Lord Treasurer's accounts, at "William Cunynhams burgess of Dumfriese,"—the King's Arms Hotel, in all likelihood, of that day. And King James VI. put up, it seems, at Terregles. But this monarch was entertained in the town on two occasions:—once, in the "painted hall belonging to the Cuninghams," for so it is described to us, Provost Francis Irvin presiding; the other occasion was when he passed through to England in 1617.

The last remains of the ancient castle were demolished in 1719, and the materials taken to assist in building the New Church.

THE MONASTERY

founded by Dervorgille must have occupied a considerable space of ground in the town, having besides the old church a dormitory, refectory and other buildings and conveniences, all enclosed, like the castle, within its own walls and gates. It was erected for the order of Franciscans or Grey Friars; and not improbably on the site of an earlier ecclesiastical foundation.

It was here, Spottiswood tells us, John Duns Scotus the subtle doctor was clothed with the habit of St. Francis. But of course the great event in its history was the death of the red Comyn in the church, with that of Sir Robert Comyn in the sacristy.

The effusion of a layman's blood seems to have damaged the character of the place. But the friars still lingered on, and in 1504 King James IV. gave them 14s., probably a piece of the nature of our half sovereign. The buildings, or some of them, appear to have survived the era of the Reformation; for Arthur Johnston, the Scottish physician and poet, speaks of them as existing in his time. He says:—

Surgit in hac ædes, cui cedunt templa Dianæ Vel venerabilius Græcia si quid habet, Proditor hic patriæ Brussii virtute Cuminus Concidit, et sacram sanguine tinxit humum. Scotia Drumfrisii reliquis altaria prefer, Hic tibi libertas aurea parta fuit.

O Scotland, I prefer this spot of earth to all others in the land, for here thy precious liberty had its birth-place!

The materials were at length all taken and used, as in the case of Kelso Abbey and others, in the construction of houses in the neighbourhood.

THE MARKET CROSS.

This is the next object of interest conspicuous by its absence. It was taken down within memory, and perhaps escaped an earlier fate by being removed from its original position to a more shady side of the mid-steeple. Here was the chief market-place of the town for provisions, and the common place of resort. And here accordingly the laws were published in old times, proclamations made, summonses executed, and whatever of a secular nature which required publicity or solemnity was ordinarily done. So here too a party of dissentients, opposed to the union with England,

testified their abhorrence of that measure by publicly burning a copy of the Articles of Union. Dumfries was not by any means singular in the feeling which dictated this step, the union being looked upon as a surrender of the national independence, and likely to affect the religion of the country.

The fruit and vegetable stalls remain to attest the existence of the ancient structure, and the neighbourhood is still a place of resort on hiring and other market-days.

THE OLD COUNCIL CHAMBER

is said to have stood on the site of the old Deanery. In very old times the diocese was divided into several deaneries, and this may have been the *Deanery of Dumfries*.

THE OLD PARISH CHURCH OF ST. MICHAELS.

This, like other St. Michael churches, stood on an elevated ground at the south end of the town; and its fine tower would form a beautiful and very marked feature. There was probably no other turret, tower or spire then to be seen in the town but this, and the massy buildings of the castle at the town head.

But though adjacent to the town, the church lay perhaps outside the town wall. And if so, the church of the monastery would naturally be regarded as the church of the town. This may the more easily account for the meeting together there of Bruce and Comyn and their friends on the memorable day of Comyn's death. But from that time the parish church appears to have at once become the resort of the Bruce or Scottish party.

THE OLD OR SIR CHRISTOPHER'S CHAPEL

was another edifice by the side of the town wall. It was the chapel erected by Bruce's sister, the widow of Crystal or Christopher Seton, who was taken by the English, brought to Dumfries and there condemned and executed.

There is no reason to doubt but that the patriot Seton suffered at the common place of execution at that day. This place and its neighbourhood appear to have gone under the name of the "Hullerbass," the termination of this word being a corruption perhaps of bourse or place of meeting. The term has been happily transmuted into the Lover's Walk—which it still bears.

This beautiful little chapel, so significant in its form of the purpose for which it was erected, gradually went to decay, and the remaining materials were taken to assist in fortifying the town at the time of the rebellion of 1715.

OUR LADY CHAPEL.

When King James IV. passed through Dumfries in one of his many pilgrimages to St. Ninians he went to Our Lady's Chapel at the end of the town, and there made his offering, but we have no particulars of its locality or structure. It was perhaps when this chapel was erected, that Sir Christopher's Chapel got the name of the Old Chapel.

Of the *streets* and *private dwellings* we have some account, though comparatively recent, in the "Journey through Scotland in 1723."

"I passed the river Nith from Galloway," says the author, "to Dumfries, over a fair stone bridge the finest I saw in Britain next to London and Rochester. There is a street that leads from the bridge by an easy ascent to the Castle,* which is on the east of the town, and hath a commanding prospect of the town and adjacent country. And from it the High Street runs by an easy descent to the church at half a mile's distance. This High Street is spacious, with good stone buildings on each side; those on the north side having their hanging gardens to the river side. The Exchange and Town House are about the middle of the street towards the south, and besides this great street, Lochmaben Street

^{*} The Friars' Vennel.

hath very good houses. This is a very thriving town, and hath a good face of trade."

In conclusion, to sum up all in a few words, let us take the table of our fancy—for the reality is now gone from our eyes-and picture on it a plan of the fair town of Dumfries surrounded by the town wall on all sides but the west, where the winding Nith flows past in all the width of the fine old bridge, 400 feet in length, or about one-fourth more than it is at present. At the town head stands the massy and commanding Castle with its walls and gates; and near it the Monastery wall enclosing the conventual buildings. Then see the spacious High Street down to the parish church of St. Michaels about half a mile off; with the Market Cross on the breast of the town, and near it the town-council buildings: on the one side the town the large and convenient cattle-market and, perhaps, the Lady Chapel; and on the other side of the town the common place of execution with, perhaps, ground for the May Games, and the old or Kirsty's Chapel with all its sad yet glorious recollections.

Such was the fair town of Dumfries in the olden time.

THE TRANSACTIONS

AND

JOURNAL OF THE PROCEEDINGS

OF THE

DUMFRIESSHIRE & GALLOWAY NATURAL HISTORY

A N D

ANTIQUARIAN SOCIETY.

SESSION 1863-64.



PRINTED BY W. R. M'DIARMID AND CO.

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"For the pleasure and delight of knowledge, it far surpasseth all other in nature. We see in all other pleasures there is satiety; and after they be used their verdure departeth, which showeth well that they be but deceits of pleasure, and not pleasures; and that it was the novelty which pleased, not the quality; and therefore we see that voluptuous men turn friars, and ambitious princes turn melancholy. But of knowledge there is no satiety—but satisfaction and appetite are perpetually interchangeable."

BACON.

"That nothing walks with aimless feet,
That not one life shall be destroyed,
Or cast as rubbish to the void,
When God hath made the pile complete."

In Memoriam.

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JOURNAL OF THE PROCEEDINGS

OF THE

Dumfriesshire & Galloway Natural History and Antiquarian Society.

November 3d, 1863.

Mr. M'DIARMID in the Chair.

THE SOCIETY held the first meeting of the Session,—being the Annual Meeting—within the Committee Room of the Mechanics' Institute.

Mr. Andrew Barrie; Mr. A. Simpson, Writer; Mr. Malam, Gas-Manager; Mr. John Shaw, Drumlanrig; Mr. Biggar, Thornhill; Mr. J. Bryce, Closeburn; Mr. John Maxwell, Joiner, Dumfries; Mr. R. A. Dickson, Queensberry Square, were elected Ordinary Members.

Rev. W. Greenwell, University, Durham; Rev. D. Langmuir, Aberdeen; Dr. Aitken, District Lunatic Asylum, Inverness; Dr. Donkin, Medical School, Newcastle; Rev. James Edmonston, Ashkirk, Hawick; Professor Struthers, Aberdeen, Corresponding Members.

The Secretary read an Abstract of the Proceedings of the past Session; thereafter the Statement of the Treasurer was submitted to the Society, and being examined was found correct.

The Report of the Committee of Management, of October 31st, was then read by the Secretary. The suggestions as to

the alterations in the rules were considered and approved of, and Mr. M'Diarmid, Mr. Mitchell, and the Secretary were requested to prepare a re-issue of the code as revised. The suggestions of the Committee with regard to the formation of a library, and the continuation of the present office-bearers were also approved of. The Secretary intimated that the President—Sir William Jardine—would deliver his presidential address at the next meeting. This concluded the general business of the Meeting.

Dr. Grierson, Thornhill, gave an oral account of some curious Roman relics lately discovered near Carlisle, and the Society then adjourned.

December 3d, 1863.

Sir WILLIAM JARDINE, Bart., in the Chair.

Mr. Francis Maxwell, Gribton; Capt. Yorstoun, Lincluden; Mr. Maxwell, Munches; Mr. Paterson, Veterinary Surgeon, were elected Ordinary Members.

Rev. D. Landsbury, Free Church, Kilmarnock; Mr. Wellwood Herries, were elected Corresponding Members.

Sir W. Jardine then delivered his presidential address, in which he reviewed the country meetings of the Society during the past summer, and commented at some length upon its future development, and the nature and value of its researches in relation to the science of Natural History, and the varied aims which it had in view. The address was listened to with great interest by a very full assembly of Members, and at the close, a vote of thanks was accorded, on the motion of Mr. MDiarmid, seconded by the Rev. Mr. Goold.

The following communications were read:—

On the recent Discovery of a Stone-Coffin in Lochar Moss, near Tinwald Downs. By Mr. M'Diarmid.

A Footprint on Sandstone, the first that has been met with in that district, was exhibited by Dr. Grierson, from the carboniferous sandstones near Thornhill. Dr. Grierson expressed his opinion, that it was the footprint of a Batrachian reptile, in which opinion Sir W. Jardine was understood to concur.

A number of objects of Natural History and Antiquarian interest were laid upon the table, and afforded subjects of conversation to the Members present.

January 5th, 1864.

Dr. GILCHRIST in the Chair.

Dr. W. S. Kerr, Buccleuch Street; Mr. Howat, Architect, Drumlanrig, were elected Ordinary Members.

The following communications were read:-

On the Old Greyfriars' Monastery, Dumfries. By Mr. Stark, Troqueer Holm.

In the course of the discussion which followed, it was observed, that the chimney, which is supposed to have been that of the kitchen, is still to be seen, where it forms a large portion of the gable of the house called the "Grey Horse Inn" at the head of the Friar's Vennel, and that it is still in use as the kitchen fire-place of that establishment.

On the Geological Features of the summer excursions, illustrated by specimens and diagrams. By Dr. Gilchrist.

On the rarer *Lepidoptera* of the district. By Mr. W. Lennan. Specimens were exhibited of various species, hitherto unknown to entomologists as inhabiting Dumfriesshire or Galloway, and which he had taken at different periods.

On the Pearl Mussel found in the river Cluden. By Dr. Aitken, Inverness. Read by the Secretary. Specimens of

shells and pearls from the Cluden, and also from the principal pearl-bearing rivers in Scotland, were exhibited.

February 2d, 1864.

Dr. GILCHRIST in the Chair.

On the Botany of Colvend and Southwick. By the Rev. Mr. Frazer, Colvend.—See *Transactions*.

In discussion, Dr. Grierson, Thornhill, made some remarks relative to the geographical distribution of the plants referred to by Mr. Frazer, as compared with their distribution in his own district. He remarked that he had tried Eryngium maritimum in his own garden, from plants obtained from the west coast, but found that it lost its peculiar iodine taste. He had seen both Primula elatior and veris growing in Galloway, but veris only was known in the neighbourhood of Thornhill. Carum verticillatum was found abundantly in Upper Nithsdale. Droscra rotundifolia was common, but the species longifolia* was known only in a limited range, and where found, to the complete exclusion of rotundifolia. Equisetum hyemale was found only at a single station, viz., Scaur Water. Hypericum clodes was not known. Lobelia dortmanna he had found in a loch in the parish of Keir, but it was known to be abundant in Lochmaben Lochs. Salix pentandra abounded along the sandy banks of the Nith. He thought it worth mentioning that Vaccinium oxycoccus was mentioned by Pennant as having once been an article of commerce in this discrict. Carlina vulgaris he had found in Tynron, and in the same locality as Drosera longifolia, showing an affinity between the two plants as to geographical distribution. Genista tinetoria was very abundant, and he had found Pyrola minor in the woods. Ulex nana he had found in Newabbey district. Viola lutea a was found in his district, precisely corresponding to Viola \$\beta\$ of botanists, except as regards the colour, which was blue.

^{*} intermedia, Hayn.

Mr. Maxwell, Breoch, mentioned that he had found *Pyrola* secunda at the head of the Long Wood.

Dr. Gilchrist had gathered *Allosorus crispus* on the road to Craig's Quarry, a habitat which was quite unnatural to it as a sub-alpine plant.

The Secretary reported that he had received a communication from Mr. Stratherne regarding the second paper on the list, but that the paper itself had not yet come to hand.

Mr. Gibson exhibited an ancient British cinerary urn, found on the other side of the border, and remarked that the shape and style of the ornaments corresponded with several found in Dumfriesshire, portions of some of which were laid on the table, and that it appeared to him to belong to the second of the three classes mentioned by Wilson, viz., the hand-shaped urn, with rude and imperfect attempts at decoration. It was found in a tumulns on the farm of Shancastle in the parish of Stapleton, and, like one found lately in the parish of Irongray, the bones seem to have been gathered together on a flat stone, and the urn inverted over them.

Dr. Gilchrist exhibited urns of the same type found in Perthshire.

Dr. Grierson, Thornhill, brought under the notice of the Society the investigations at present being carried on at the Tibbers Castle, Drumlanrig, under the superintendence of Mr. Gilchrist Clarke. He observed that the early history of the castle was very imperfectly known, probably it might have been the old baronial residence of the family, but at all events its origin was very remote. For many years only mounds of debris indicating its site had been visible; latterly, the Duke of Buccleuch had given orders to lay bare these mounds; the result had been that the ground-plan of the castle, which was of greater extent than had been anticipated, was now com-

pletely discernible, and that many interesting relics had been brought to light.—See *Transactions*.

Mr. Goold exhibited two slabs of sandstone from Lochar-briggs Quarry, with markings resembling rain-drops.

Dr. Grierson laid on the table specimens of concretions from the Permian limestone of Sunderland.

March 1st, 1864.

Sir WILLIAM JARDINE, Bart., in the Chair.

Mr. Frank Maxwell, Drumpark; Mr. Grierson, Dalgonner; Mr. John Martin, Courier Office, Dumfries, were elected Ordinary Members.

It was proposed that, for the better working of the Society it should be divided into sections, and a Committee was appointed, consisting of Dr. Gilchrist, Mr. Gibson, Mr. Stark, Mr. Goold, Mr. J. Thorburn, and the Secretary (convener), for the purpose of nominating members to take charge of the respective departments. The Committee were requested to communicate with the gentlemen nominated, and report at next meeting.

On the Geology of the Nith Valley, with reference especially to the earlier formations. By Dr. Gilchrist.

Dr. Gilchrist stated his intention of resuming the subject, in relation to the more recent deposits, and the present aspect of the valley, in a future communication.

On the Relics of supposed Ancient Armour found near the source of the Corrie Water. By Mr. Alexander Strathern. Read by the Secretary.

Mr. Gibson exhibited a collection of coins, dating from the reign of William the Conqueror to the present day. A number of these had been found in the neighbourhood of Dumfries.

Sir William Jardine expressed his opinion that the markings upon the sandstone-slabs from Locharbriggs, exhibited at last meeting, had been caused by rain-drops.

Dr. Grierson, Thornhill, exhibited varieties of the bullfineh and chaffinch.

April 5th, 1864.

Dr. GILCHRIST in the Chair.

Mrs. J. S. Milne, Berkshire; Mr. T. R. Marshall, Edinburgh, were elected Corresponding Members.

The Committee appointed at last meeting for the purpose of nominating "Heads of Sections," submitted the following arrangements. It was considered expedient that, as far as possible, a town member and a country member should be selected to co-operate in their respective departments.

	Town.	Country.			
Geology .	Dr. Gilchrist.	Mr. Maxwell, Gribton.			
Botany .	Mr. Hogg.	Mr. Frazer, Colvend.			
Mineralogy	Mr. Aitken.	Mr. Dudgeon, Cargen.			
Zoology .	Mr. W. Lennan.	Dr. Grierson, Thornhill.			
Archæology	Mr. Gibson.	Mr. Stark, Troqueer Holm.			
History .	Mr. M'Diarmid.	Mr. Maxwell, Breoch.			

All the gentlemen nominated, with whom the Committee had had an opportunity of consulting, had consented to act.

The following communications were read:-

Notes on the Siller Gun. By Mr. Stark.

On the New Granite Quarry at Kirkeonnell, and the geology of the neighbouring district. By Dr. Gilchrist.

Dr. Gilchrist exhibited specimens of the various rocks in illustration of his remarks, and observed that the quarry was especially interesting from the beauty and the quality of the

granite, from the different varieties which it exhibited, and from the excellent illustrations which it afforded of the contact of the Syenite and Silnrian rocks, which was well marked at a place nearly opposite Glencaple: a vein of granite or Syenite passed through the Silurian rock and varied the character of the latter very considerably. Dr. Gilchrist described also the traces of the ancient sea-beach along this part of the coast-line. He drew attention to the geological features of the Silurian rocks, as exhibited in the quarry at Longwood, and the contorted and twisted appearance which they present in some parts, which he thought might probably be due to a vein of granite which passed near the quarry, and showed a "fault," the two sides not agreeing. The quarry presented also veins possessing precisely the character of "lode"—in mining phrase—in which the quartz was of a semi-opaline character, which indicated the probable vicinity of a granite vein.

Dr. Grierson exhibited a specimen of a white robin-redbreast, and a "Smew" or "White Nun" (Mergus albellus), a northern species, which was obtained in the vicinity of Thornhill, and which, so far as known to Dr. Grierson, was the only one ever seen in that district.*

Mr. Maxwell, Gribton, exhibited a stone-hammer found at Carmaddie in Holywood.

Mr. M'Diarmid laid on the table a number of Roman mosaics collected by him while on a recent tour in Italy.

Dr. Gilchrist exhibited and presented to the Society a quern, which had recently been found on the side of the road passing between the Craig's quarries, and which had evidently been thrown out in clearing a ditch; also a slab of sandstone

^{*} A specimen was shot on the river Annan, near Dormont, and is now in the collection of British birds there, formed by the late W. L. Carruthers, Esq.—W. J.

from Locharbriggs showing rain-drop markings: he exhibited also a specimen of obscure footmarks upon sandstone from the Wood-end Quarry.

May 3d, 1864.

Sir WILLIAM JARDINE in the Chair.

There was a very full attendance of Members.

Mr. Sloane, Merchant, Dumfries; Mr. Blacklock, Timber Merchant, Dumfries; Mr. Witham, Kirkconnell; Mr. Coupland, Hairdresser, Dumfries; Mr. G. Clarke, Speddoch; Sheriff Trotter, Dumfries, were elected Ordinary Members.

Sir William Jardine then presented the Society with the published Journal of the Proceedings of the Society's first session. It was arranged that the journal should be distributed free to all the Ordinary Members on the roll up to May 1864. Members admitted after that date to pay 1s. 6d. The price to non-Members was fixed at 2s. 6d., and to corresponding Members 1s. 6d. It would be expected of new Members that they should take the Transactions of the past year, as this would assist considerably towards increasing the funds of the Society. Sixty copies of the journal were then placed in the hands of the Secretary, to be followed by 240 more on the following day.

It was then agreed that the open-air meetings of the Society should commence upon the first Tuesday in June, and that the first excursion should be made to the ruins of Tibbers Castle, near Drumlanrig. The principle of last summersession was adopted of selecting the locality for next excursion at the previous meeting.

The following communications were read:—

Translation from the writings of Hector Boethius, "On the Terrestrial Winged and Aquatic Animals of Scotland." By Mr. D. Biggar, Drumlanrig.

With reference to this paper the president remarked, that from the mass of fiction and fable with which the older writings on Natural History were surcharged, we were apt to overlook many valuable hints and suggestions, and much information which we might otherwise obtain from them. It was curious to remark that in the Highlands and Western Islands of Scotland, many of the superstitious feelings and beliefs of the present people bore a close resemblance to the stories related by the older naturalists. Many of the lochs, for instance, were still the objects of superstitious fears to the ignorant minds of the natives, as the abodes of monsters and strange creatures resembling those described by Boethius.

Dr. Grierson remarked that the wild horses mentioned by Boethius as inhabiting Scotland might probably be Highland ponies. He thought that the statement regarding the rejection by foxes of their natural prey, when fed upon the flesh of the fox, was not improbable, and certainly derived support from observations made by himself upon his own dog.

Extracts from the old Borough Records of Dumfries. By Mr. M'Diarmid.

On Circular Markings upon Rocks and Stones, with special reference to some recently discovered near Lochgilphead in Argyleshire. By Dr. Dickson, Secretary.

Dr. Grierson exhibited a pair of Jougs which were removed from the cross of Minnyhive, Glencairn, in 1812, when it was undergoing repair.

Dr. Dickson laid upon the table a collection of coins which had been found from time to time in trenching the ground of the Crichton Institution.

(French) 3 Gold pieces of Francis.
1 Silver ,, of Edward IV.
15 ,, ,, of Henry VIII.
5 ,, ,, of James V.

LIST OF MEMBERS

OF THE

Dumfriesshire & Galloway Natural History and Antiquarian Society.

SESSION 1863-64.

November 3d, 1863.

ORDINARY MEMBERS.

Mr. Andrew Barrie, George Street, Dumfries.

Mr. A. Simpson, Writer, Dumfries.

Mr. Malam, Gas-Manager, Dumfries.

Mr. J. Shaw, Drumlanrig.

Mr. BIGGAR, Thornhill.

Mr. J. BRYCE, Closeburn. Mr. J. MAXWELL, Joiner, Dumfries.

Mr. R. A. Dickson, Queensberry Square, Dumfries.

CORRESPONDING MEMBERS.

Rev. W. Greenwell, University, Durham.
Rev. D. Langmuir, Aberdeen.
Dr. Aitken, District Lunatic Asylum, Inverness.
Dr. Donkin, Medical School, Newcastle.
Rev. James Edmonston, Ashkirk, Hawick.
Professor Struthers, Aberdeen.

December 3d, 1863.

ORDINARY MEMBERS.

Mr. Francis Maxwell, Gribton. Captain Yorstoun, Lincluden. Mr. Wellwood Maxwell, Munches. Mr. Paterson, Veterinary Surgeon, Dumfries.

CORRESPONDING MEMBER.

Rev. D. LANDSBURY, Free Church, Kilmarnock.

January 5th, 1864.

ORDINARY MEMBERS.

Dr. W. S. Kerr, Buccleuch Street, Dumfries. Mr. Howat, Architect, Drumlaprig.

March 1st, 1864.

ORDINARY MEMBERS.

Mr. F. Maxwell, Drumpark. Mr. Grierson, Dalgonner. Mr. J. Martin, Courier Office, Dumfries.

April 5th, 1864.

Corresponding Members.

Mrs. J. S. Milne, Berkshire. Mr. T. R. Marshall, Edinburgh.

May 3d, 1864.

ORDINARY MEMBERS.

Mr. Sloane, Merchant, Dumfries.
Mr. Blacklock, Timber Merchant, Dumfries.
Mr. J. Coupland, Perfumer, Dumfries.
Mr. Witham, Kirconnell.
Mr. G. Clarke, Speddoch.
Sheriff Trotter, Dumfries.

DONATIONS TO THE MUSEUM OF THE SOCIETY.

Collection of Casts of Footprints. — Captain Anderson.

Photographs of three pages of the Minute-Book of the Ayr Sailors' Society, of date 1647.—Dr. Sloan, Ayr.

DONATIONS TO THE LIBRARY.

The "Genetic cycle," by Professor Ogilvie, Aberdeen.

The "Master-Builder's Plan," by Professor Ogilvie, Aberdeen.—
The Author.

The King's Quair.—Dr. Sloan, Ayr.

Report of the Liverpool Naturalists' Field Club.—The Club.

Report of the Montrose Natural History and Antiquarian Society.—

The Society.

Annual Report of the Transactions of the Plymouth Institution.—

The Institution.

On the Permian Rocks of the North-West of England, and their extension into Scotland, By Sir Roderick Murchison, K.C.B., &c., and Professor R. Harkness, F.R.S., &c.—Professor Harkness.

Transactions of the Nova Scotian Institute of Natural Science, Vol. I., Part 1.—The Institute.

DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY AND ANTIQUARIAN SOCIETY,

In account with Mr. W. G. Gibson, Treasurer.

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Examined and found correct,

J. GILCHRIST, V.P.
J. DICKSON, Secretary.





ADDRESS OF THE PRESIDENT,

SIR W. JARDINE, BART., LL.D., F.R.S., F.L.S.,

ETC. ETC. ETC.

6th December 1864.

Gentlemen,—The printed proceedings which you have had this evening laid upon your table will best inform you of what has been done at the meetings of the past winter; and while these have not been without interest, and show a wish from all the Members of the Society to enlarge our knowledge in every department, we must not relax our exertions, and because we have once gone over the ground, think that we have nothing more to discover.

It is one of the duties of your President to render some account of what has been done during the Summer Meetings; and this is an important one, because, if done carefully, it should be the record and authority for the facts and discoveries which you have made; and these, being authenticated, proved and verified by the Members, either during the excursions or by after-examination, will give you the foundation and yield the materials for the natural history and antiquities of our district.

The first summer excursion of 1864 had been arranged to meet in the Thornhill district, with the especial intention of examining Tibbers Castle, the ruins of which were in progress of being cleared out by his Grace the Duke of Buccleuch. The meeting was well attended.

Dr. Grierson's museum at Thornhill was first inspected by

the Members who had started early, after which the party proceeded to Boatford, and examined the upright stone placed in a field upon the south side of the river Nith, and not far distant from the road leading from the village of Thornhill to Penpont. Little or no history exists in regard to this cross, but there is an excellent representation of it in the volume of the Spalding Club devoted to the Sculptured Stones of Scotland, pl. exxi. p. 37, edited by Mr. Stuart, who thinks it may have once stood close to the bank of the river. Other sculptured stones seem to have also formerly stood at some distance, but in the vicinity, which have been removed in the course of improvements. This points both to the value of Mr. Stuart's volume and to the importance of yet saving all that we can of these relics.

The fog and drizzling rain of the morning having cleared away, and the sun breaking out, the party proceeded to Tibbers, where they were met by Mr. Howat, clerk of the works at Drumlanrig, who explained the plan of the ancient building, and gave an account of the clearing operations which were still going on. Dr. Grierson, among the ruins, read a paper on the ancient history of the castle.

During the excavations the greatest pains have been taken to find and preserve all remains and relics that could throw any light upon the ancient place and its inhabitants. The clearing out of the well discovered several articles and bones; but one of the more interesting incidents of the excavations was the discovery of the ashpit or kitchen-midden, telling us of the animals that were then living in the vicinity and of the especial feeding habits of the residents in Tibbers. Among a large heap of bones collected by the workmen—among which those of sheep, roebuck, etc., could be recognised—by far the most abundant were the leg bones of a small ox, the so-called Bos longifrons of palæontologists. This animal, I have no doubt, existed until a very late period, if it does not exist still, and was only, I believe, a small race of oxen run-

ning almost wild on the hills of the district, and most probably the remains so frequent in the Irish bogs and crannoges were from similar races, or varieties of them. Bones of the same animal occur in other localities. I place on the table bones from Tibbers—Dowalton Loch, whence those sent to Professor Owen were named as above—a specimen found when digging the site for the gasometer in this town of the same character; and you have beside them the analogous bones of a Shetland cow killed at Jardine Hall a few months since. If the latter was subjected to the influence of peat for a few months it might also bear the name of Bos longifrons.

Another remarkable incident is the finding of a large quantity of oyster-shells mingled with these animal bones. In the refuse-heaps of equal age—at Dowalton—and in the lake dwellings, we have almost always a certain proportion of marine shells, edible species, showing that these were a favourite and national article of food. Where the localities are near the sea this is not difficult to understand, and the presence of fish bones also indicated that the sea was largely used; but at Tibbers, where a few shells of the common whelk, Buccinum undatum, and the common clam, Pecten varius, were found among the oysters, the nearest sea where these could be obtained is very distant, and we have difficulty in accounting for so many being now found.

Leaving the remains of Tibbers, the beautiful grounds of Drumlanrig Castle were walked over under the conduction of Mr. Mackintosh. It was just after those severe nights of frost, and most of the more tender plants and vegetables were much injured. Acres of rhododendrons, which, in a few days, would have exhibited a splendid mass of bloom, now half-opened, were entirely checked. The thermometer at Drumlanrig gardens stood so low on the 30th and 31st May as 26° and 25°. This low temperature extended over a great portion of Scotland, and also southward, varying one or two degrees. At Jardine Hall, on the same two last nights

of May, the thermometer stood 27° and 26°, and considerable damage was done in the garden; but the great harm and loss occurred among the pines. The young shoots of the deciduous trees were sufficiently advanced and strong to resist the cold; but the young shoots of the common spruce and silver firs were all cut, and did not recover or spring again. A. mcnzesii, pinsapo, cephalonica, and others, were entirely cut; but the A. douglasii, with a few exceptions where the trees were early, either from shelter or variation, almost entirely escaped; and in this case that tree has proved itself more capable of withstanding our climate than those species we have so long grown.

A beautiful drive and walk from Drumlanrig took the party to Durisdeer, a secluded village of a few houses, situate at the head of a pastoral valley, and such as one scarcely expected to meet with at the present time. The vicinity is full of interest and the remembrances of ancient times. The church of the village is, as in general, a modest structure, but the aisle, shut off from it, and known as the "Queensberry aisle," is the burying-place, and contains memorials of the different members of the Queensberry family. The stained glass, marble monuments, and rich carving and workmanship contrasts strangely with the other primitiveness of the valley and its buildings. If this aisle is not quite faultless, it is a fine work, and is one of those historical records which will repay examination, both on account of the records of the times and the style of art then prevailing; nevertheless, after the beautiful drive and peculiar position of Durisdeer, we felt the aisle almost as an intrusion, and marring the harmony of the surrounding landscape.

After a simple and enjoyable repast beside a clear and cold stream, and having fixed the place for next meeting, the members separated into small parties, each to explore on its own account.

The interest of this day's excursion has been very great,

and will be better understood by referring to the papers in our Transactions for this year. Antiquarian details would be unsuited for such observations as those I have now to make. The geology is interesting, but this you have well described in the papers by Professor Harkness, which are possessed by the Society. The botany of the upper valley of the Nith, and of the rich country passed through in approaching Durisdeer, will repay a closer examination. Several rare plants are known to occur. The juniper is abundant on many of the hills in Tynron. Meum athamanticum was gathered in the upper part of the Durisdeer valley, and it is not uncommon in many of the Nithsdale valleys, while in Annandale I do not know of any habitat. The entomology of the district passed through should be rich and varied, but although the after part of the day was warm and brilliant, it was particularly remarked that the Lepidoptera observed during the very varied walk were comparatively few.

The second excursion of the Society was to Dundrennan Abbey, and afterwards to examine the coast-line towards Auchencairn. The starting-point may be said to be the station at Dalbeatie, where various parties joined, and proceeded by vehicles of different descriptions. A short detour enabled them to visit the old tower of Orchardton, remarkable for its circular form. It is a building of very considerable strength. The walls are $5\frac{1}{2}$ feet thick, and are grouted together, like many of the castles in this district, with sea-sand mixed with shells.

Marubium vulgare, Verbaseum thapsus, and Myrrhis odorata grew by the walls or near the building—the two first perhaps introduced of old. A few plants of Scolopendrium vulgare grew inside; but the rare plant of the locality was the Asplenium ecterach, which grew abundantly on the outside of the tower, the greater part of it fortunately out of the reach of wanton collectors. We were favoured with a bright day,

and from Orchardton had a beautiful drive, with fine views of Auchencairn Bay, Heston Island, and the distant English hills. The hedges were now covered with honeysuckle in full flower.

The approach to Dundrennan, and first view of the grey old abbey, is very fine; but, for the reasons before mentioned, we shall not now enter into its history. There is a good description printed in a 4to volume, with engravings of the principal carvings and tombs, entitled "Memorials of Dundrennan Abbey, by the Rev. A. B. Hutchinson, B.D." A copy of this is kept at the village for the use of visitors. A review of this work, with copious extracts, also appeared in the "Dumfries and Galloway Courier," of 29th June 1858. It is a great satisfaction to see this fine ruin cared for and protected by the Commissioners of Woods and Forests.

In the joints of the walls, and among loose stones, several specimens of *Clausilia nigricans* were picked up. *Asplenium trichomanes* grew abundantly on the inside walls.

The shore was struck at Port St. Mary. In the garden there, several plants indicated a mild winter and spring. There are fine specimens of *Laurus nobilis*, or sweet bay. *Budlea globosa* was a large plant; and a *Camellia* had stood out without protection in winter.

The coast here is very rugged and precipitous, in some places rising into cliffs; but from the tide not coming up to their base, sea-fowl do not breed at any part, but various hawks nestle among the rocks—a great portion is clothed with natural vegetation, which yields a rich treat to the botanist. In some of the caves and hollow parts of the rocks, where a little stream trickles over, are beautiful fern houses. Scolopendrium vulgare and Asplenium marinum cover the roof and sides in the greatest profusion and luxuriance, and may be studied from the earliest state to their highest development. A list of the principal plants observed is given, but the whole district has to be carefully botanised. Among the plants

observed were Carlina vulgaris, considerably larger than those gathered on the Colvend coast; Lychnis floscuculi, very strong in the stem and leaves; Solanum dulcamara, with very dark-coloured leaves; Convolvulus sepium, Raphanus maritimus, Trifolium filiforme, Vicia sylvatica, Lathyrus maritimus, the latter in abundance; but the more interesting and less frequent were Crambe maritimu, below Roscarrol House, and Iris fætidissima. The latter is not given as Scotch by Babington.

The entomology must also be very rich, but has been still less examined. In the many hollows from the top of the bank or cliff small streams run down and give growth to other vegetation. Chrysosplenium forms a rich undergrowth; Eupatorium canabinum is here a showy plant; and by the sides of the stream Enanthe crocata grows very luxuriantly. The umbells of this plant were weaved up by a small gregarious caterpillar. Mr. Lennan collected and took these home; they span up, and the perfect insect appeared in the autumn, which he made out to be Depressaria umbellana, Fabric: this species does not appear to be noticed as found in Scotland. The society had the satisfaction of being accompanied in this excursion by Dr. Baird, one of the officers of the British Museum, and in such brackish pools as dry weather had left, and in the eddies of small streamlets he detected the following Entomostraca:—Diaptomus castor, Cidaris sphericus, Cyclops quadricornis, Condona—probably new species.

The third excursion had been fixed for the Moffat district, taking the higher or lower hill ranges as the weather might suit. A hill or mountainous district in fine weather is always exhilarating to travellers; and the influence might be perceived as the party, after reaching Lockerbie, took up their members at the different stations, and the ascent began. At Beatock Mr. William Carruthers, who was well acquainted with the country around, and the Rev. W. Bennet, were in

waiting, and to those gentlemen the members were indebted for guidance to the more interesting objects. The lower district was decided upon as the field for exploration: nothing but the finest days in early summer will suit the ranges exceeding 3000 feet in elevation, but on the ground selected it was found that there was yet ample scope even for discovery.

The party started for the summit of Beatock Hill to examine a stone fort situate there, the formation of which has been usually attributed to an ancient British people. The site commands a noble view of a great portion of Annandale, and the upper part of the valley of the Kinnell, bounded on the horizon by the Skiddaw range of mountains.

Descending from this high ground into the upper part of the valley of the Garple, a remarkable tumulus on the right bank of the burn near Holm Shaw was reached. It is about eighty yards in circumference, and is surrounded by a ditch partly artificial, and shows also traces of ramparts or outworks. Farther down the stream on the opposite side there is a more extensive camp-like structure. The ancient history of all these remains is well worthy the attention of the Society, and under judicious care and superintendence no doubt excavations would be permitted to ascertain the structure or other particulars that would throw light upon their origin.

Aucheneass Castle, now the property of Butler Johnstone, Esq., late M.P. for Canterbury, was next visited. It is now a very dilapidated ruin, many of the walls being mounded or grown over with turf, but sufficient exists to show the plan of the building, in the form of a square with circular towers or bastions at each corner, the entrance being at one side, and the access to the apartments opening from the inside of the square.

From Auchencass the upper part of the Garple Linn was reached. The Garple, a small mountain stream, falls into the Evan water above Beatock. Near its source among the lower hills forming the north-east shoulder of Queensberry, and in

its upper parts it winds past the old remains we have just mentioned without much character; but on reaching the slope of the Evan Valley it has to make a rapid descent, and has formed for itself a "linn," broken by falls from one rocky precipice to another. The banks are clothed with natural wood, and a footpath being now cut, a summer walk of great beauty has been formed. Formerly all was wild and tangled. The explorer had to scramble up, as best he could, and early in May there was great interest. Water-ousel and grey wagtail nested at all the falls; many kestrels bred among the rocks; and at the higher fall a pair of ravens had their nest and held undisturbed dominion. The ravens have now been gone for many years; the kestrels are diminished to one or two pairs. The linn is also of equal interest to the botanist and entomologist, and is especially rich in ferns and mosses. At all the falls where the rocks are covered in and shaded these abound. Hymenophyllum wilsoni was gathered: this pretty fern covers yards of moist rock, and the rapacious collector may pull off large pieces more than his share. By one of the falls Aquilegia vulgaris grows, but was out of flower and not noticed. It bears purple flowers, and many plants are fortunately out of reach. It keeps its purple flowers without variation, and if at one time it originated as an outcast from old Auchencass, it is now naturalised, and thrives well in its very local and restricted habitat. Specimens transplanted to the garden at Jardine Hall have not varied for twenty years.

H. blandina was plentiful in many of the open spaces in the wood.

The *graptolite* shales were examined under the direction of Professor Harkness and Mr. Carruthers.

Carlingwark Loch and Threave Castle in Galloway were chosen for the fourth excursion, the meeting-point being Castle-Douglas. Members arrived there by an early train—the morn-

ing was far from promising; but, deeply in love with what they expected to see and find, and seduced by occasional glimpses of light, and blue sky the members pressed manfully on. Under conduct of Mr. S. Gordon, and in expectation of an improvement in the weather, the antiquities in the vicinity of Castle-Douglas were first visited: among others the Carlingwark Thorn, and the spot where Mons Meg is reported to have been manufactured.

A few bright openings in the sky, and a lull in the gale, made Threave to be thought accessible; and on they went. On reaching the Dee it was found to be swollen, and had it not been for confidence in the assurance of Mr. Rae's servant that the ford was practicable, and the powerful appearance of his horse, Threave must have for this time remained unvisited. As it was, there was some demur, but the bolder spirits of the Society took the first plunge and were forded safely over. The more timid followed, and, jolted over the edges of the Silurian beds which stand up almost erect, they were also landed.

Threave was a fine fastness, beautiful and strong in its site. The thick walls have been grouted with mortar, of which sea-sand and shells formed a part. The tumbleddown fragments show a concrete of this consistency as strong as the stone itself. Returned to Carlingwark Loch, an attempt was made to find the lake buildings or driven piles mentioned in the Old Statistical Account of Scotland; but the rain and gale had now increased, and although the attempt was made, it was impossible under the circumstances to detect anything. But even if fine, another cause would have prevented us: a minute fresh-water Alga filled the whole water in immense profusion, and was drifted and laid in a thin layer upon the Cattle could not have drunk in the loch without shores. swallowing thousands. The water was coloured a dull green, and it would have been impossible to have examined the bottom or to have seen any substance or erection a foot below the surface.





R K. Greville, delt

W H.M. Farlane, Lith. Edin.

Under the microscope, this curious Alga was a beautiful object, and seemed to be worthy of closer examination, and I sent specimens to Dr. Greville, who has kindly drawn up the following observations on its history, and at my request made the drawing for the excellent figure which accompanies this description:- "The little Alga belongs to the family Rivulariadæ (Kutz.) Some of the genera Physactis and Limnactis, for example, seem to pass into each other, and it is only by very careful dissection that some of the species of Rivularia itself can be separated from those two genera. The plant under consideration is at first sight exceedingly like Limnactis parvula; but as the radiating filaments of which the "phycoma" is composed are furnished at their base with an elongated cell, it must be referred to the genus Rivularia, and I am disposed to identify it with R. pygmca (Kütz. Sp. Alg. p. 337; Tab. Phycol. vol. 2, pl. 70, fig. 4). The following are the specific characters given by Kutzing:-

"'R. globosa, obscure æruginea, dura, trichomasibus omnibus excentricis rigidiusculis, torulosis, apice hyalinis inarticulatis; manubriis elongatis curvulis, basi incrassitis.'

"The very minute size of this Alga, being smaller than the head of the smallest pin, and the firm, elastic, and highly lubricous substance, render it extremely difficult of examination. It is only by completely crushing it, and patiently searching out the perfect fragments, that its true nature can be ascertained."

Carlingwark Loch will well repay another visit. Marle is said to have been procured in quantity, and animal remains have been found in it. Many aquatic molusca inhabit the loch, and notwithstanding the unfavourable circumstances of the day, the following species were picked up:—Anodon cygneus, Cyclas cornea, a Psidium, Planorbis marginatus, Limnaus periger, Bythinia tentaculata. Our entomology was restricted to water-beetles. From the same causes, our botanical list was limited. Besides the Alga already referred

to, among phænogamous plants, plantago maritima was observed on Deeside; by the loch, Sparganum simplex and ramosum, and Bidens cernua were gathered. Dr. Gilchrist reported Potamogeton crispum and heterophyllum.

The last excursion for the summer session had been fixed to meet at Ecclefechan, to examine the Roman encampment at Birrens Werk, but from unfavourable weather and other circumstances this did not take place.

At different times excursions have been made by Members of the Society independently of the fixed monthly meetings, and the information then acquired may very properly be incorporated among the work of the year.

It had been reported that some stone coffins had been discovered near Newby, in the vicinity of Annan, and on the 8th July a small party made arrangements to proceed thither and ascertain the truth of the report. On reaching Newby they ascertained that, although two stone coffins were to be seen, they had been known to the tenant, Mr. Beatie, and others, for some years. One of the coffins was placed in a mound of drift, a short distance from the farm-house. A workman stated that it had been opened about ten years since by some idle persons, probably in expectation of finding concealed treasure, and the stone slab or covering had been replaced immediately afterwards, and had not been disturbed since. Upon again removing the covering, and digging amongst the mould and rubbish which had been thrown in, a number of fragments of an ancient urn were found, which, when pieced together, indicated plainly that it was rudely fashioned, as if by the hand, and was marked with the herring-bone pattern of ornamentation. Some small fragments of bone were also found. The coffin itself was formed of unliewn slabs of

sandstone, resting against each other, forming an irregularly-shaped hole. The covering overlapped the cavity considerably, and with the slabs forming the sides was five inches in thickness. From the dimensions of this coffin, the body must have been placed in a sitting posture, for which there was sufficient depth. The long axis was placed nearly due east and west.

The site of the second coffin was about 200 yards farther along the coast. It had also been placed on a mound of drift, on which the sea had made considerable inroads, and some years since had exposed a coffin similar to the last, but longer, as if the body had been placed in a lying posture. All the slabs which formed this coffin, except the end one, remain; but the cavity is now mostly filled with stones and dèbris.

The clearly artificial character of the superficial parts of the mound, to a depth of probably three or four feet, satisfied the party of the almost certain existence of other coffins, probably resembling those which had been already opened, and of the importance of farther explorations.*

Another small party† met during the summer. The object was to visit a tree that had been found in Lochar Moss, standing in an erect position, and which, from the account that Mr. Simpson had received, was worthy of and would repay examination. While casting peats this year in a part of Lochar Moss called the "Syke," in the parish of Torthorwold, and the property of Sir Alexander Grierson, Bart., Mr. John Kerr, farmer, came upon the tree in question, which attracted his attention from its unusual position. In preparation for the party visiting the spot, Mr. Simpson had labourers employed, and the peat removed.

 $^{^{\}ast}$ See description of further examinations; Address of the President for 1865.

 $[\]pm$ Sir W. Jardine, Bart. ; Professor Harkness ; J. G. Clerk, Esq., Speddoch ; and Mr. Simpson.

The trunk of the tree was uncovered until the root was reached, spreading out upon a grey sandy subsoil. The tree, a Scotch fir, had grown from this soil, and now stood in its original position, the peat having formed around it. On the north side, a little above the roots, it presented a charred appearance, as if fire had been at one time applied, but this apparent charring was the result of the peat surrounding the tree, and a strong spring of water issuing near the roots impregnated with iron. This spring came directly in contact with the charred side of the tree, and was considered by Professor Harkness to have produced that appearance.

The depth of the peat surrounding the stem of the tree was fourteen feet, and exhibited at the bottom a very compact texture. It there contained the remains of jointed reed-like plants, showing that in the early formation the place was marshy. Among this compact peat seeds of plants were abundant, with the remains of various insects. The latter were so preserved as to enable us to distinguish the corslets and wing-cases of carabidous species, and the wing-cases of a species frequenting aquatic plants, *Donacia*, easily recognised by the beautiful sculpture upon them, here finely preserved.

A closer examination of the wood of this tree has been attended with considerable interest. To see the more exact structure of the wood, I took some cuttings to Edinburgh to have them polished. On handling and sawing it, I was struck with the soapy or greasy feel, and the heat of the saw dissolved what was then thought to be resin. But on subjecting the slices to a greater heat to dry them for polishing, a considerable quantity of a dark oily matter exuded, more, certainly, than could be accounted for by the presence of the resin of the pine. Anxious to ascertain the true nature of this, I sent a piece of the wood to Dr. Blyth, professor of chemistry, Queen's College, Cork, and that gentleman has kindly sent me the following valuable observations:—

" WOOD FROM LOCHAR MOSS.

"The whole wood is saturated with an oily fluid, which is most abundant between the annual rings, and communicates a dark brown tint to these. Under a magnifier small granules of a whitish uncrystalline resinous matter is perceived in some places between the woody fibres. The greater part of the substance in the wood is, however, neither crystalline nor solid, and can be pressed in the form of oil out from the dark centre annular spaces. It is tasteless and inodorous, but gives off a faintly aromatic odour when heated. It is highly inflammable, and distils at a low temperature, the vapour taking fire and burning with a bright luminous but smoky flame. The wood is rendered by this matter highly inflammable; it takes fire instantly, and burns with a bright flame.

"There is no regular deposit of the white solid in any quantity or layer, and it is only seen in minute traces when the woody fibres are torn apart and examined by the microscope. It is quite soluble in alcohol and ether.

"On submitting the wood to slow (dry) distillation a considerable quantity of oily matter sublimes, which on standing becomes semi-solid, but it does not crystallise.

"Both ether and alcohol readily extract the oily matter from the wood, and, on evaporation, a whitish soft semi-solid but not crystalline matter is left, which has the properties of resin.

"The ethereal solution is not rendered turbid by the addition of alcohol. Water renders the alcoholic solution quite turbid. It is attacked by strong nitric acid.

"A second portion of wood from the outside of the tree was forwarded to me for examination after the above remarks were made, which afforded some further insight into the nature of the oily matter between the annual layers. In the more compact parts of the wood there was abundance of this

oily fluid, which flowed out on the slightest pressure. But where the woody texture was more open it had passed from the annual rings in those parts, and had, by the more free access of air, been converted into transparent solid layers, having a shining appearance like wax. This was particularly observed in the direction of the medullary rays. When split in this direction thin cakes of a spermaceti-looking substance were found coating the wood, and communicating a soapy or greasy feeling when touched. Although having no crystalline form in the wood, these thin plates, when dissolved in alcohol and ether, and carefully evaporated, readily formed crystals. These were generally grouped in masses of needles, radiating from a centre, and resembling very much nodules of wavellite. When heated in a tube they fuse at about 320° Fahr., and sublime in the form of oil drops, which on cooling become crystalline. From some portions of the solid matter from the wood were obtained at once, by heat, at a comparatively low temperature of about 120° Fahr., and without passing through the oily stage, delicate flattened four-sided prisms, half an inch long, and belonging to the rhombohedral system. These crystals were distinct from the radiated nodules. This proves that the solid matter in the wood was evidently a mixture of several crystalline bodies.

"The small quantity of matter at my command did not permit of a separation and fuller examination of these different bodies. There can be no doubt, however, that none of the oily or crystallisable matter in this fossil tree was derived from the surrounding peat. The pine-tree must have contained, in its fresh state, an unusually large quantity of turpentine, from which, by slow and very imperfect oxidation, the various substances found in the fossil were formed. In the inner and more compact portions, from which air was excluded, the turpentine preserved its fluid character, but possessed so little of the turpentine odour, and had acquired a peculiar aromatic smell of its own, that it is very

probable that it has been partly changed into an isomeric hydrocarbon.

"Towards the exterior, where the woody fibre is more open, so as to admit a little of the limited quantity of air which penetrated into the peaty layers around the tree, some of the oil has been resinified; whilst in the outer layers, where the wood is cracked, the resin is further oxidised into a solid crystalline matter.

"It would be interesting to ascertain if the wood in the upper portion of the tree, where it comes near the surface of the bog, and must consequently have had a freer supply of air, contained more of this solid crystalline matter than in the lower parts further removed from air.

"The crystalline matter appears to belong to the same class as Fichtelite, Scheererite, Tekoretine, Phylloretine, etc., which have been obtained from fossil pines found in bogs in Bavaria, Denmark, and elsewhere. It is not, however, identical with them. These bodies fuse at temperatures varying from 113° to 200° Fahr., whilst only a part of the Lochar pine-tree crystals fuse at these lower temperatures, the greater part requiring for this purpose above 300° of Fahr. The published accounts of Fichtelite and the other oxidised products from turpentine found in fossil pines, show that these bodies also cannot be regarded as really simple, but that they are mixtures of different substances. Should a sufficient quantity be obtained for a more complete examination, a considerable series of fossil products would undoubtedly be found to be derived from the slow metamorphosis of the turpentine of the ancient pines.

"The roots of pines from the Irish bogs, found in abundance at Macroon, near Cork, appear to be saturated with a matter similar to that of the Lochar pine-tree. The roots are torn into threads, and sold for firewood. They have a greasy feel too, and burn at once, on the application of flame, with

much light and smoke, and in them is also found chrystalline matter. In Jutland, in the large turf bogs, there is a species of turf, evidently derived from the dèbris of pines (from the twigs and leaves), which burns like cannel coal, and contains a resinous matter, which also can be extracted from the fresh fir-needles. It is called Lyscklyn, and is used by the inhabitants for lighting their dwellings. The resinous matter may possibly be similar to those portions of the Lochar pine fluid which have been so far transformed as to assume the semi-solid unchrystallisable resinoid form."

In connection with this subject, and the age of peat, I bring to your notice the fact of silver coins having been found not very far from the same locality. They were found, while casting peats, about six feet below the surface, and were said to have been about fifteen or sixteen in number. That before you is the only one recovered, and I fear "treasuretrove" has prevented them coming to light. This one was traced to the possession of an old woman in Liverpool. It is of the coins called family coins, and was struck for one Fufus Calenus, B. C. 82 years, to record the reconciliation which had taken place between Rome and the other people of Italy after the end of the Social War. It is not easy to fix a time from this. Still we have something. It has been suggested that these coins may have been carried out with manure; but the distance from the edge of the moss, and the inutility of carrying manure there, would militate against this supposition. From the appearance of the coin before you it had been some time in circulation.

Such are the results of our summer meetings. They have not been altogether unfruitful, and have cleared the way for again examining the same localities. But we have generally endeavoured to take in too much ground, and have consequently run over it without that careful examination the country required. In our excursion to Dundrennan, for in-

stance, the walk along the shore, and its examination, was far more than a day's work. It is most interesting in every point of view. There is more than a day's work in and around Carlinwark Loch alone. There should be a little more division of labour, and it should be more careful work.

This time last year I directed your attention to one or two subjects on which a great deal had been written, and which were exciting much attention among both high and low, scientific and unscientific persons—such as the *Darwinian* theories, antiquity of man, authenticity of the Scriptures, etc.; and the facts, or so-called facts, on which the different opinions expressed regarding them were based. I may say that no great advance has been made during the past year to prove or disprove these asserted theories. At the same time, the subjects are fully maintaining their interest, are taken up by a very varied class of persons, and are being looked upon, I think, with a little more serious importance.

I judge from the numerous works called forth in consequence (they are perhaps only exceeded by one other class), and from the general tenor of the speeches and discussions arising at the meetings of our scientific as well as other societies and associations. See the extremely numerous rudimentary works on most scientific subjects, as if science was to be made easy at once, and without work; the numerous controversial works—replies to, and defences of, the principal or typical works lately published. Some of those exhibit great carefulness and research and sound reasoning; others are flimsy in the extreme, and hurt the cause they advocate.

Look, again, at the *periodicals*. The *literary* devote some of their pages, just because the subjects are, I may call it, fashionable. The *scientific*, which relate to animal or vegetable life and physiology, whether popular or more strictly scientific, are almost filled with papers referring more or less to these subjects. It is the same with the *geological* and *geographical* journals and transactions, and one *Society's Journal*

and Review is devoted entirely to the study of man. The Anthropological Society, although I am now far from agreeing with all the principles it sends forth, is doing a great deal of work, both by its papers and the translation of little-known publications, but these have to be carefully sifted.

The bibliography of this subject would now fill a large volume. I will only mention two works, but for very different reasons. The first of the translations put forth by the Anthropological Society is Introduction to Anthropology, by WAITZ a compilation certainly, but, at the same time interesting, and containing original views. This has been reviewed by a qualified traveller, and many of the circumstances upon which certain positions were upheld as conclusive are challenged, and sometimes demonstrated to be false. In fact, Waitz, given out by authority as written and compiled by one who had devoted long time and research to the subject, cannot be entirely trusted, and must be read side by side with Burton's review and notes. I have mentioned this to show you how very careful we require to be in drawing conclusions from works ranging over a whole subject, where portions must be gathered second-hand-such are quite different from a monograph, or description of some particular local formation in geology, or of the description of some particular tribe with which the individual had had long intercourse. Here the authors, when they generalise, may be mistaken; but the facts so studied and recorded may be mostly depended on.

The other work I alluded to is by one of the most careful and candid observers of the present day. It is a paper by Joseph Prestwich, Esq., published in the Transactions of the Royal Society for 1864,—" Theoretical considerations on the conditions under which the deposits containing the remains of extinet Mammalia and Flint Implements were accumulated, and their Geological Age." Mr. Prestwich, after very careful and repeated examinations of the valley of the Somme, extending over a series of years, and compared with other deposits, in

May 1863, writes:- "Thus there were two extremes" (in accounting for the deposition of the formations): "I have been led to adopt an intermediate course. I could not admit the possibility of river-action, as it now exists, having in any length of time excavated the present valleys and spread out old alluvia; neither was it possible to admit purely cataclysmic action in cases where the evidences of contemporaneous old land-surfaces and of fluviatile beds were so common. But with river-action of greater intensity, and periodical floods imparting a torrential character to the rivers, the consequences of joint operation are obtained, and the phenomena admit of more ready explanation. I long had proposed the separation of the gravels into the high-level gravels and low-level gravels, and shown that the former were older than the latter. I was, however, at one time disposed to adopt, in part, some of the views of M. Elie de Beaumont with regard to the cataclysmic action in preference to the slower action of rivers; but further research, and the discovery of land and fresh-water shells in so great a number of low-level gravels, and in some of the high-level gravels, and especially the striking evidence eventually afforded by the beds of St. Acheul, and by the higher level gravels around Paris, satisfied me that river-action peculiar to each valley commenced with the high-level gravels; while the mass of dèbris and the large blocks present in the beds indicate the action of a large body of water and ice-transport. I conceive that the hypothesis brought forward in this paper gives consistency to the whole subject. It brings down the large mammalia to a period subsequent to that when the extreme glacial conditions prevailed, and closer to our own times." . . . "And" (the formations and deposits) "dependent upon one prolonged and uniform set of operations in accordance with the climatal conditions, and necessarily resulting from them."

Thus it will be seen that the unprejudiced working of a candid observer can modify preconceived views or theories;

and our knowledge of all those great questions has been, and still is, so limited that any absolute proposal may be very probably overturned by continued research. I would recommend a very careful perusal of this paper, which cannot be understood by any partial extract.

Attend also to the addresses which were made on opening many of the sections of the last British Association, and the character of a great portion of the papers read before some of the sections, and the discussions which followed, how they bore on the subjects I have alluded to; members could not help, as it were, introducing them, so much were they in their minds. They even got mixed into the complimentary and after-dinner speeches, but at the same time a greater caution was displayed, a feeling as if the ground they were trying to tread upon was not sufficiently firm under them for ecrtainties to be proclaimed. The same subjects have been more or less taken up by general public speakers and by bishops in their charges. The Bishop of London has very lately given a lecture in Edinburgh "On Science and Revelation." There is another sign of the importance with which these points are looked A declaration commencing—"We, the undersigned students of the natural sciences, desire to express our sincere regret that researches into scientific truth are perverted by some in our own times into occasion for easting doubt upon the truth and authenticity of the Holy Scriptures," etc. etc.

All these are signs or indications which proclaim that fears are roused by the tendency to scepticism which these books and discussions may produce. I declined to sign the declaration because I did not see why we scientific gentlemen or students of natural history should be called upon to make any such declaration, more than other professions, and we deny that we pervert scientific truth to casting doubt upon the Scriptures. I have no fears for the books or discussions, and my reason for introducing the subject here is both in sequence to what I addressed to you last year, and to recom-

mend you to study those subjects freely and unreservedly, and without prejudice one way or another, and to study them with your Bible, for now you can scarcely do so without. there are scientific points which you cannot master, and I doubt not there will be, apply to those who have made a study of the branches to which your difficulties relate; you will find very few that will not be ready to assist or direct you. And if, on comparing science with your Bible, you think that they do not agree, and that you have made out a clear case that the latter cannot be relied upon either scientifically or historically, before deciding, bring to your mind and recollect the extent and kind of information you require before you can arrive at such a conclusion. Let it be asked, Have you got up the zoology, botany, and geology of the East—its meteorology—the ethnology and study of races—its traditions and monuments-manners and customs of the ancient peoples? Are you a Hebrew scholar, and do you know the allied tongues? When you can say you are so well instructed, we may think it worth while to listen to and examine some of your arguments.

When I mentioned that the books of science, rudimentary, popular, or scientific, and the controversial volumes incident to these, were only exceeded by one other class, I alluded to what are called works of *fiction* or *scnsation*, now at last beginning to be looked at as having some influence on the mental development of youth. Of old, and in all countries, fiction has been enjoyed, and many of us may yet recollect the delight with which we once read such books as "Sandford and Merton," "Robinson Crusoe," "Philip Quarles," "Gulliver's Travels," or the "Arabian Nights;" and when a little more advanced, how we enjoyed the novels of Smollett and Fielding, or discussed Uncle Toby and Corporal Trim. Later still came a higher class of light literature—the novels of Sir Walter Scott, and his imitators, many of them of a high class.

I have before stated to you that I considered recreation,

amusement, change of work, necessary under all circumstances. This is one of the reasons given for bringing out the quantity of fiction so constantly streaming on. The true one is, that, like gin palaces, it has been found profitable; but, like them, it is a stimulating waste of mind and time. Its low-class quality debases the mind, and induces carelessness of reading and study, by skimming over page after page in search of sensation passages. It has been said that the language of the old novels and stories often precluded them from being put into the hands of young persons or females; but we question if the outspoken expressions of Fielding, or Smollett, or Laurence Sterne, were more injurious and unchaste than the tales (sometimes written by females) of seduction, adultery, and bigamy, of the sensation novels of the present day.

I trust it will not be taking too much upon ourselves if we venture to express a hope that the objects and pursuits of this Society, as well as its meetings, may tend to direct the minds of its members into sounder channels, and that our "sensations" will be the discovery of new species—new facts—and new uses to which we can apply the various productions that Providence has placed around us.

The law of treasure-trove is of great importance to some of our pursuits. Several good letters on the subject have appeared in the "Times" during the past year. There is one by Mr. Godfrey Taussett, in which he defines the law as laid down by Coke; and, if he is correct, it is very simple and intelligible.

"Treasure-trove is where any gold or silver, in coin, plate, or bullion, hath been of ancient time hidden, where-soever it be found, whereof no person can prove any property, it doth belong to the King, or some Lord or other by the King's grant or prescription." And he explains the words gold and silver thus:—"For if it be of any other metal it is no treasure, and if it be no treasure it belongeth not to the

King, for it must be treasure-trove" (Coke, Inst. iii. p. 132).

Or it may be otherwise put:—1. The *Crown* claims all *silver* and *gold*; 2. The finder all *other relies*. But whatever be the reading, all *jewels*, *glass*, *pottery*, *poreelain*, etc. etc. are excluded.

The directions of Sir G. Grey to the police in 1860, and their interference in consequence, has done great harm, and to it the concealment of various pieces may be attributed. The value of these articles cannot be overrated. Whether old deeds or writings, utensils, ornaments, or coins, etc., they constitute the old history of our country, and give us the details of manners and customs long gone by; for, notwithstanding the advance of civilisation, there is yet much to learn in studying any ancient people, and we may gather many things from their primitive customs, simple virtues, rude manufactures, and modes of government.

It is right and expedient that there should be some public collection where such relics may be preserved, and where they can be easily referred to; but I must say that I should grudge to see all the old relics of Scotland transferred to the British Museum, useful as that great institution is. These public museums, even the British, were at one time very badly managed, and anything getting into them might have been said to have been consigned to oblivion. Now it is different.

In Edinburgh the Society of Antiquaries is an excellent institution, and their collection, in charge of Mr. Macculloch, is in good order, and the specimens can be at once referred to. I have received great assistance here in making out some of the relies which have come into possession of our members since this Society was constituted, and any one calling there will receive every assistance and information. Scotch antiquities that cannot find a resting-place elsewhere should be sent to Mr. Macculloch.

But some of the letters on treasure-trove, to which I have alluded, decry private collections and collectors. With this I entirely disagree. Private love for any subject begets its investigation, and a collection is the consequence, endeared to its owner by all the difficulties of procuring the specimens and making out their history. These collections may sometimes be scattered and dispersed, but they should be known to the officers of the public museums; and when they come to sale the desiderata and really valuable pieces can be secured, and the expense to Government or the public will be much less than the purchase of a large miscellaneous collection. There are few of our best authorities who have not collections in the branches they pursue, whether paintings, coins, natural history, or antiquities. These seldom go out of Great Britain, except when Government happens to be economical. Destroy or interfere with private collections, and you will destroy the taste for the subjects, and at the same time interfere with the liberty of the subject.

I think it more than probable that treasure-trove may be this session taken up by Parliament, and a clear definition of it made; it might be useful, and assist, if the various societies were to express their opinions, and memorialise for that purpose. In the meantime I would recommend any one possessing or finding antiquities not gold or silver to bring them forward, and let them be studied and described. They will be quite safe and again restored, or, if desired, full value will be obtained for them.

Before concluding these observations, it may be profitable to learn if our wanderings and explorations have produced any additions to our knowledge of the various productions coming under our notice. Among the larger animals, or mammalia, we can scarcely expect any, though, if attention is given to the smaller species—Bats, Arvicola, Sorex—we may yet add to the list.

But although we may not have anything new, changes

take place. The *squirrel* and the *roebuck* are now spreading over a much greater space. Both have reappeared in Annandale within the last ten years. This may be attributed to the growth and extent of wood and cover.

The Alpine or blue hare—Lepus variabilis—not known, I believe, in the south of Scotland, is now to be found on the Moffat, Evan Water, Lead Hills ranges, and the other high ranges leading into Selkirk and Peeblesshire. But there is reason to believe that it was introduced, though it cannot be certainly ascertained when or by whom. It is an animal, however, not difficult to introduce or naturalise. In Faroe it was in 1854 or 1855 introduced from Norway, and thousands now exist in the island.

A specimen of the thrasher—Alopias vulpes (Borlasse)—was taken in the Solway, and was procured for our collection. It is far from common, and has only occurred a few times on the British coasts.

Among insects we may place *Depressaria umbellana* of the Dundrennan excursion as new to Scotland.

The larva of one of the saw-flies was extremely common in the Drumlanrig woods, feeding on the Scotch fir, and stripping their young branches. Mr. Doughty, forester to his Grace the Duke of Buccleuch, sent some of the caterpillars to ascertain what they were. They were larvæ of Lophyri, but the exact species could not be ascertained until the perfect flies appeared. They did so in the spring, and on sending specimens to Mr. F. Smith, British Museum, they were ascertained to be the true L. pini. They appear at uncertain intervals, like the saw-fly of the turnips, and being gregarious, are sometimes very destructive.

The plants occurring have been mentioned in the account of the different excursions, among which the most important was the *Iris fætidissima*. Next, the very curious Alga of Carlingwark Loch (see p. 10). In the trip which Professor Balfour made with his pupils to the vicinity of Dumfries,

Enanthe fistulosa was gathered;—not recorded by Babington as Scotch, although Sir W. J. Hooker gives a few habitats.

In paleontology, Professor Harkness obtained a portion of a trilobite in the slate-rocks of the valley of the Scaur Water. A search was made during summer in these quarries (not now worked), by the professor, myself, Mr. Maxwell of Gribton, and Mr. Harley, but without success. The slates are, however, very interesting. They afforded many good impressions of tracks which we would refer to crustacea. Dr. Grierson has obtained species of a graptolite in Nithsdale.

In Annandale, for the first time, we have met with the remains of an ox. It occurred in the same remarkable deposit which has yielded the remains of red-deer, roebuck, black bear; and in the same deposit has also been found the fragment of a palmated horn, which, though small to pronounce a decided opinion upon, there is little doubt is a portion of that of a rein-deer.

In *mineralogy*.—On our visit to Barlochan mine of barytes an interesting mineral was seen, exhibiting a rich blue colour. Mr. Dudgeon has submitted this to competent authority, who pronounces it to be the *eup. sul. of lead*.

Many of the Members may have seen Miss Hope Johnstone's spirited advertisement in regard to iron or other minerals. Professor Harkness visited the "diggings" along with me. There are undoubtedly strong traces of iron to be seen in the small portion opened; but the doubt is, if the fissures in the old rocks there will be large enough to contain sufficient quantity of ore to render it valuable. There are perhaps stronger indications eastward towards the dryfe.

TRANSACTIONS.

Notes on some Antiquities and Old Records of Dumfriesshire and Galloway. By James Starke, F.S.A. Scot.

THE SILLER GUNS.

Read 5th April, 1864.

I HAVE had an opportunity of seeing the "Siller Gun," which is in the hands of Mr Martin, Town-Clerk of Dumfries; and have thus been induced to note down a few particulars respecting it.

The Gun came into the possession of the Town-Council about twelve years ago, having been given over to them by the Incorporated Trades of Dumfries, to whom it was presented by King James VI.

Authors have spoken of this royal gift in a slighting way, as a toy, a trinket, and so forth. This is difficult to be accounted for: it would imply a total misapprehension of the nature and object of the gift.

It was not given as a field-piece, and the precious metal of which it is composed precludes our expecting a Mons Meg. It was given simply as a prize to be shot for; and is in the nature of a medal, expressive enough, as such, like the silver arrow of the Royal Archers, and would be correctly termed a Gun Medal to be worn on the person of the victor at the annual shooting match or weapon-schawing.

The Burgh of Kirkcudbright is also in possession of a Siller Gun from the same royal donor, as a prize to encourage the Trades there in the use of fire-arms as implements of war instead of the bow and arrow.

There is also sometimes mention made of another Siller

Gun in another Burgh, but I am not in possession of any particulars respecting it.

The Kirkcudbright Gun is probably in much the same state as when first presented. It is a tube or barrel of about seven inches in length, with a ring and heraldic shield of silver, and a ribbon attached by which it may be suspended.

The barrel of the Dumfries Gun is of a similar length, but it is said to have been mounted on a silver wheel carriage, which has long since disappeared.* And it is now set on a stock or butt of white metal, with cock, trigger, and ramrod, all modern and immoveable. There is also no touch-hole to be seen, which in the Kirkcudbright Gun is on the side; and if there are marks of the original wheel carriage, these are likewise not to be seen. Such changes, though cleverly done, and not without cost, must of necessity alter the character and value of the Gun as a specimen of the fire-arms then in use.

On the Kirkeudbright Gun are engraved the letters T M C, and the year 1587. The letters are understood to be the initials of Sir Thomas M'Clellan of Bombie, the then Provost, or Alderman,† of the Burgh; and, historically, it appears that the Gun, though meant for the use of the Trades, was the property of the Burgh, and in the custody and keeping of the Magistrates, to whom accordingly they made application for its use.

The Dumfries Gun, on the other hand, was presented to the Trades, and retained in their own possession and custody till given over by them to the Town Council in the year 1852.

The following is an excerpt from minutes of meeting of the Council on the occasion of its delivery, 6th August, 1852:—

"Mr Blaind introduced a deputation from the Seven Incorporated Trades, who produced a minute of the said Trades, in which the Trades had agreed to give into the custody of the Town Council, to be kept by them in a pro-

^{*} Guide to Dumfries, page 14. † Nicolson's Galloway, vol. I., page 529, note.

per place of safety, the 'Silver Gun,' presented to the Trades by King James VI., and upon the condition that in future if the majority of the Trades in Dumfries agree to shoot for the said Gun as formerly, they should have liberty to do so, upon an obligation that it be returned and restored to the said place of safety. The Council, on the motion of Mr M'Gowan, and seconded by Bailie Crombie, unanimously agreed to accept of the custody of the said Gun, and tendered their unanimous thanks to the Seven Incorporated Trades for the great confidence reposed in them.

"The Council appointed the following committee to make arrangements as to a proper place in which to keep the Silver Gun, viz.:—Messrs Dunbar, Dinwiddie, and Blaind,—Mr Dunbar convener.

"The meeting adjourned till Thursday first at 2 o'clock.
"(Signed) WM. NICHOLSON.

"Present-

"Provost Nicholson.

Bailie Leighton.

"Crombie.

"Watt.

Dean Payne.

Messrs Dunbar.

P. Mundell.

Dinwiddie.

Lawson.

Clark.

Sloan.

Blaind.

M'Gowan.

Smyth"

The Dumfries Gun has on it the letters I M, and a modern inscription:—" Presented by King James VI. of Scotland 'to the Seven Incorporated Trades of Dumfries, MDXCVIII."

The King was in Dumfries in the month of November of the previous year, 1597,—ten years after the gift to Kirkcudbright,—and spent the greater part of that month in the town, in anxious endeavours to repress the disorders of the times, and bring the western borders to quietness. It is supposed to have been on this occasion the gift was made, though it bears date the year following. This is Mr Chambers' opinion in his Domestic Annals of Scotland. "Most probably," says that author,* "it was while spending this month "in Dumfries, and not during 1598, when he certainly did "not visit the town, that he conferred this mark of his favour."

The explanation of this discrepancy may be that the date was put on at some distance of time after the event, and in the absence of the record.

In our two Guide Books the date assigned for the gift is 1617,—when the King is known to have passed through Dumfries to England. The same date is also given in the Statistical Account of Dumfries. But no authority is stated in any of these cases, nor any reference made to the date upon the Gun.

The Town Council records of that period are not extant, the carliest being, I am informed, 1650, and the Trades' records, having been sold, are in the hands of a private party by purchase.

With regard to the letters I. M. on the Gun, I am not aware whether any satisfactory explanation has ever been given. It has indeed been said that they are the initials of John Maxwell, Provost of Dumfries, if such there was. But, 1, as the Gun was not given to the Provost or Magistrates, as in Kirkcudbright, but to the Trades themselves, it is improbable that the Provost's name would be set upon it; and, 2, in point of fact it rather appears that the Provost of the time was one of the Irvings of the family of Bonshaw.

In default, therefore, of a better explanation, I am disposed to think that in this instance the royal donor, who was a great scholar, and prided himself not a little on his attainments, had in his eye a reference to the classical phrase, in medium or in media civitate, meaning for all, or in trust for the common good of the town.†

* Domestic Annals, vol. I. p. 294.

+ Cicero, Virgil, Horace, Terence,—in all these authors the phrase occurs, in various ways, and sometimes more than once. Terence says:—

"In medio omnibus

"In medio omnious
Palma est posita."—TER., Phormio, prol.
This was quite the position of the Siller Gun.

His Majesty probably saw a seeming unfairness in bestowing a gift on the Trades and yet giving the possession to the Magistrates. But aware also of possible risk in placing it elsewhere, he stamped upon it a word of caution that it was in trust for the general benefit. It is much to be regretted if the trust has not been preserved, by the alleged disappearance of the original wheel carriage; and still more if the depreciatory style in which the gift has come to be spoken of had its origin in this part of its history.

In both towns now the gun medals are in excellent keeping, and further enquiry may lead to information respecting the other "Siller Gun."

The Kirkcudbright Gun has been shot for on two occasions in the present century—in 1830, when the Earl of Selkirk attained his majority, and in 1838, on the occasion of the Queen's coronation.

The Dumfries Gun "was shot for several times in our "recollection," says one of the Guide Books, "and the last "time it figured in a public pageant was on the 25th Janu-"ary, 1859,—the Burns Centenary, which was celebrated at "Dumfries with extraordinary pomp and enthusiasm."

I cannot conclude without expressing my acknowledgments to Mr Martin and Mr M'Lellan for the readiness with which they produced to me the guns in their charge. Such frank and ready courtesy merits acknowledgment. It facilitates research and smoothes the way in investigations which are apt to be regarded by some people as interfering with business. My especial thanks are due to Mr Martin, who has furnished me with copy excerpt from the Council records of the minute passed by the Council on the occasion of the Trades of Dumfries giving over the custody of the Gun to the Town Council.

P.S.—The Dumfries silver gun is now enshrined in an oval frame in the Council Chamber.

NOTICE OF THE NUN SLAB AT DUNDRENNAN ABBEY. By James Starke, F.S.A., Scot.

THE old ruin of Dundrennan Abbey has many points of great interest, both in its historical aspects and in the detail of its examination. Among its old monuments is the Nun Slab. This slab is broken into several pieces, and the legend or inscription round the border is both abbreviated and obliterated. But an epitaph can be plainly made out, and the object of the present paper is to submit a conjecture that it is the epitaph of the last prioress of Lincluden before the change of that Abbey into a College. From the present state of our information respecting the old Abbey of Lincluden, any suggestion on the subject can be offered only as an historical conjecture, but a direction may be given to enquiry, and the burial place of the old prioress may be found to be at once a vindication of her own personal character, and a testimony to the good feeling which subsisted among the old Abbeys for one another.

Some difference exists in the statements of writers as to the founder of Dundrennan Abbey, where the present Slab lies: Dempster and Fordun, with Hollinshed, ascribing the foundation to David King of Scots, whereas Spottiswood, an accurate and reliable authority, and the industrious Chalmers, say the Abbey was founded by Fergus, Lord of Galloway. The latter opinion harmonizes with the whole circumstances of the case.

The district of Galloway, in which Dundrennan Abbey is situated, was at the time of its foundation a separate and peculiar district, having its own lords or reguli, and its own people, with their own language, laws, and customs. The Abbey was not likely to be a royal foundation; and the case of Dryburgh Abbey shows that David, that sair sanct to the

croun, obtained the name of founder though another than he was the actual founder.

Dundrennan Abbey was founded in the year 1142. This was four years after Fergus first appears in history as Lord of Galloway, and two years after his great neighbour De Morville, Lord of Cunninghame, in Ayrshire, founded his stately Abbey of Kilwinning. Fergus appears to have become Lord of Galloway on the fall of Ulgeric and Dovenald, the previous Lords of Galloway at the battle of the Standard in 1138. Two years after this the Abbey of Kilwinning was founded, and two years thereafter Dundrennan Abbey.

The circumstances thus seem to point to Fergus Lord of Galloway as the founder of the Abbey. He was the acknowledged founder of other Abbeys in the district, and the ancestor of a line of founders of Abbeys.

His son, Uchtred, Lord of Galloway, founded at Lincluden a priory of Benedictine Nuns—apparently the only nunnery in the district. And among the monuments at Dundrennan Abbey still remaining is an old mutilated effigy in the north transept, supposed to represent Uchtred's grandson, Alan, Lord of Galloway, who was buried here.

These preliminary remarks have their bearing on the view here taken of the Nun Slab.

This Slab lies in the eastern aisle of the south transept. It is an incised slab, now in fragments, and according to the Rev. Mr Hutchison, in his Memorials of the Abbey of Dundrennan, the length is 5 feet 6 in., and the breadth 2 feet 10 in.

It has on it an incised figure, full length, in the dress or habit of a nun, the feet resting on two lambs, with a Latin inscription in old English characters, without capitals, round the margin of the stone.

The Slab being broken and mutilated, the legend is in some parts defaced and incomplete; the want of capitals adds to the difficulty of deciphering it, and while in some parts there are unnecessary blanks, in another the words are huddled together so as to require abbreviation, contraction,

the union of letters, and even what we must call interlineation.

Mr Hutchison remarks on the singularity of a female being buried within the precincts of a monastery, but he offers no explanation of the present case, nor any explanation of the inscription, but supposes that the nun must have been of the same monastic order as the monks of the Abbey, though other considerations than co-fraternity may have led to her being buried here.

Commencing the inscription at the top of the Slab, the first words are entire-Hic jucet, Here lies. And the conconcluding words hardly admit of doubt. They are biit ano d 1440. The initial letter to biit cannot be doubted, and año has the usual mark of a contraction for anno. Obiit anno domini 1440-She died in the year of our Lord 1440. The next considerable passage in the inscription is domina pr — uondan. The last word is obviously quondam, formerly, at one time; and if we take pr to be a contraction, as it probably is, it would perhaps intend prioressa, prioress. Here the significance of the lambs under the feet of the figure becomes apparent. The symbol of a lamb does indeed denote purity and meekness, as Mr Hutchison suggests by his quotation to that effect, but here it seems as natural to betoken office and authority, that the lady prioress had under her the lambs of the flock.

Immediately following the commencing words of the epitaph there is a long blank, in consequence of the mutilation of the Slab, and then come the letters chea. If these letters be assumed to be part of the name of the deceased, the name they would suggest is Blanche, in Latin Blancha or Blanchea, preceded by the usual title domina—domina Blanchea, the lady Blanche.

The only remaining letters are v si. The v is either the end of a word, which on the foregoing supposition must be only of two letters, or it is an abbreviation for a word. In either case it might be virgo, followed by the word sit, or some such similar short word, meaning that she was a vestal or nun.





Taking this interpretation to be the true reading of the inscription, we have the following epitaph:—

Hic jacet
Domina Blanchea
v. sit

Domina pr. quondam Obiit anno d 1440.

i.e.,

Hic jacet
Domina Blanchea
virgo sit
Domina prioressa quondam
Obiit anno Domini 1440.

Here lies
The Lady Blanche;
She was a nun,
At one time a lady prioress;
She died in the
Year of our Lord 1440,

hic jacet

XL°

chea — v si—

utuop

.

If we proceed to enquire who this nun was, at one time a lady prioress, and how it came that she was buried here, the inscription gives us no information. It is especially remarkable that the name of the priory of which she was prioress is not given.

As already stated, the priory of Lincluden appears to have been the only nunnery in the district, and it ceased to exist as such in the reign of K. Rob. 3, who died in 1406. The nuns of Lincluden were of the Benedictine order, and the monks of Dundrennan were Cistertians. The orders thus differed entirely. But yet their situation in the same peculiar district of country, and their common origin from the Lords of Galloway might establish between them common ties, which the fate of the nunnery might in the case of the discarded prioress not sever but strengthen. King Rob. 3 died in the year 1406. This was 34 years before the death of the prioress, yet she may have lived so long after the breaking up of her establishment, and been but in middle life at that event; while, if she retained an unblemished character, it was reasonable to give her the honourable burial she here received in vindication of her character, and possibly also of the nunnery itself, as well as in testimony of their common relation.

It is not necessary to suppose that the lady prioress lived in the monastery at Dundrennan. When the establishment at Lincluden was broken up by its change into a college, the nuns would betake themselves, according to their temper and habits, and the lady prioress, chaste but weak perhaps, and unenergetic in the necessary discipline of the convent, would, after a life of purity in some other establishment, or in private life, receive honourable burial here.

Her burial place is not in the common cemetery of the Abbey, nor in the chapter-house, where there are other tombstones, but in the eastern aisle of the south transept of the Abbey church.

If this is the tombstone of the last lady prioress of Lincluden, it would go far towards a vindication of her character

against the imputation on which the change of the priory into a college was founded.

But whatever may be thought of the suggestion here offered, the singularity of a female being buried in a monastery, and in such a prominent situation of the Abbey church, together with the mysterious obscurity of the epitaph in not giving the name of the priory in which she was a nun and prioress, and the obscure, abbreviated form in which she is described,—all these are circumstances which excite investigation, and the present paper is an attempt at their solution.

SIR CHRISTOPHER SETON AND HIS CHAPEL AT DUMFRIES. By James Starke, F.S.A. Scot.

In the churchyard of St. Mary's parish church there is a small monumental stone. There is no getting at a close examination, and the stone is somewhat discoloured and weatherbeaten. But it is understood to be composed of fragments of stones, put together in the nature of a tombstone, and to bear the following inscription:—

"These stones, the relics of the ancient chapel, dedicated to the Virgin Mary, erected by King Robert Bruce in memory of Sir Christopher or Chrystal Seatoun, are here placed

for preservation by Major James Adair. 1840."

There are doubtless other stones to be found in the neighbourhood which may reasonably be supposed to have formed part of the old chapel, but the present are especially interesting from their authenticity. I made enquiries on the subject, and received a letter from the church officer, who superintended the excavations when they were found. He says:—The few stones erected within Major Adair's burying ground were part of the east window of the old chapel, and only brought to light when the workmen were excavating the hill for the foundation of St. Mary's Church. Under my immediate superintendence at the time every part of the ruins were carefully inspected, &c.

Major Adair here mentioned was a residenter in Dumfries, and one of the trustees of St. Mary's Church and ground. In the list of the trustees in the Presbytery records, under date 28th May, 1838, his name stands the first in order,—Major James Adair, Albany Place. He was not a member of the Kirk Session, as I understand, nor is there in the Session records any reference to the erection of the monument.

This interesting monument stands on the south of the church, within an iron railing, which encloses also tombstones in Major Adair's burying ground. The stones, it is stated, formed part of the east window of the chapel, and were only brought to light when the workmen were excavating the hill for the foundation of the present church.

The chapel had long disappeared, the materials having

been from time to time carried off for other purposes.

It was standing undecayed in 1552,* and old Sir Richard Maitland of Lethington, who wrote an account of the House of Seyton, says he had heard mass in it. After the Reformation it would no doubt fall into neglect, and in 1715 the remaining materials were taken to make up the defences of the town against the rebel army then threatening Dumfries. When the defences also came to an end, the materials would be appropriated in many ways.

The present church on the site of the chapel was erected in 1838—a period of 510 years at least from the foundation

of Sir Christopher's chapel.

In Robertson's Index of Old Charters, the following is the title of the charter of erection by King Robert Bruce:—

Charter of the foundation of ane chappel near Dumfries, and £5 strivelig dotted thereto by the King furth of the lands of Carlaverock, where Christopher Seton, his good brother, was slain in his Majesties service.

The date is not given, but it would probably be about

the year 1323 or 1324.

The £5 "dotted" or dotated by the King furth of the lands of Carlaverock would not maintain a permanent chaplain, but it might and probably did secure daily mass being said by an itinerating or mass priest.

In this point of view, and also having regard to the locality on which it was built, the size of the chapel becomes a matter of probable conjecture. It would be in the nature of an oratory or chantry chapel, and of limited size. We find accordingly that when the excavations were being made

^{*} Burke's Peerage.—Art. Seton.

for St. Mary's Church, the foundation showed that the chapel was small. By the kindness of Mr Mitchell I have been supplied with extracts from the *Dumfries Courier* of 1837. It is there stated that "Traces of the rough foundation of a "building were lighted upon by the workmen, but from what "was seen it only proves that the chapel or oratory must have been a very small one indeed."

Mr Gibson has procured a lithograph of Dumfries from the copy of an old print. The view is tasteful and felicitous, with the chapel in the foreground; but it here appears of larger dimensions than would have been anticipated, and there is also more of the edifice exhibited than is perhaps warranted by the perspective. The object, no doubt, was to bring into view as much of the chapel as could conveniently be done, and the print may thus be deemed more valuable than if it had been more artistically correct.

I sent it to a distinguished antiquarian in England, author of a learned work on church architecture, and he considers the stepped gables an unusual feature. He says he had found such in houses at Ghent and some other of the old cities in Flanders, but did not remember any gable of this character applied to churches. But on looking at this print we perceive the same description of gable at St. Michael's Church; and this peculiarity should invite the attention of our archæologists.

At each corner of the edifice is a tall pointed buttress, and another of like character in the centre between them supporting the main wall, very elegant; and the fine east window, as well as the two side windows, and the general appearance of the building, beautiful and appropriate, confirms the traditionary accounts of the excellent taste and workmanship displayed in its original construction.

Sir Christopher Seton was brother-in-law to Bruce, having married Bruce's sister, the Lady Christian Bruce, third daughter of Robert, Earl of Carrick, and widow of Gratney, Earl of Mar, whose elder sister Isabel was the wife of Bruce.

He was an associate and one of the principal supporters

of Bruce, and was present at his coronation at Scone on the 27th March, 1306,—45 days after the death of Comyn at Dumfries; and when Bruce was unhorsed at Methven by Philip de Mowbray, Sir Christopher, then acting as his particular Esquire, rescued him.*

After the defeat of Methven, Sir Christopher took refuge in the Castle of Loch Ur,† and when that fortress surrendered he was taken prisoner, brought to Dumfries, and there condemned and executed. His brother, Alexander Seton, was executed at Newcastle, and others suffered at other places.‡ Bruce's daughter Marjory, and his sister Christina, the wife of Sir Christopher, were immured in convents, having been taken at the Girth of Tain, to which they had fled with other ladies from Kildrummy in the hope of safety.‡

According to Trivet, the English historian, Sir Christopher, being deemed an Englishman, not a Scotsman, was ordered to be led off to Dumfries, where he had slain a certain knight of the English interest, and there was forced to undergo judgment, drawn, hanged, and afterwards beheaded.

This sentence would seem to imply a charge of treason, and therefore it was no doubt that his Anglo-Norman lineage was made to pass muster in the account against him.

Hemingford, another English historian, says it was Comyn's brother, Sir Robert, who was thus slain. The letter of King Edward on the occasion of Comyn's death is vague and general, stating that the Comyn was slain and some others. But in general our historians mention only the Red Comyn and his uncle, Sir Robert.

It is probable that Sir Christopher Seton was at the monastery of Dumfries with Bruce, and he may have ran in with Kirkpatrick to despatch Comyn, and Sir Robert who came to his defence; and that Seton's presence and assistance on the occasion were made the groundwork of the charge against him. There appears nothing to connect him with

^{*} Kerr's Bruce, chap. 4. † Nicolson's Galloway, I., 244. ‡ Kerr's Bruce, chap. 6.

the slaying of any other knight of the English interest in Dumfries.

There is no reason to doubt but that the patriot Seton suffered at the common place of execution at that day, and that this mount where the chantry chapel was so piously erected for him—then described as in the neighbourhood of Dumfries, being outside the town wall,—was the actual locality. It was the Tyburn of Dumfries; and here also, as tainted and polluted ground, all suicides were buried.

When the excavations were being made for St. Mary's Church, a considerable quantity of human bones and about 70 or 80 skulls were dug up*—the miserable remains, no doubt, of the convicts and suicides who had been buried there.

Before concluding, I will offer a suggestion.

We are all indebted to Major Adair for collecting and authenticating these relics of the old chapel, and they have been preserved already for upwards of 20 years from their discovery.

But unquestionably they are not placed in the most favourable situation for inspection; and it is a curious circumstance that the fact of their existence is not referred to in the Statistical Account of Dumfries, or in any of the recent Guide Books.

What I would suggest, therefore, is, that after due enquiry and consent, they should be removed to the interior of St. Mary's Church, and placed as a tablet on an inner wall, in an accessible position.

We may safely reckon on the public spirit of the Minister and Kirk-Session for their co-operation in such a matter.

^{*} Dumfries Courier, 31 May, 1837.

THE OLD MONASTERY OF DUMFRIES. By JAMES STARKE, F.S.A. Scot.

THE old Monastery of Dumfries has long ceased to exist. Streets and houses now occupy the site. And a few names of places—some portions and pieces of ancient structures—and the occasional disinterment of old relics, are what remain to attest its former existence.

But the locality has a permanent and undying interest, as the scene of a busy life which was characteristic of a former period of our history, and still more as one of the many memorable spots in the nation's struggles for liberty and independence.

I have therefore been induced to put together some notes of the place. They are chiefly historical, as in too many cases they must be from the want of material remains.

There is reason to believe that Dumfries was early chosen as a settlement, and first of all, perhaps, as an ecclesiastical settlement.

The venerable Bede, in his Ecclesiastical History of England,* tells us that in the time of St. Wilfred, who was a zealous bishop of the north of England in the 7th century, a Synod was held juxta fluvium Nidd. If this was the Nith, it would be close by the river, or rather close by the flowing stream of the Nith. These words describe the locality of Dumfries happily enough. But no town is named. Had any such existed at that time, the mention of it would hardly have escaped the minute accuracy of Bede.

However, in the list of towns in the historian Nennius, a name occurs which Mr Skene, in a late paper in the Antiquarian Transactions "On the early Frisian Settlements in

^{*} Bede Eccles. Hist., Lib. 5, cap. 20.

Scotland,"* thinks is Dumfries. This is the Caer Peris, or Caer Pheris of Nennius, which Mr Skene is of opinion became, by change of dialect, Dumfries.

Be this as it may, the natural advantages of the place were seen. An important town arose, and in the time of William the Lyon it was made a royal burgh, having then also both a fort or castle and a church. The castle went, even at that early time, by the name of the old castle. This appears from a charter, supposed by Chalmers, in his Caledonia,† to have passed between the years 1175 and 1189, wherein King William grants to Joceline, Bishop of Glasgow, toftum illum apud Dumfries quod est inter vetus castellum et ecclesiam—the toft or messuage of land situate and lying between the old castle and the church.

The Castle was in all likelihood a residence of the Lords of Galloway. The situation of the town in the district—the erection of a Monastery occupying a large space in the very heart of the town, and the grant by Devorgille of bridge dues to the convent,—all tend to shew a great power in the family over the town. And in one charter Alan, Lord of Galloway, is familiarly described as Alan de Dumfries.

This Alan, Lord of Galloway, was a great man. Buchanan calls him *Scotorum longe potentissimus*,[†] by far the greatest noble in the kingdom.

He married for a second wife the eldest daughter of David, Earl of Huntingdon, the King's next brother,—a marriage from which important consequences followed in the history of Scotland. And it was the eldest of his two children by this marriage, Dervorgille, who founded the Monastery.

The date of the foundation is, I believe, not exactly known. But if we run over the events of her life in connection with her character and disposition, and with the character of the age in which she lived, we shall perhaps arrive at an approximate, or at least not improbable time.

^{*} Proceedings of the Society of Antiquaries of Scotland, vol. 4, p. 169. † Chalmers' Caledonia, vol. 3, p. 135, note. ‡ Buchanan Rer. Scot. Hist., Lib. 7.

She married John Baliol of Bernard's Castle, in England. The date of this marriage is given by Mr Nicolson, in his History of Galloway, as 1228. But this is certainly wrong. She would be but 15 years old, and on the other hand her son John Baliol, afterwards King of Scots, was not born for 30 years after. He was born, according to our historians, in 1260, and died in 1314. We may rather take it, therefore, I presume, that the lady Dervorgille remained a long time in a state of single blessedness. Her warm feelings and susceptible character are very conspicuous in all that relates to her husband's death. He died in 1268 or 1269. Two years before this, she founded at Wigton a convent of Black Friars, possibly on some occasion of her going to St. Ninian's shrine in his illness. And after his death, as is well known, she founded Sweetheart or Newabbey, and deposited his heart there, bringing it from France, where he had died. Her father, Alan, lord of Galloway, died in 1234, when she would be about 21 years old, and by the death of her sisters she would come as sole heir into the possession of great wealth. Two events now occurred, either of which was calculated to affect such a person very strongly-even violently. In 1242, when she was 29 years old, her youthful cousin, Patrick, Earl of Athole, was cruelly murdered, in revenge, as it was thought. for his having foiled and defeated in a great tournament his great relative Sir Walter Bisset. The other event was the death-but whether before or after the other is differently stated by different authors-of her mother's brother, John le Scot, Earl of Chester, by poison, when about setting out for the Holy Land. Would it be surprising that in an age of religious foundations, when the building of a church or an abbey was the accustomed mode of expressing strong feeling. the mind of Dervorgille, wealthy, susceptible, unmarried, should take that direction, and that she should now found her abbeys of Dumfries and Dundee.

The monastery of Dumfries was founded for Franciscan or Grey Friars or Friars Minors as they were variously called —an order of monks which had come into this country a

short time previous, and were quickly followed by the Dominicans or Black Friars.

They had eventually eight convents in Scotland, of which Dumfries is reckoned by Spottiswood the third, the first two being Berwick and Roxburgh, both of them under the wardenship or custody of Newcastle.

The existing church would naturally determine the site of the convent. Not that a church was a regular or even perhaps usual part of a monastery, which was normally but the residence of a fraternity of monks, whose function and mission was not to preach to any stated congregation, but to go from place to place and from house to house hearing confessions and speaking peace to the departing spirit, then returning to their convent with as many of the good things of life as they could collect or get the promise of. But notwithstanding, a church was an advantage, and in that light the church of the town would be regarded.

If this is a correct idea of the circumstances the buildings which the Lady Dervorgille actually erected would be the dormitory or sleeping apartments, the refectory or dining hall, a granary, cloisters, and the other usual conventual buildings. The whole, including the church, appears to have been enclosed by a wall with ports or gates at the

thoroughfares.

The monks were mendicants. They professed poverty and received alms. But in order to secure to them a stated revenue, a bridge was erected—the old bridge of Dervorgille—and a power given to the convent to levy dues and customs on all goods and cattle passing, on condition of main-

taining and upholding the bridge.

This grant of bridge dues shows very plainly the power which the Lords of Galloway exercised over the town—thus continued even after it became a royal burgh. For the effect of it was to give the convent a species of control over the ingress into the town, which with our present notions should be vested in the Town Council and in the Town Council alone.

By the erection of the bridge the town or village on the west became the Brig-end of Dumfries. This was the usual name for houses so situated, but the village was of old standing, and is now the populous burgh of Maxwelltown.

While all was yet quiet in the monastery and prosperous, John Duns Scotus, the subtle doctor, was here clothed with the habit of the order. So says Spottiswood in his "Religious Houses."* But others say it was at Newcastle, or by the friars of Newcastle. If Dumfries was like Berwick and Roxburgh in the wardenship of Newcastle, the discrepancy may be reconciled.

But events were now at hand, big with the fortunes of both the monastery and the kingdom.

In the summer of 1300 the ambitious Edward of England came to Dumfries, and lodged with the Friars Minors in the monastery. And in the course of the same year he received the papal bull which claimed Scotland for the Holy See. This complicated matters not a little.

The situation of Scotland was now most critical. It had almost ceased to be a separate and independent kingdom. Baliol's short reign was over, and having presumed to affect independence, he was after a humble submission to Edward and a humiliating feudal penance sent a prisoner to the Tower. The Scottish regalia and the ancient regal stone of Scone were lodged at Westminster. The brave Sir William Wallace was tried in mock state, executed, and dismembered as a traitor to England, which Tytler says was not true "as he never had sworn fealty to Edward." + The fortresses of the kingdom were in the hands of English governors. And Justiciars, in the nature of the English Justices of Assize, were appointed over Scotland, two of them sitting as it seems at this very moment in the castle of Dumfries. when an event occurred in the monastery the consequences of which subsist to this day in the position and character of Scotland. This was the death of the Red Comyn in the

^{*} Spottiswood Relig. Houses, chap. 16, sec. 1. † Tytler's Scotland, chap. 2.

church, and his uncle, Sir Robert, in the sacristy or vestry, on Thursday, 10th February, 1305-6.

The accounts of this affair have varied in some particulars from the very first, and appear even contradictory, arising from party representation and also the want of witnesses to the transaction. But the main facts are clear enough, and though well known we shall state them here for a reason which will afterwards appear.

Bruce and Comyn were heads of parties in the State, and also personal rivals as descendants from the daughters of David, Earl of Huntingdon, the younger brother of William the Lyon, whose line of succession to the throne had failed. And in the course of an altercation in the church of the monastery Bruce struck Comyn with his dagger. Lindsay and Kirkpatrick afterwards seeing Bruce pale and agitated, enquired the cause, when Bruce replied, I doubt I have slain Comyn. Doubt ye, said Kirkpatrick, I'se mak sicker, whereupon he and Lindsay ran in and despatched Comvn still alive at the high altar, and his uncle, Sir Robert, in the sacristy. From this it is plain that however desirable the death of either might be to the other, Bruce did not intend the death of Comyn. It was Lindsay and Kirkpatrick who made all sure. The die was now cast. The wretched discord which had been so baneful to Scotland was now hushed. And decision of conduct on the part of the survivor was imperative and indispensable. Before the end of the following month Bruce was crowned King of Scots.

On the 5th April, which was eight days after this, Edward, much enraged, made Aymer de Valance captain-general of the English forces in the North, and in the letter of appointment the death of Comyn is described from the English point of view. Robert de Brus (says the letter) sometime Earl of Carrick, in whose fidelity we (Edward) had placed entire confidence, disregarding his oath of homage and fealty, has with his abettors and supporters traitorously slain—nequitur et proditionaliter interfecit—John Comyn of

Badenoch and some others in the church of the Friars Minors at Dumfries.

This is the aspect of the case which the letter presents; and many a sad day followed. But Bruce at length prevailed.

"For Freedom's battle, once begun, Though baffled oft, is ever won."

Religious, national, and party feeling now all concurred to desert the desecrated church of the Friars Minors for St. Michael's in the neighbourhood—to which William de Carlyle, lord of Torthorwald, a near relative of Bruce's, appears to have presented the fine bell which now rings in the Mid Steeple.

But the monastery still continued; and when King James IV. came to Dumfries to attend the great justice ayre or circuit court held here in 1504, he gave the friars of Dumfries a gratuity of 14s., and in September of the next year he gave a like sum to the cruicket vicar of Dumfries that sang to the King at Lochmaben.* This cruicket vicar was perhaps the worthy who officiated in the church of the monastery.

The Reformation was now approaching. And after that event, on the 23d April 1569, the magistrates and community of Dumfries received from the Crown a grant of all the houses, gardens, possessions, and revenues which had belonged to the Grey Friars of Dumfries, under the old condition of upholding the bridge.†

This grant to Dumfries was after a similar grant to the town council of Edinburgh of the conventual properties in that city,—and there, in the garden of the Dominican Convent a school was erected, and in the Grey Friars' grounds a church. We were not so fortunate here. Shops and houses were erected, and these perhaps not on any regular plan but as occasion served, the material of the old buildings affording also a convenient supply for the new.

^{*} Treasurer's Accounts ap. Pitcairn.

⁺ Chalmers' Caledonia, vol. 3, p. 136.

The church appears to have been still in existence in Arthur Johnston's time.

This learned Scotsman, and distinguished physician and poet, wrote some lines on each of the principal towns of Scotland. Unfortunately, like Buchanan, he wrote in Latin. The following are some of the very beautiful lines he wrote on Dumfries:—

"Surgit in hac ædes, cui cedunt templa Dianæ
Vel venerabilius Græcia si quid habet.
Proditor hîc patriæ Brussii virtute Cuminus
Concidit et sacram sanguine tinxit humum.
Scotia Drumfrisi, reliquis altaria præfer
Hîc tibi libertas aurea parta fuit."

"In this town may be seen a building to which the temples of Diana or whatever Greece can show more worthy of honour, must give place. For here the valiant Bruce struck down to the earth the traitor Comyn, whose blood soiled the holy ground. O Scotland, I prefer this spot in Dumfries to all others in the land: it was the birthplace of thy glorious liberty."

In this passage we find the form into which tradition early moulded the story of Comyn's death. The gallant and generous Bruce, who shuddered to think he had mortally wounded Comyn, is here the stalwart champion of liberty, striking down the traitor to the ground, which is soiled with his blood. Posterity has approved the deed, idealized it, and consecrated the hero.

This result is obviously to be ascribed to the cruel and relentless way in which the English persecuted our great patriots, and the glorious success which Scotland at length achieved.

Let us now conclude with a short reference to the locality.

The area within which the monastery lay was perhaps from Mr Lennox's premises on the north to Mr Anderson's on the south, and extending back to Irish Street and St. David Street on the west. Within this space we look for remains of the walls and old structures.

The most patent memorial remaining is the Friars' Vennel, which shelves down from the upper end of the High Street to the river, nearly opposite the old bridge of Dervorgille; and about the middle of the Vennel, behind Mrs Arnott's shop, is Comyn's Court.

On the spot occupied by this shop was, it seems, to be seen, about the beginning of the present century, part of the wall of the monastery, with the remains of two arched windows. And on the other or south side of the Vennel, in Dove's, Grierson's, or the Crown Inn Close, is another piece of the monastery wall.

There is said to be a fragment of the original gate or *Port* of the Venuel in the gable of Mr Selkirk's house; and in the public-house opposite the large *chimney* of the kitchen connected with the monastery.

The Church, where the death took place, probably stood at the back of Mr Lennox's shop, and Comyn's Court may indicate the very spot.

THE LADY DEVORGILLA. By WILLIAM R. M'DIARMID, Dumfries.

THE South-west of Scotland has produced a number of eminent individuals, and in proof of this may be mentioned that an interesting pamphlet has recently been published devoted to the eminent men of Dumfries-shire alone. Doubtless these eminent men owed much to their mothers, but the mothers do not stand out individually, and the local list of eminent women is, I am afraid, a brief one.

There is one name, however, which may be safely claimed, though the place of the lady's birth is uncertain, the Lady Devorgilla, who, if not born in the South of Scotland, was deeply interested therein, and was to it a great benefactress.

This noble lady, whose descent from the great Norman William the Conqueror can be easily traced, was the third daughter by his second wife of Alan, Lord of Galloway and Constable of Scotland. Alan, who lived in the end of the 12th and the beginning of the 13th century, was a member of that Norman aristocracy which over-ran England and the richer portion of Scotland, and with their tyranny introduced civilization. At this period, though England and Scotland were separate kingdoms, the aristocracy appear to have been common to both, and the two countries were more united than they were again until the Union in the time of Queen Anne. As an illustration of this it may be mentioned that Alan, Lord of Galloway and Constable of Scotland, was one of the great Barons of England to whom King John gave, or who extracted from him, the Magna Charta. In short, Alan in the 12th century occupied a similar position to that of the Duke of Sutherland or Buccleuch at the present day. There is ground for believing that in the days of Alan this district of Scotland was prosperous and advanced, but that it was thrown far back by the oppression of Edward the 1st, and the unfortunate wars arising from the disputed succession to the Scottish Crown.

Alan married for the second time in 1209 a daughter of the Earl of Huntingdon, and this lady must have died before 1228 (there being no Divorce Court in these Catholic days), when he was married for the third time.

The Lady Devorgilla was the third child of the second marriage, and was born in 1213. Her father died in 1234, leaving three surviving children, all daughters, one born by his first wife and two by his second. The wild men of Galloway revolted at the idea of being ruled by females, and desired to be governed by a natural son of Alan, but after a long struggle the succession of the daughters was established. Devorgilla's full sister, Christian, married a son of the Earl of Albemarle, but as Christian died without issue, Devorgilla became her heir, and thus acquired two-thirds of her

father's estates. Devorgilla herself married John Baliol, who is by some described as Lord and by others as Sir. He is best known as having been the founder of Baliol College, in the University of Oxford, a work in which he was aided by his spouse, who moreover carried out his beneficent desires after his death. John Baliol died in 1269.

The Lady Devorgilla had previously borne her husband four sons and a daughter, but only the fourth son and a daughter survived her. She resided chiefly at Fotheringay, a seat of her grandfather the Earl of Huntingdon, in Northamptonshire, whence she was usually called the Lady of Fotheringay, but she retained a warm side, as the Scottish saying is, for this part of the country. She founded the Franciscan Monastery of Dumfries, Sweetheart Abbey in the Stewartry, and she built the bridge at Dumfries, a portion of which still spans the Nith. She also founded a Convent in Dundee.

Alan, Lord of Galloway, was buried in the Abbey Church of Dundrennan, but the Lady Devorgilla formed a burying-place for her own family at Sweetheart Abbey. She seems to have erected a new Church and Monastery on the site or in the vicinity of a former building, whence the name of Newabbey. Her husband Baliol was buried there in 1269, but she caused his heart to be embalmed and placed in an ivory box bound with enamelled silver, and this box she solemnly closed in the walls of the church near the high altar, whence was derived the name of Sweetheart Abbey.

The Lady Devorgilla died at Bernard Castle, a seat of her husband, in 1289, at the age of 76, and her remains were brought to Sweetheart Abbey, and interred in the same tomb that contained the ashes of her husband. The noble ruins of Sweetheart Abbey still remain, to charm the visitor and to attest the architectural skill of what are called the dark ages, but there is no trace, so far as I know, of the tomb of the lady to whose munificence we owe these stately walls. The ruins were partially repaired recently, and the ground floor levelled down to the base of the pillars, but no carved

stone or anything else remarkable was discovered. There are, however, three stones lying on the window sills of the parish church that adjoins the Abbey which appear to me to be worthy of more attention than has hitherto been bestowed upon them. They were found among the ruins some years ago, and are said to be the foundation stone of the Abbey. With some hesitation I venture to suggest that they may have formed part of this double tomb. On one of the stones may be traced without difficulty the latter letters of the name Devorgilla, and the word fundatrix; on the second is what seems to be the date 1280, but as a portion of the stone is broken away, it is not improbable that the original date was 1289, the year in which Lady Devorgilla died. The inscription on the third stone I have not been able to decipher. I have submitted a copy of it to Mr Starke, who supposes the first part to be Marito viro illustri, that is, To my husband, illustrious man. This may be part of the inscription on the tomb when it was occupied by Baliol. The 1289 would be added after the interment of Devorgilla, with whom is said to have been buried the heart of her husband. That there were inscriptions on the tomb is known, for there is record of an elegy for Devorgilla composed by Hugh de Burgh, the Prior of Lanercroft, which was inscribed on the tomb. It is as follows :-

> In Devorvilla moritur unsata Sibilla, Cum Marthaque pia, contemplativa Maria, Da Dervorville requie, rex summe potiri, Quam tegit iste lapis, cor pariterque viri.

In Dervorgil, a sybil sage doth die, as
Mary contemplative, as Martha pious;
To her, oh deign, high King, rest to impart,
Whom this stone covers with her husband's heart.

The son who survived Devorgilla was John Baliol, the competitor for the crown of Scotland, to which he succeeded

through his maternal grandmother, the daughter of the Earl of Huntingdon, and wife of Alan, lord of Galloway.

The daughter, who was named Marjory, was married to John Comyn, lord of Badenoch, and her son was murdered by Bruce in the church of the Franciscan Monastery in Dumfries, an edifice that owed its erection to the piety of his grandmother.

How Quackery was Treated in Dumfries in 1739. By William R. M'Diarmid, Dumfries.

AT a meeting of the Dumfries Town Council on the 8th of October 1739, a complaint was produced from Elizabeth Moffat, Indweller in the Burgh, against Nicholas Holding, residenter there, representing that she having applied to him to cure her arm and that by his mismanagement the same was spoiled and which obliged her to apply to Surgeons to get the same cut off; which they having done upon Saturday last and therefore craved that he might be brought before the Council to answer to this complaint. The Magistrates and Council having sent for the said Nicholas Holding and examined him and the surgeons employed by the said Elizabeth Moffat, it appears that by the said Nicholas his mismanagement and taking upon him to practise surgery though he never had education for that business and that he had no credentials to show of his good behaviour or having served any apprenticeship; That the said Elizabeth Moffat is not yet out of danger, Therefore the Magistrates and Council unanimously ordain the said Nicholas Holding to be imprisoned in the Tolbooth of this burgh until he find sufficient caution Judicio Sisti et Jus Judicatum solvi and appoint Mr Ebenezer Gilchrist, Physician, in this Burgh, Joseph and William Johnstons and Thomas Morrison, Surgeons, in the said Burgh or any two of them to examine and take trial of the said Nicholas Holding his ability and qualifications for

practising in Surgery and to make report thereof in writing to the Magistrates.

On the 15th of October there was produced and given in to the Council a certificate under the hands of Dr Ebenezer Gilchrist, William and Joseph Johnstons, Thomas Gordon and Thomas Morrison, Chyrurgeons, bearing that they having by appointment of the Magistrates and Town Council of this burgh examined Nicholas Holding indweller there with respect to his knowledge in Physick and Surgerie which he has for some time past assumed to practise in this town and country adjacent they found him entirely destitute of the least knowledge necessary to the practice of those arts besides being highly illiterat never having served any apprenticeship or had opportunity otherwise to qualify him for practice in either of the foresaid arts and therefore gave it as their opinion that he is not only highly unfit but dangerous to be trusted with the health or lives of mankind which certificate is dated the 10th of October. Which report with the petition given in by Elizabeth Moffat and a petition given in this day by the said Nicholas Holding representing that he ought to have been called when the dressing of the said Elizabeth Moffat's arm was quarrelled by the surgeons and at that time might have probably given them a satisfactory answer for after his first dressing the said arm the same had been loosed by persons of no manner of skill or experience at least poultises and plaisters of their own contriving laid thereto for several days which had occasioned the spoyling of the arm if it was spoiled and probably he might have prevented cutting of the same and though he had no extraordinar learning yet it was known that a person of long experience and practise had performed cures as well as a learned surgeon and which was the case with him as appeared by certificates therewith produced.

Being considered by the said Magistrates and Council with the foresaid pretended certificates subscribed by some poor people in this burgh and others unknown to the Magistrates and Council and the said Nicholas Holding being

called and examined with respect to his having any right or privilege of residence in this Burgh or to follow any trade as a surgeon or in adhibiting medicines to people within the same which he acknowledged he had not. The Magistrates and Council find that the said Nicholas Holding has no right or privilege to reside in this Burgh or to follow any trade or business therein and that he has been in use for some time past to practise in Physic and Chyrurgerie in this place though it appears to the Magistrates and Council that he has had no education for these employments nor can give any account of any skill or knowledge therein: And the said Magistrates and Council considering how dangerous it is to the inhabitants of this Burgh and country adjacent to be imposed upon by the said Nicholas Holding in his going on to practise in Chyrurgery and Physick which may lead to endangering the health and taking away the lives of many people. They therefore appoint and ordain the said Nicholas Holding to remove himself and family furth and from this burgh, liberty and privileges thereof betwixt the date hereof and the term of Martinmas next and never to have any residence therein from and after that term without express allowance from the Magistrates and Council and have discharged the said Nicholas Holding to adhibit any medicines or practice in any part of Chyrurgerie or Physic within this burgh after this date under the penalty of One Hundred pounds Scots payable to the Treasurer of this Burgh and of being summarily seized and apprehended by the Burrow officers or any inhabitants and incarcerat by warrant from any of the Magistrates till payment of the said penalty and until he find sufficient caution acted in the burrow courts to remove himself and family and not to return and to desist from practising in Physick and Chyrurgerie within the same in all time coming, and reserving always action to the said Elizabeth Moffat against the said Nicholas Holding for her damage and expenses.

EXTRACTS FROM THE MINUTES OF THE DUMFRIES TOWN COUNCIL. By W. R. M'DIARMID.

November, 1653. On this date the Magistrates and Council with consent of the community passed an act for taxing malt for the relief of the widows and orphans of those who were killed in the wars.

July, 1657. The Council ordained that, in consequence of great abuses from excessive numbers of persons attending bridals and baptisms, not more than 12 persons were to be present at the latter or 24 at the former under certain penalties: the fines for excessive bridals to be paid one-half by the bridegroom and one-half by the innkeeper in whose house the bridal had been held.

November, 1659. The common lands of the Burgh were set for a year from Martinmas at 1000 merks Scots; the Bridge dues for 2000 merks; and the dues of the other three ports at 525 merks.

Same date. Bailie Cunningham was appointed to meet the Earl of Nithsdale anent the ground before the Castle.

March, 1660. The Council finding that some of the inhabitants send their children to other schools than the High School ordain all but especially lads to be sent to the High School. Parents abstracting a manchild from the High School to be fined 5 merks and the teacher who receives such child to be fined the same sum.

11 February, 1661. The Council considering the dearth of wine in the burgh ordain all vintners to sell their French wines for 5 groats a pint under penalty if they charge more of 10 merks Scots. Thomas Irving eldest Bailie protested against this as being against all order for the council to interfere in the sale of foreign goods.

3d December, 1661. The Council prohibit the sending any tallow out of the burgh as all can be sold within: candles are not to be sold above 5s. per fb.

2d April, 1662. James Dickson was fined 30 shillings for coming out of prison without leave.

September, 1662. Bailie Irving was appointed to attend the election of the Deacons of Trade and see that they acknowledged his Majesty according to act of Parliament.

29th October, 1662. The Council, considering that the Earl of Middleton, his Majesty's Commissioner for this part of the Kingdom, had discharged Mr Smyth Henderson from preaching in the Burgh because he would not conform to the government of the Kirk as by law established, from their strong affection and desire that he be continued Minister in this burgh, proceeded all in a body to entreat him to conform. This appeal was not successful and the Council entreat the King's Commissioner to appoint Mr James Chalmers, Minister at Collin, to preach until the Burgh be provided with a Minister.

10 November, 1662. Notwithstanding notice was given to all the inhabitants to frequent the sermons upon the Lord's day yet divers persons to the great scandal of the gospel and breach of the Sabbath day have most contemptuously absented themselves from the Kirk for the last two sabbaths and either stayed at home or travelled up and down the country during divine service; it is enacted that every master and mistress of a family in Dumfries on Saturday night and in health shall attend the Kirk of this Burgh on the Sabbath day or pay for each person absent the fine of 40 shillings Scots.

17 November, 1662. Bailie Irvine was appointed to go to Edinburgh and supplicate my Lord the Commissioner to appoint James Chalmers Minister without further delay to reclaim the people from principles of rebellion. Those who had been guilty of breach of the sabbath day who confess their fault and promise not to repeat it are ordained to be discharged from the fine. A declaration was taken to this effect and a promise made not to go to other kirks in the country by William Wallace and four others.

NOTES ON A FEW OF THE RARE LEPIDOPTERA OBSERVED IN THE VICINITY OF DUMFRIES. By WILLIAM LENNON.

On a former occasion I had the pleasure of preparing a small paper, which was read to the Society last winter, on a few of the rare Lepidoptera of this district. In that paper particular mention was made of a rare Butterfly, scientifically called "Thecla Quercus," which I had the satisfaction of finding in Comlongan Wood. This year I was fortunate enough to find it in quite a new locality, and one much nearer home, namely, at Dalscairth. I found it on the 28th of July last, when I was beating the oaks for larvæ. Stainton, in his Manual of British Butterflies and Moths, says that it is generally distributed in the south, and occurs in the north of England. I wrote to one or two entomologists in Cumberland and Westmoreland, but not one of them had ever taken it, or ever heard of its capture in any of their respective localities, so that the fact of finding it at Comlongan and also at Dalscairth makes it the more interesting.

The next rarity of the season is "Notodonta dictæa." This Moth belongs to an order of insects called the "Bombycina." The Germans call them the Spinners, because it is to this order of insects that the silkworm belongs. There are only twelve families represented in Britain. "Notodonta dictæa," or the "Swallow Prominent," is by no means a common insect, although it takes a very wide range, and is found sparingly in most parts of England. Stainton cites Edinburgh as the only place of its capture in Scotland. The moth appears in May and July. The caterpillar is of a greenish white, with a yellow stripe on each side. It feeds on the poplar, and is full-fed in October. I took about twenty larva in the grounds of the Crichton Institution, which are now in pupa state.

Notodonta dictæoides (or the Lesser Swallow Prominent) very closely resemble the preceding, but is generally a little darker, more especially on the hind wings. The moth appears in May and June. The caterpillar is deep brown,

with a broad yellow band on each side, and in some lights extremely glossy. It feeds on the birch, and is full-fed in October. Stainton also cites Edinburgh as the only place of its capture in Scotland. I found four of the larva this season in the grounds of the Crichton Institution.

The next order of insects belong to what are called the Geometrina. They are so called from their peculiar mode of walking when in the larva state. This makes them appear as if they were measuring the earth: for this reason the larva are commonly called Loopers. The larva have only ten legs, which appears to be the reason of their peculiar mode of progression, for, having no legs under the middle part of their body, they grasp the plant on which they are walking firmly with their fore legs, and then bring the hind legs up close to the fore legs, curving or looping the body, thereby producing nearly a full circle.

Tephrosia crepuscularia (Small Engrailed). This is by no means a common insect. Stainton does not cite Scotland at all. The Rev. F. O. Morris cites Glasgow as the only place of its capture in Scotland. I took it at Dalscairth in May last. The situations in which it is generally found are in fir woods, where it is generally seen at rest on the trunks of trees in the day time. The caterpillar is said to feed on the larch.

The Geometra papilionaria (Large Emerald) is another of this year's capture, and is one of the handsomest of the small-bodied moths, being of a brilliant grass or emerald green, but unfortunately the brightness of the colour soon fades. The specimens generally seen in collections exhibit but a faint tinge of its former colour. The caterpillar is green, with humps on the second, sixth, seventh, eighth, and ninth segments. The humps are all tipped with red, and a small red dorsal line on the tenth to the twelfth segment. Stainton cites Dumbartonshire and Renfrewshire as the only Scotch localities. The moth appears in July. The larva feeds on the birch. I took six larva near Douievale, and four near Tinwald Downs

The next rarity of the season is Venusia cambricaria (Welsh Wave). This insect at one time was so very rare that few collections could boast of it. Of late years it has been found in several English localities. Stainton gives no record of its capture in Scotland. The Rev. F. O. Morris cites Arran and Ben Nevis as the only Scotch localities. I took it at Dalscairth in July last. The larva is unknown.

Scotosia undulata is another insect that may be considered rare. The regular undulating transverse stripes, which have suggested its specific name, are very beautiful. I took one at Tinwald Downs, and one near Dalscairth. It very seldom happens that more than one is taken during a season in the same locality. They are almost always taken singly. The moth appears in June. The caterpillar is said to feed on sallow.

Cilix spinula is a very beautiful little moth. It was formerly considered rare, but it has recently been found near Manchester, Brighton, and the Cotswold district. Stainton gives no record of it further north than Newcastle. I found it near Dalscone in July last. It is generally seen gambolling about in wet and boggy places in the gloaming. The caterpillar is of a bright green, with a row of red dorsal spots; its head of a reddish hue. The caterpillar feeds on the sloe and the wild cherry.

Melanippa hastata (Argent and Sable) is a very pretty insect, and is rather rare but widely distributed. Stainton cites Dunoon, Arran, and Ben Lomond. I found it at Tinwald Downs, Dalscairth, and in Lochar Moss, near Barnkin. The caterpillar is cinnamon brown or black brown, with the dorsal line dark brown; spiracular line formed of a series of horseshoe-shaped yellow spots. It is said to feed on the birch. I found the larva feeding on bog mirtle. The moth appears in June and July.

Carsia imbutata (Treble Bar) is a very local species, and formerly taken occasionally in heathy places in the north of England, and also at Dunoon. Of late years it has been found in some abundance in Chatmoss, near Manchester.

The Manchester collectors were so elated with their success that they named it the Manchester Treble Bar. I don't see why we should not name it the Dumfries Treble Bar, seeing that we have it in our own locality, namely, at Tinwald Downs, where I myself found it in July last. I have not been able as yet to see the larva, so that I cannot speak of it at this time. It is said to feed on Vaccinium myrtillus or bilberry.

BRIEF ACCOUNT OF THE BOTANY OF COLVEND AND SOUTH-WICK. By the Rev. James Fraser, Colvend.

Read 2d February, 1864.

WHAT I have undertaken to-night, at the suggestion of our excellent Vice-Preses, Dr Gilchrist, is to give you some brief account of the botany of Colvend. I was not long settled in Colvend till I found that it was peculiarly rich in botanical treasures; that it was richer than any parish or district of the same extent which I had ever had an opportunity of botanizing. If we except those districts in which from the elevation of the mountains contained within them, a truly Alpine flora is to be met with, I question if there are many districts in Scotland of similar extent in which a greater variety and number of rare and interesting plants can be found. And the reason is that Colvend contains within itself great and marked varieties of land and water. It is naturally rugged and broken, a condition always favourable to the growth, and preservation within its nooks and glens, of plants, which left to grow in the field or by the roadside would soon be rooted up or trodden down. It is intersected and bounded by hills, none, it is true, of any great elevation,-Laggan Hill, the most central, is about 900 feet high, and Boreland Hill, which separates Southwick from Kirkbean and Newabbey, is about 1,100 feet. On hills of this height, of course, we can neither have an Alpine

nor a sub-Alpine flora, but we have several plants of considerable interest to botanists. But what chiefly gives Colvend its character botanically is its lochs and its seashore. At one time there were in Colvend some ten or eleven lochs of different sizes, several of which have been drained for agricultural reasons: -but there are still six lochs undrained, or only partially drained; -and in these are to be found all the ordinary, and not a few of the rarer Lacustrine plants. Then Colvend has a long and varied outline of sea coast, stretching from the mouth of the Urr, near the village of the Scaur, round by the Castle Hill, and Millstone Quarry, Glenstocking, Port o' Warren and Whitehill, Portling, Torr and Douglas Hall Heughs, on to Lot's Wife and Southwick Burn: consisting of high and precipitous cliffs, of deep fissures and caverns,—of a shore, composed in one place of mud or clay, in another of sand and broken shells ;-thus furnishing the conditions favourable to the growth of maritime plants of different habits. A variety of hill, and lake, and shore such as that which Colvend contains within itself. I think, is not often to be met with ;—and corresponding to the variety of situation is the variety of plants which we find scattered over the length and breadth of the parish, embracing at once the plants of the north and of the south. Before I became acquainted with Colvend, now nineteen years ago, I had resided mostly on the east coast of Scotland, or in the highlands of Invernesshire,—and with the plants of those localities I was more particularly acquainted. When I came to the south therefore, or rather to the south-west, I was delighted to find a flora to me almost new; and hardly a year has elapsed in which I have not had the pleasure of discovering something which I had not met with before, or something which, if not new to me, was new to me in Colvend ;--and I have no doubt that there are many things yet undiscovered, which would repay a careful search in the different months of the year.—And this leads me to remark. that it is not by any single excursion into a district that the botany of that district can be known; but by a residence on the spot, and a frequent and careful examination of its localities. When a person takes a hasty run through a part of a country, as some of you gentlemen did last summer through Colvend, he is perhaps disappointed that he meets with so few rare or uncommon plants. He must remember, however, that, in examining a district for a first, or even for a second or third time, there are many plants which will not be in flower at that particular season,—and also, that it is possible to reach only one or two of the localities in a single excursion.—This leads to a suggestion, and it is this, that if ever we arrive at a full and correct flora of the province of Galloway, i.e., of Dumfriesshire and the two Galloways included, we must have full and accurate lists of the plants found in the various districts and localities, furnished by botanists resident on the spot. And no greater boon can be conferred on this society by its members resident in the three counties of Dumfries, Kirkcudbright, and Wigtown, than to send in to the Society lists of the plants found in their several neighbourhoods, with dried specimens for the sake of verification and comparison,-with sufficiently exact descriptions of the habitats of the rarer plants for the guidance of future botanists. In this way only can we hope to have at some period not remote, what many counties and provinces have, a complete flora of the plants of a district, which is, I believe, second in interest to none in the kingdom.—As a small instalment from a limited field, I beg now to submit to you a list of the principal plants found in the united parish of Colvend and Southwick, all of which, with one or two exceptions, I myself have gathered, and have seen growing in the stations named. I hope to add dried specimens of the plants themselves at some future meeting.

PLANTS FOUND BY THE SEASIDE, EITHER ON THE ROCKS OR ON THE SEASHORE.

Apium graveoleus—Salt Marsh, or Merse as the people call it. Near the Needle's-Eye. Origin of our garden celery. Rather uncommon in Scotland.

Asplenium maritimum. Rocks and caves from Douglas Hall all round the coast.

Astragalus glycyphyllus. Millstone Quarry and Blackneuk.
Rather rare.

Blysmus rufus. Seashore, Glenluffin.

Carex extensa. On the muddy portions of the seashore all round from Glenluffin to Southwick burn. A rare carex.

Curex distans. In similar, but drier and more sandy situations. Also a rare carex, although some botanists have thought it a maritime state of the well-known Carex binervis.

Crithmum maritimum, or Sea Samphire, which begins on the rocks at Douglas Hall, and is continued all round the coast to Colzean Castle, Ayrshire, but is found in no other part of Scotland. It is plentiful in the south of England.

Eryngium maritimum—Sea Holly. Sandy seashore at Saltflats, Millstone Quarry, and Douglas Hall bay: but almost extirpated by summer visitors. Found in great abundance on the Kirkbean shore, near Saturness.

Glaucium luteum—Horned Sea Poppy. Saltflats and Port o' Warren.

Juncus maritimus. Mouths of the Urr and Southwick Burn.

Primula veris. Together at Douglas Hall Bay, near the elatior.

Burn.

Ráphanus maritimus—Sea Radish. Rocks and cliffs around Port o' Warren. One of the rarest and most peculiar plants of the shore.

Ruppia maritima. Salt marshes at Douglas Hall Bay and near the Needle's-Eye.

Rubus suberectus. Seashore near Portling.

Samolus valerandi—Brook-weed. Plentiful along the coast.
Salicornia herbacea—Glasswort. Plentiful at the mouth of
Southwick Burn.

Armeria maritima-Thrift or Sea Pink. Common.

Statice Limonium—Sea Lavender. Muddy seashore at Portling. This is rare in Scotland.

Zostera marina. Between Saltflats and Rough-Isle.

PLANTS FOUND IN THE LOCHS, MARSHES, AND MOSSES OF COLVEND.

Anagallis tenella. In marshy places near the sea.

Carum verticillatum—Whorled Caraway. Plentiful in wet meadows. This is very rare in England.

Drosera rotundifolia. Marshes. Common.

Drosera longifolia. Sides of Ironhash Loch and some other lochs and marshes. Less common than the former.

Equisetum hyemale. Near Barnbarroch school.

Hypericum elodes. Various marshes and ditches. This is one of the rarest and most peculiar of the hypericums. It is not found anywhere on the east coast of Scotland.

Isoetes lacustris—Quill-wort. Bottom of Manse Loch. Discovered for the first time in 1864

Litorella lacustris. Sides of Manse Loch.

Lobellia Dortmanna. Sides of Manse Loch.

Lycopus europæus. Marshy ground near the Manse and at Lochhouse.

Nymphæa alba. } Lochs. Abundant.

Osmunda regalis. Side of Manse Loch and in one or two other localities, but nearly extirpated.

Parnassia palustris. Abundant.

Rhynchospora alba. Bog opposite Auchenlosh on Drumstinchall.

Scutellaria galericulata. Sides of lochs and seashore among stones.

Scutellaria minor. Bog behind Murbroy. Very rare.

Salix pentandra. Near Torr, &c.

Schænus nigricaus. Boggy ground near the Scaur, on the Mark Hill.

Typha latifolia. Gallihorn Loch. Common.

Typha angustifolia. Manse Loch. Rare. Utricularia minor. Meiklecloak Moss, &c. Vaccinium Oxycoccos and Vitis idæa. Bogs.

PLANTS ON THE HILLS, IN THE FIELDS, &C.

Allium vineale. Rocky ground near the sea.

Alsine verna or Arenaria verna. Found for the first time on Torr Heugh in 1864 by Dr Latham. A most interesting discovery, being the first time found on the west coast.

Arenaria verna. Found by Mr Peter Gray in the same situation ten or twelve years ago.

Allosorus crispus. Among rocky debris on the south slope of Whitehill, and in other places in Southwick.

Botrychium lunaria. On the glebe, Colvend, and over the hills frequently.

Betonica officinalis. Sea cliff east of Glenstocking. Rare. Carlina vulgaris. Hilly pastures.

Convolvulus sepium. Millbank farm.

Corydalis claviculata. Many places.

Eupatorium cannabinum. Frequent.

Genista anglica. Roadside, Drumstinchall Moor. Common.

Hypericum perforatum. Heugh of Laggan.

humifusum. Dry pastures.

Habenaria viridis. Hilly pastures.

_____ albida. Do. Less Common.

bifolia. By the burnside in a wood above Barnhourie Mill.

Jasione montana—Sheep's-bit. In dry hilly pastures. This is almost unknown on the east coast.

Lithospermum officinale. On the roadside opposite Broadyards. A very uncommon and singular plant.

Lychnis viscaria. Cliffs near Port o' Warren, and on Lot's Wife.

Lysimachia vulgaris. Side of Manse Loch.

Ornithopus perpusillus. On rocky and stony places frequent. A curious plant, with its seed pods resembling

a bird's claw. Uncommon on the east coast.

Pyrola minor. Fir wood on Barnhourie.

media. Found flowering beautifully on the southern slope of Whitehill by Mrs Latham some years ago.

Sedum anglicum. Common.

Viola lutea. Hills near Barnbarroch. Ulex nanus. Abundant on the hills.

There are found in the parish 18 Ferns indigenous.

Of the Mosses, Lichens, Algæ, and Fungi I cannot speak, as I am not acquainted with these divisions or departments, but I have no doubt that in some of them the parish of Colvend will be found to be equally rich.

Notes on Birds. Taken in 1864, at Mountainhall, a mile east from Dumfries. By Thomas Aird.

I AM not a naturalist, in the usual sense of the term; but I take a living interest in the characters, habits, and fortunes of my country neighbours, the birds. From Loch Skene and the high Moffat range, down to the shores of the Solway, where we have a fair proportion of the sea-birds, Dumfriesshire, being well varied of cultivated fields, pastoral solitudes, hills and valleys, woodlands and rivers, moors and mosses, has a correspondingly varied wealth of birds. New discoveries of a decisive kind are hardly now to be expected, still fresh points may be found out from time to time. For instance, we have ascertained in this district lately that the Siskin, which was long thought by naturalists not to breed in this country at all, breeds in that large fir wood at Dalswinton and in the woods of Shambelly. Light is still to be thrown on other points of the kind; and it is one function of our

Society to give an impulse to that spirit of observation from which such light is to be drawn. I would, therefore, call on other unscientific members like myself, who can yet use their eyes, not to be backward in giving us their simple notes of fact.

At Mountainhall, where we have a small shrubbery, an old-fashioned bushy garden, some fine old trees, and two or three fields in grass, with hedge-row trees, we have a fair number of the birds common in Scotland.—The MAGPIE has left us of late years. Or rather, I ought to say, it is almost exterminated in this district by the cruel zeal of gamekeepers. I am surprised that our proprietors allow such a style of warfare to be waged against some of our finest species of birds.—The TREE LARK. In a small grass field, much shaded with trees, and sloping down to a marshy bottom-in the neighbourhood of Mountainhall-I notice occasionally what Bewick calls the Tree Lark, I am disposed to think, however, that that peculiar raising of the wings and fan-like spreading of the tail, as it descends from its short upward flight and song, which he considers a distinctive characteristic, is a mere sexual affection at a certain season.—The MISSEL THRUSH is multiplying with us yearly; and on fresh gusty days, in the end of December and beginning of January, we have it regularly in song. I think I have observed that this bird sits an unusually long time in hatching, but I am not prepared yet to lay this down as a fact.—The Common Song Thrush, after its breeding time is over, disappears from Mountainhall. Invariably, however, I find it back in our garden in autumn, in the drills of the potato plots, where, I presume, it gets small slugs, worms, and insects to its particular liking at that season. It disappears from us again, and is away all winter-where, I cannot tell.-The COMMON GULL walks our grass fields, in the end of August and beginning of September, every year regularly, for a fortnight or so. It is there not only for worms and grubs, but mainly, I think, for the crane-fly (commonly called daddy-long-legs), which is found in autumn in great numbers

entangled in the tufts of grass.-We are at a considerable distance from the river, and have no burns near us, and so the WAGTAIL does not breed at Mountainhall; but every September, without fail, we have numbers of them running about the slate and stone roofs. I fancy they get young spiders there and then. The Pied Wagtail, like the Thrush, is seldom seen with us in winter. These partial migrations of our common birds are very obscure. I see the Yellow Wagtail sometimes in spring, about the corners of fields of young corn; but it is rare about Dumfries. The Grey Wagtail, from having a good deal of yellow about it, is often mistaken for the Yellow Wagtail.—Of the migratory birds we have an average number. The Blackcap and Redstart visit us occasionally, but do not breed at Mountainhall. Our northern friends, the Fieldfare and Redwing, come to us about the middle of October. Some naturalists hold that the Redwing comes a little before the Fieldfare, but I have not been able to detect this. Redwings are few in number compared with the Fieldfares; and, when the full rigour of our winter comes, they are seen to be much softer birds: many of them get detached from the main flock, which they seem unable to follow, and make their way to warmer places, near the habitations of men. In severe weather. I have often seen them distressed and weak in the low Dock meadow at Dumfries. I have made special reference to the Fieldfares, chiefly for the sake of venturing to state as a fact that, for two or three years bypast, they have stayed with us later in the spring than usual: nay, the flock has been with us in May. What instinct as to weather. here or in their own high latitudes, has caused this delay of departure, may be easily guessed at, but is not so easily determined. Of the Spotted Flycatcher, never more than one pair comes and breeds at Mountainhall. Last summer our pair had two broods: this is contrary to the opinion of many naturalists. As our little visitant insists on building low down in some elbow of the strong hairy arms of the ivy clasping one or two of our old ash trees (for the ivy prefers

the ash), I have some difficulty in fencing the nest from cats by means of thorn and holly branches fastened round the root of the tree. The bird repays me with its picturesque movements in hunting its flies. What kind of flies it likes best, I have not yet found out; but it is obviously nice in its choice. A difference of flies and insects depends much on soil, and soil on geological formation: and therefore the migrations of such birds as feed on insects and flies are so far regulated by rocky structure. Query—Is it possible to classify such migrations on a geological basis? To return to our Spotted Flycatcher: I have now to mention, in connection with the query just put, that I never saw the bird on a stiff clayey bottom. It is common enough on light, sandy, and especially gravelly soils.

THE STARLING.—"When I was four or five years old," says Sir Walter Scott in his Diary for 1830, as given in Lockhart's Life of Scott, "I was staying at Lessudden Place, "an old mansion, the abode of this Raeburn. A large "pigeon-house was almost destroyed by starlings, then a "common bird, though now seldom seen." This statement by Scott, as to the prevalence of the Starling in that district and its disappearance therefrom, corresponds exactly with what my father used to tell me. When he was a boy in the village of Bowden, which is mid-way between Abbotsford and Lessudden, the Starlings were very numerous there, several of them building every year in the gable of an old barn belonging to our family. They left the place altogether; and during my own boyhood, the old barn being still there, I never saw a starling about Bowden, or even in that quarter of the country. Whether or not they are back to Bowden, I cannot say; but in autumn, last year, when I was on a visit at Bridgeheugh, about a couple of miles from Abbotsford, I saw a large flock of them, packed close in the very centre of a looser flock of rooks, making their way toward the Sunderlandhall woods. In harmony with all this, as to the habits of the bird, I have now to add that when I went to live at Mountainhall, eight years ago, not a Starling was to be seen thereabouts; but now they breed with us, and I see large flocks of them in our fields in autumn. Now, such sudden and sweeping changes of habitat are not governed by the usual laws of inner migration—that is, of migration from one part of the island to another. The gradual changes of tillage, modifying the supplies of food for the bird, cannot account for such violent changes of habitat. I myself have no way of accounting for them.

THE SWALLOW.—In reference to the Martin or Window Swallow, White of Selborne says :-- "Unless these birds are "very short-lived indeed, or unless they don't return to the "district where they have been bred, they must undergo "vast devastations somebow and somewhere; for the birds "that return yearly bear no manner of proportion to the "birds that retire." The same remarks are applicable to the House or Chimney Swallow. We send about twenty of them away from Mountainhall every autumn, and invariably only two pairs return to us next April. They breed twice. the latter broods being in the end of August or beginning of September. The young birds keep close in the nest till they are large and strong. Last autumn, and the autumn before. I pushed the younglings out of the nest, when I knew they were fully ripe, in order to see how they should take the air. They went high at once, and wheeled about with vigour and ease, leaving me no room to doubt their ability to take the passage to Africa on the 25th of September-which I have set down as the day when our Swallows leave Mountainhall. I am thus led to think that there is no weakness in the later broods to prevent their going with the rest; and I believe they go accordingly. In all events, I have seen no indication of any lingerer about our place.

THE CHAFFINCH.—It is my first business, when I step out in the morning, to call on Robin; and he comes and sits on my hand, and eats his breakfast of oaten cake broken into crumbs. With all his habits of familiarity, it is not easy to get Robin to do this. We have also with us at Mountainhall a hen Chaffinch or Shilfa, whose tameness is even more peculiar than Bob's. She was bred close beside the house in 1863. All last winter, and especially in spring, when the natural food of birds gets scanty, she was very much about the door, and ventured often into the lobby. She was gradually brought to take food from the hand; and when she was hatching, and came down to me from her nest, eager for supplies, I put the bit of cake in my mouth, and she flew straight to my face and took it. When her young were out, she took none of the cake to them in the nest, but fed them with the small green caterpillars from the leaves. When the fledglings had got to the garden, however, she followed me assiduously for the cake, hovering about my face till I got it into my mouth, and then made off with it to her young ones. I may remark here that oaten bread is preferred by the birds to every other kind: there is much flint in the oat for the bones, and the instinct of birds may like it accordingly. When her brood were dismissed to take charge of themselves, Tibbie (for such is the name we have given our little friend) continued to be very familiar with the people of the house; and often, when I was leaning on the gate, the breadth of a field away from our avenue, she came and sat down on the gate beside me. Once, but only once, she allowed me to touch her with my forefinger. After a proper interval, she dressed up her old nest (not a very common thing), and brought out a second brood in it. About the middle of July, Tibbie began to be much away from us. yet visiting us from time to time. For the cake she seemed no longer to care: I suppose she was getting food in the fields which she liked better. I have seen the flock of Chaffinches repeatedly in our upper grounds; and have noticed, in accordance with White of Selborne's observation, that the most of them are hens. One day lately, when I was by a bit of paling up in one of the fields, I saw Tibbie detach

herself from a flock of Finches on a high tree; and down she sat on the paling close beside me. I offered her some small crumbs, but she declined them: her object was pure friendly recognition. After she had sat awhile, and I had bantered her for her faithlessness to the kind old door, she answered with a chirrup, and rejoined the sisterhood on the tree. Such is little Tibbie of Mountainhall. Now I myself never saw or heard of such habits in the Chaffinch before; and I have thought them not unworthy of being recorded in the papers of our Society.



THE TRANSACTIONS

AND

JOURNAL OF THE PROCEEDINGS

OF THE

DUMFRIESSHIRE & GALLOWAY NATURAL HISTORY

AND

ANTIQUARIAN SOCIETY.

Session 1864-65.



PRINTED BY W. R. M'DIARMID AND CO.

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"The boundless store
Of charms which Nature to her votary yields."
POPE.

"For I have learned To look on Nature, not as in the hour Of thoughtless youth, but hearing oftentimes The still sad music of humanity, Nor harsh nor grating, though of ample power To chasten and subdue."

WORDSWORTH,

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JOURNAL OF THE PROCEEDINGS

OF THE

Dumfriesshire & Galloway Natural History and Antiquarian Society.

November 1st, 1864.

THE SOCIETY held the first meeting of the Session—being the Annual Meeting—in their Apartment in the Dumfries and Galloway Club Rooms,

DR. GRIERSON, Thornhill, in the Chair.

The following New Members were enrolled:—Ordinary Members—Mr. David Dunbar, Writing Teacher; Mr. Murray, Editor of Herald; Mr. J. H. M'Gowan, Writer, Dumfries; Mr. Alexander Fraser, Architect, Dumfries; Lord Henry Scott, M.P., Dalkeith; Rev. Mr. Crombie, Manse, Penpont; Rev. Mr. Donaldson, Manse, Kirkconnell, Sanquhar; Mr. John Lorimer, Advocate; Mr. Thos. Johnston Carlyle, Waterbeck, Ecclefechan.

Honorary Members—Sir Walter C. Trevelyan, Bart., Newcastle-on-Tyne; Mr. William Carruthers, Botanical Department, British Museum; Edward Crisp, M.D., London; Mr. Wm. Sanders, Clifton; Mr. John Stewart, Secretary to the Antiquarian Society, Edinburgh; Mr. Thomas Grindley, Laxey, Isle of Man.

The Secretary read an Abstract of the Proceedings of the past Session.

The Report of the Committee of Management preparatory of the Meeting was then taken up.

On the motion of Mr. Aird, seconded by M. Corrie, the thanks of the Society were tendered to the gentlemen of the Dumfries and Galloway Club for their kindness in allowing the apartment in which the Meeting was held to be occupied by them for the purposes of the Society.

As Sir Wm. Jardine had consented, at the request of the Society, to accept the office of President for another session, it was proposed by Mr. Starke, and seconded by Mr. Corrie, that the then Vice-Presidents, who according to rule ought to retire, should also continue in office during the session. This was unanimously agreed to.

Dr. Kerr, Buccleuch Street, was appointed Joint Secretary, in room of Mr. M'Ilraith.

It was proposed that the following gentlemen should be appointed Members of Committee, in the room of the three Members retiring in the order of rotation, viz.—

Mr. MAXWELL, Breoch. Mr. DUDGEON, Cargen. Mr. M'ILRAITH.

On the motion of Dr. Gilchrist, seconded by Mr. Starke, a vote of thanks was given to Sir Wm. Jardine, for his kindness in accepting office for another year.

As the First Tuesday of the Month had been found in many respects inconvenient for the Summer Excursions of the Society, it was suggested by the Committee that the First Thursday or Friday of the Month should be adopted instead, but that no alteration should be made as regards the Winter Meetings. After some discussion, Thursday was agreed to, and the change ordered to be made in the Printed Rules of the Society.

The Committee suggested that a Circular, embodying the

Minute of the Society of May 3d, with reference to the distribution of the Journal, should be printed and sent to the Ordinary and Corresponding Members (who are entitled to the Journal at a reduced price), with the view of increasing the income of the Society so far as regards this source. Mr. Gibson, Mr. Corrie, and the Secretaries were appointed a Committee for this purpose.

The Treasurer submitted an Abstract of the Income and Expenditure of the Society during the past year, which was ordered to be published in the Journal of the Society.

Dr. Gilchrist submitted a Form of Memorial to the Government respecting the Law of Treasure Trove, which had been forwarded to him by the Secretary of the Montrose Natural History Society for consideration. The subject was referred to a Committee of the Society, consisting of Mr. Maxwell, Breoch; Dr. Grierson, Thornhill; Dr. Gilchrist, Crichton Institution; Mr. Starke, Troqueer Holm; Mr. Thorburn, Writer; Mr. Simpson, Writer. Mr. Maxwell, Convener.

Dr. Gilchrist also submitted a communication from the Secretary of the Antiquarian Society of Denmark, with reference to its intercommunication with this and other Societies, which was referred to the above-named Committee.

This concluded the business of the evening.

The following objects were laid upon the table, and submitted to the Society for conversation and discussion:—

- 1. A Collection of Plants of the District, forming the first contribution to the Herbarium of the Society. By Mr. Hogg, Draper.
- 2. Two Gold Rose Nobles of the Reign of Edward III. By Mr. Gibson.
- 3. Coin of the time of Vespasian, from the Collection of Sir W. Scott.

An Image cut in Steatite, found in Lochar Moss. Mr. Gibson.

A specimen of the Carex Curta, found growing on the road to Mountainhall. By M1. Aird.

Dr. Grierson, Thornhill, made some remarks, and exhibited some of the properties of the new Metal Magnesium.

It was intimated that Sir Wm. Jardine would read the Presidential Address at the next Meeting.

The Society then adjourned.

December 6th, 1864.

The Society held the Second Meeting of the Session in the Assembly Street Club Rooms,

SIR WM. JARDINE, Bart., in the Chair.

The Minutes of the last Meeting were read. The Committee appointed to consider the subject of Treasure Trove reported that, after discussing the question, they had resolved to hear the remarks of the President in his Presidential Address, and to adjourn the meeting to another occasion.

Sir Wm. Jardine read the Presidential Address, which consisted principally of a review of the proceedings of the past session. The Excursions of the Society were particularly alluded to, and opportunity taken of noticing the objects of Natural History or Antiquarian interest,-which might be regarded as the discoveries, and, so to speak, the property of the Society,—made during these excursions. On the motion of Mr. M'Diarmid, a vote of thanks was heartily accorded.

Mr. T. Aird read a paper on some observations which he had made during the year on the Wild Birds in the immediate neighbourhood of Mountainhall, a mile east from Dumfries.

Mr. Starke then read a paper upon Sir Christopher Seton and the Chapel dedicated to him, and built upon the site of the present Chapel of St. Mary's, Dumfries.

Donation-Transactions of the Edinburgh Botanical Society. By the Society.

January 3d, 1865.

The Society held the Third Meeting of the Session in the Assembly Street Club Rooms,

Dr GILCHRIST in the Chair.

The following New Members were enrolled:—Ordinary Members.—Mr John Morrin, Castle Street; Colonel Clark Kennedy, Knockgray, Galloway; Col. Maxwell, Portrack, Holywood; Mr. Smith, Netherholm, Kirkmahoe; Miss Jardine, Jardine Hall; Mrs. Dudgeon, Cargen; Rev. Mr. Dudgeon, Free Church Manse, Dalbeattie; Major Bowden, Lochfield.

Corresponding Members.—Mr. Clark, Curator of Royal Botanic Gardens, Glasgow; Rev. G. J. Duncan, Portman Square, London; Mrs. Duncan, Do.; J. A. Knipe, Moorville, Carlisle.

Mr. Dudgeon, Cargen, read a paper upon the minerals found in the granites of the district. He remarked that crystals of the mineral sphene, which was not a common mineral in Great Britain, and but sparingly distributed in granites or rather syenites of this district, had been found by him in patches in such quantities as almost to form a constituent of the rock. The mineral zircon had been mentioned in some books on mineralogy as being found in the syenite of the district, but this he thought a mistake, which had probably arisen from the peculiar form of some of the crystals of sphene, which, when superficially examined, had much the appearance of crystals of zircon. In company with Professor Heddle, he had also found crystals of allanite, a mineral containing the rare metal cerium, and in the same locality, viz., about a mile up the Newabbey Burn, some small granular masses of a vitreous mineral supposed to be gadolonite.

A paper was read by Dr. Gilchrist, from a corresponding member, Mr. Grindley of Laxey, on some remarkable Geological features observable in the Isle of Man. The paper was accompanied by illustrative specimens. On the motion of Mr. Dudgeon, seconded by Mr. Aird, a vote of thanks was given to Mr. Grindley for his interesting communication.

Dr. Grierson of Thornhill read a communication on a species of Vole, the Arvicola Agrestis, which is at present committing great ravages on the plantations of the Drumlanrig estate. Dr. Grierson pointed out that the indiscriminate destruction of the weasels and birds of prey has allowed the voles to usurp supremacy, and without check lay waste the woods and forests. Other species of Voles were exhibited and described, one of which was considered to be new.

Dr. Gilchrist exhibited specimens of Claystone Porphyry from Goldielea hills, and Ripple Markings from Edgerton, Kirkcudbright; also a rare kind of Lichen, the Peltigera Polydactyla, found in Longwood; and Peizeia Cocernea, found in Goldielea wood. He also made some observations on the habits and colour of lichens as determined by the nature of the rocks upon which they are found. Dr. Dickson exhibited specimens of Apple Blossom, indicating the openness of the season. Mr. Coupland showed specimens of Photo-Lithographic Printing of a few pages of Shakspeare, from an old type of the play of "As You Like it." This concluded the business of the evening, and the meeting adjourned.

Donation—Transactions of the Nova Scotia Institute.

February 7th, 1865.

The Fourth Meeting of the Session was held in the Society's Room, Assembly Street,

SIR WM. JARDINE, Bart., in the Chair.

The following New Members were enrolled: -Ordinary

Members—Rev. Alex. Symington, Dumfries; Mr. J. L. Pike, Dentist, Dumfries.

Corresponding Members—Dr. John Shand, junr., Kirkcudbright; Rev. Mr. Smith, Penrith.

The Chairman intimated that he had sent a copy of the Journal and Transactions to the Royal Society of Antiquaries, Copenhagen, and had received a reply, which he read. The Secretary of that Society described the aims and objects which they had in view, and congratulated the Dumfries Society on the commencement which they had made in a similar direction. In furtherance of their mutual interests he invited an exchange of their Transactions. The Chairman intimated that he had also sent copies to the Institute of Natural Science, Halifax, Nova Scotia, from which he had received a very interesting communication in reply, along with the recent volume of the Transactions.

After some remarks regarding the Tree found recently in Lochar Moss, with reference to which a letter from Professor Harkness, Cork, was read, the Chairman proceeded to call the attention of the Society to the subject of his communication, which was the first on the programme of the proceedings of the evening. It was the occurrence of a very rare bird, the Roller (Coracias Garrula), in this district. Of this bird, which is a native of the southern and eastern parts of the Old World. Sir William exhibited a series of the most characteristic species. Very few specimens (about nine or ten in all) had ever been seen in this country. One (which was among the collection exhibited) was caught as far north as Shetland, and one or two in Northumberland. Some time ago, viz., October, 1864, he got notice of an unknown bird having been observed near Bankhead, Tinwald; and shortly afterwards it was found lying dead and partially decayed. When he sent for its remains he only got some feathers of the wings and tail, which he now exhibited. These were sufficient, however, to prove its identity. In the two instances in which the bird had been found in Northumberland they were also dead. He had no doubt that they had been

driven north by stress of weather, as was most probable in the present instance also.

The next paper, Geological Notes of the Summer Excursions, was read by Dr. Gilchrist. Among other details, Dr. Gilchrist alluded to the eruption of trap through the sandstones to the east of Wardlaw Hill, and it was suggested by Mr. Dudgeon that the trap dyke at the Sawmill at Mabie might be a continuation of this.

Dr. Grierson, Thornhill, then reported on some further researches he had been making into the history of the Arvicola or Vole, on which he read a paper at the previous meeting. It appeared that the two species (one of which he had supposed to be rare in the district), were alike common; but he thought he had detected a third species, which he would make the subject of a separate paper on some future occasion. Dr. Grierson also exhibited a monstrosity—the skeleton of a pig's foot which had five instead of the usual number of four bones.

Mr. Dudgeon made a brief communication regarding certain markings in Sandstone formed by the decomposition of Iron Pyrites, and exhibited specimens which tended to prove that these markings must have been formed at the time of the deposition of the sand. Mr. Clarke remarked that at King's Quarry sandstone containing these markings was found in situ in abundance.

Dr. Gilchrist exhibited some beautiful collections of Mosses, Lichens, and Algæ, and presented the Society with a small herbarium of lichens, all of which were gathered within the walls of the Crichton Institution.

This concluded the business of the evening, and the meeting then adjourned.

March 7th, 1865.

The Fifth Meeting of the Session was held in the Assembly Street Club-house,

SIR WM. JARDINE, Bart., in the Chair.

With reference to the paper read by Dr. Gilchrist at last meeting, and the suggestion by Mr. Dudgeon that the trap dyke at Mabie might be a continuation of that seen to the east of the Wardlaw Hill, Mr. Dudgeon stated that in company with Dr. Gilchrist he had examined the Mabie dyke, and found that it corresponded precisely with that at Wardlaw, both as regarded the nature of the rock and the direction in which it tended. They had no doubt that the dyke was continuous. It was about two feet broad, and its direction was E.N.E. by W.N.W. Specimens of the trap were exhibited.

Mr. M'Diarmid read a paper, compiled chiefly from extracts from the Burgh Records, showing how quackery was treated in Dumfries a century and a quarter ago.

Dr. Grierson, Thornhill, read a paper on the relics of prehistoric man found in Nithsdale, and showed several specimens of stone hammers, spear heads, axes, &c., found in the district, with diagrams of others. He expressed his opinion that the more rudely fashioned and finished had a local origin, as being the work of the ancient natives of Nithsdale, while those of a higher and more finished character had been introduced by an immigrant and foreign tribe. He further argued that from the localities and circumstances in which these implements were found certain conclusions might be drawn as to the mode of sepulture practised by the native and foreign tribes,—that while the custom of the natives was to bury their dead under mounds and cairns, the mode practised by the foreign tribes was to burn their dead previous to burial. The reading of Mr. Crisp's paper on the anatomy and habits of the Spoonbill was adjourned, owing to the lateness of the evening. Mr. Aird presented to the Society a pamphlet by Mr. Fergusson, Q.C., on the Ogham Inscriptions, and read a letter from that gentleman with reference to the probability of similar inscriptions being found in Nithsdale, the ancient Strathclyde. Sir Wm. Jardine presented to the Society the first two parts of Vol. V. of the Berwickshire Natural History Club, and directed the attention of the members to the paper by Mr. Tait, "On Ancient Sculptured Rocks," and to the importance of the subject of sepulchral remains.

Mr. Underwood presented to the Society a stone hammer

found in the parish of Irongray.

Mr. Hastings, bird-stuffer, exhibited a specimen of a hermaphrodite black grouse (Tetrao tetrix).

This concluded the business of the meeting.

April 4th, 1865.

The Sixth Meeting of the Session was held in the Assembly Street Club Room,

SIR WM. JARDINE, Bart., in the Chair.

The following new members were enrolled:—Ordinary—Mr. Murray, manufacturer; Mrs. Walter Scott, Castle Street; Mrs. Witham, Kirkconnell; Mr. Wright, merchant, Dumfries.

Corresponding—F. F. Abby, Huddersfield.

Mr. M'Diarmid presented to the library of the society a copy of his pamphlet upon "The Established Churches of Dumfries;" and Mr. Thorburn, Barnkin, to the museum a granite ball found in Lochar Moss. Mr. Starke then read a paper upon "The Nun Slab at Dundrennan Abbey," the object of which was to show that the said stone or slab marked the resting place of the last prioress of Lincluden before the change of that Abbey into a college, and that the abbreviated and partially obliterated epitaph inscribed upon it might reasonably be conjectured to relate to that lady.

Dr. Dickson, Secretary, read a communication upon certain markings, described as hollows or cups, upon the Stones of the Druid's Circle at Holywood, and directed the attention of the Society to the resemblance which they bore to the hollows or cups frequently found upon similar stones and circles of stones either alone or along with encised circles and other markings, and regarded by antiquarians as undoubtedly artificial and symbolical.

Dr. Gilchrist read an elaborate paper upon Ancient Sea Beaches, intended as a preliminary paper to an investigation and report of the Ancient Sea Beaches of the Nith.

This concluded the business of the evening.

May 2d, 1865.

The Seventh and Last Meeting of the Session was held in the Society's Rooms,

DR GILCHRIST, Vice-President, in the Chair.

It was intimated that in a Meeting of Committee held in a previous part of the evening,

Mr Dudgeon proposed, seconded by Mr M'Ilwraith, that the First Excursion of the Society should be to Ecclefechan and the immediate neighbourhood, including Birrens Camp, Birrens Wark, &c. This was agreed to.

The following New Members were Enrolled:—Ordinary—Mr Moriarty, Scottish Borderers Militia; Sir William Broun, Bart.; Rev. W. Laidlaw, Wanlockhead.

Corresponding—Mr Robert Dinwiddie, Merchant, New York; Mr W. S. Davidson, Hammond Street, New York.

Dr Dickson mentioned that he had observed upon a stone, called the Grey Stone, about a mile from Dumfries, four depressions or cups similar to some of those which he had described at last meeting as existing on the stones of the Holywood Circle. This stone is one of a circle which formerly existed, and which circle some of the older inhabitants of Dumfries remember and describe as composed of a number of large blocks of whin.

Mr. M'Diarmid read a short sketch of the Lady Devorgilla, the mother of John Baliol, King of Scotland, founder

of Sweetheart Abbey, and builder of the Old Bridge over the Nith at Dumfries.

The Secretary read a paper contributed by Mr Crisp, Chelsea, on the Anatomy and Habits of the Spoonbill (Platalea Leucorodia). This paper contained the result of a very minute anatomical examination of the bird, one of the principal peculiarities of which is the strangely convoluted trachea, generally found in the female, of which a diagram was exhibited.

Dr Gilchrist then read a short paper in continuation of his researches on the Ancient Sea Beaches of the Nith Valley. His attention had been confined to the terrace which was seen commencing on the left bank of the Nith, immediately below the caul at Dumfries. The corresponding terrace on the other side was that which formed St. Michael Street. He was of opinion that those terraces were of marine origin, as he had certain information that marine shells had been discovered in the soil near the brickworks at the shooting range. He was still in the midst of his researches, and would communicate the result from time to time to the Society.

Dr Gilchrist also exhibited Fossils from the Silurian at Dunscore. In one there was a circular marking that reminded him of the markings noticed in a paper which had recently been sent them from the Isle of Man. He had also been supplied by Mr Cordiner of Fraserford with a specimen of the Graptolite Fossil found in the Silurian near Dunscore, which was the first time, he believed, that they had been found there, although abounding in the Valley of the Moffat Water.

A lengthened paper on the Fireclay of Edinburgh, contributed by Mr Marshall, was presented, but was only partially read, owing to the lateness of the hour.

Dr Grierson, Thornhill, exhibited some Skeletons of Monstrosities in Lambs. Among them was a lamb with a double body and a single head from Holestane. In the digestive system of this specimen it was noticed that the first stomach was double, but the second and the smaller intestines were single, after which the canal separated and terminated doubly. Another specimen had its eyes within the skull, and was stated by Dr Grierson to be unique so far as he knew. He also exhibited the skeleton of a lamb with a curious and abnormal shortening of the lower jaw, and one without limbs. The latter was sent from the farm of Mitchelslacks. Dr Grierson mentioned that he had in his possession a kitten with two heads which lived for some time.

Mr Heron, Duncow, exhibited some relics and natural curiosities which he had picked up on the Isle of Heston, viz., a small cannon ball of iron, a brass eagle of French origin,—probably a military symbol, and some curiously worn stones.

Mr William Lennon, Crichton Institution, showed specimens of larva of Cleora Lichenaria; also of Persicallia Lyringaria.

Dr Grierson, Thornhill, exhibited two specimens of muslin of very fine texture, made from the leaves of the pine apple, —from the Island of Penang.

This closed the business of the evening and of the winter session. It was arranged that the first Field Meeting should be on the 1st of the following month, to visit the Camp of Birrens, &c.

LIST OF MEMBERS

OF THE

Dumfriesshire & Galloway Natural History and Antiquarian Society.

SESSION 1864-65.

November 1st, 1864.

Ordinary Members.

Mr. DAVID DUNBAR, Writing Teacher.

Mr. Murray, Editor of Herald.

Mr. J. H. M'GOWAN, Writer, Dumfries.

Mr. ALEXANDER FRASER, Architect, Dumfries.

Lord HENRY SCOTT, M.P., Dalkeith.

Rev. Mr. CROMBIE, Manse, Penpont.

Rev. Mr. Donaldson, Manse, Kirkconnell, Sanquhar.

Mr. JOHN LORIMER, Advocate.

Mr. T. JOHNSTON CARLYLE, Waterbeck, Ecclefechan.

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EDWARD CRISP, M.D., London.

Mr. WM. SANDERS, Clifton.

Mr John Stewart, Secretary to the Antiquarian Society, Edinburgh. Mr. Thos. Grindley, Laxey, Isle of Man.

January 3d, 1865.

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Colonel Clark Kennedy, Knockgray, Galloway.
Colonel Maxwell, Portrack, Holywood.
Mr. Smith, Netherholm, Kirkmahoe.
Miss Jardine, Jardine Hall.
Mrs. Dudgeon, Cargen.
Rev. Mr. Dudgeon, Free Church Manse, Dalbeattie.
Major Bowden, Lochfield.

Corresponding Members.

Mr. CLARK, Curator of Royal Botanic Gardens,
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Rev. G. J. DUNCAN, Portman Square, London.
Mrs. DUNCAN, Do.
J. A. KNIPE, Moorville, Carlisle.

February 7th, 1865.

ORDINARY MEMBERS.

Rev. ALEX. SYMINGTON, Dumfries. Mr. J. L. PIKE, Dentist, Dumfries.

CORRESPONDING MEMBERS.

Dr. John Shand, junr., Kirkcudbright. Rev. Mr. Smith, Penrith. April 4th, 1865.

ORDINARY MEMBERS.

Mr. Murray, Manufacturer.
Mrs. Walter Scott, Castle Street.
Mrs. Witham, Kirkconnell.
Mr. Wright, Merchant, Dumfries.

CORRESPONDING MEMBER.

F. F. ABBY, Huddersfield.

May 2d, 1865.

ORDINARY MEMBERS.

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CORRESPONDING MEMBERS.

Mr. ROBERT DINWIDDIE, Merchant, New York. Mr. W. S. Davidson, Hammond Street, New York.

DUMFRIESSHIRE AND GALLOWAY NATURAL HISTORY AND ANTIQUARIAN SOCIETY,

In account with W. Geo. Gibson, Treasurer.

1864-5.

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ADDRESS OF THE PRESIDENT,

SIR W. JARDINE. BART., LL.D., F.R.S., F.L.S.,

ETC. ETC. ETC.

8th December, 1865.

Gentlemen,—I have the honor again to address you, and for the third time to report the proceedings of our last Summer Session and Excursions.

The first summer excursion for the past year was fixed to meet at Ecclefechan Station, to examine Birrens Werk Hill, but from some cause that meeting was not well attended, and no report was sent in.

On the second excursion (6th June), the party met at Dalbeattie Station, with the more special purpose of examining some lochs in Colvend in which the remains of crannogs were said to be found, and proceeded at once by omnibus to a loch near Clonyard.

Barean Loch, of considerable extent and very irregular form, has now a small island situate near its south end. The surface of this had been recently laid bare, the water of the loch having been lowered by draining; previous to that, and only in dry summers, a stone or two could be seen above water. At the time this island was examined by the members of the Society it was 23 feet 6 inches in diameter from E. to W., 24 feet from N. to S. It has a peaty soil, but upon this there is a flooring of oak slabs, which are laid in

E.N.E. and W.S.W. directions. Upon this flooring a covering of decayed vegetable matter has gradually accumulated and formed a soil, which supports bushes of alder, willow, thorn, &c., with an undergrowth of marsh plants. Around the island were perceived oak piles, and on examination these were found to have been sharpened by a metal tool, and were driven from 31 to 4 feet into the peaty bottom of the loch. The portions below or in the peat soil were very little changed, and shewed distinctly the tool markings where they had been sharpened or chipped; but the parts above the peat, though submerged and in the water, were very much decomposed, the outside, or "whitewood," rotting and crumbling away. None of those piles were visible above the water. On this oak piling beams had been laid horizontally, some of oak, some of fir still retaining the bark on the under sides. Between the oak piling and the island there is an area, varying from about 5 to 8 feet wide, filled with angular blocks of granite, apparently, with the piles, to assist in protecting the slab flooring. No remains of any kind were seen, but, before the loch was lowered, two copper pots were found upon the margin of what is now the island. One has been lost sight of, but the other is now in the possession of Mr Lowden of Clonyard, who obligingly lent it, and the accompanying figure, reduced to one-half the size, will shew the form and proportions.

From Clonyard the party crossed the country to White Loch. The water of this has lately been much lowered, and has exposed many parts of the bottom, covered with *debris* of granite of considerable size, and comprising also some large boulders, which rendered it very rugged. There appeared to be no traces whatever of crannogs or artificial buildings in or upon the shores of this loch.

The Society was hospitably entertained at Colvend Manse, which adjoins White Loch, by the Rev. Mr. Fraser, a very efficient member; and, in returning to the train, a party stopped to examine the large granite quarries opened on the Munches estate, close by the Water of Urr, by the contractor for



Berean Lock, Clonyard, Colvend. Kirkcudbright. red. ‡.



the Thames embankment. Another party, as a deputation, waited upon Mr. and Miss Lowden at Clonyard, to thank them for their attention, and the use of a boat to explore the island upon the loch.

The day was close and sultry, and for a long time a drizzly rain fell, which prevented the thick natural cover fringing Barean Loch to be carefully searched, and few insects were taken. *Hipp. semcle* was abundant in the open spaces among the granite rocks.

Among the less frequent plants Typha angustifolia was noticed, and Drosera longifolia was seen in great abundance by the sides of the loch, as well as very luxuriant specimens of the common D. rotundifolia, both growing separately, but D. anglica did not occur at all there, nor was it seen during the excursion. Habenaria bifolia, Lysimachia vulgaris, Corydallis claviculata, Veronica polita (auct. Fraser), Alisma ranunculoides, Genista tinctoria, Lobelia dortmanna, Helosciadium inundatum, Isoetes lacustris, were all picked. The two water lilies, Nymphea and Nuphar, were in great beauty and luxuriance in the lochs.

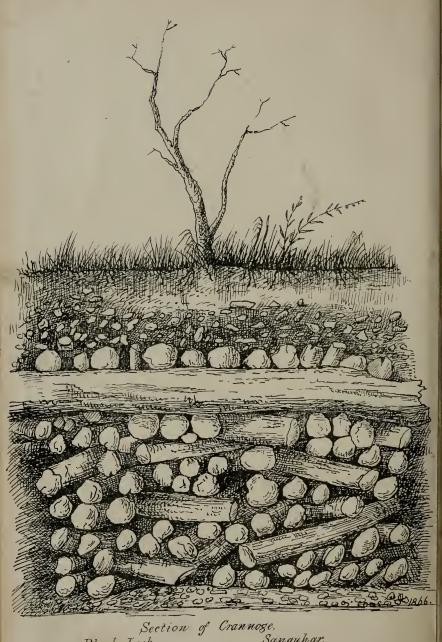
The third excursion for the season was arranged to be in the vicinity of Sanquhar, a field of great antiquarian and geological interest, as well as affording a wide range to the botanist and entomologist. But the object of principal interest was to be the examination of the Black Loch, on the property of the burgh of Sanquhar, and in which there was a small island, believed to be the foundation of another crannog. On communicating with the Provost and authorities of the burgh, the Society met with every facility to make their examinations. They were also greatly assisted in planning the excursion and in their operations by the Rev. Robert Simpson, D.D., author of a History of Sanquhar, &c.

The Sanquhar or Black Loch is a small sheet of water situate in the town-common of Sanquhar. It is of considerable depth, and now covers about two acres. At the north end of this there is a small island, covered with a rank vege-

tation of grasses, carices, &c., mixed with a few plants of Epilobium augustifolium, and there are also a few stunted trees of Scotch fir and birch. At the north or north-east end there is a natural outlet from the loch through the moss, which could be easily deepened. Some years since a man had been drowned, and, the body not being recovered, advantage was taken of this outlet to lower the water, which, while it discovered the body of the man, at the same time revealed indications of a passage to the island, and some beams and driven piles, together with a large wooden canoe. These facts being mentioned to some of the members of the Society induced them to propose this excursion to the Sanquhar loch, and to endeavour to examine the island.

The Rev. Dr. Simpson, with the sanction of the authorities, the day before the meeting employed labourers to open and deepen the outfall formerly used, which was done so successfully that the loch was drained except a small pool, and the bottom laid bare all around the island. The extent of the surface of the island available above water was 49 feet from E, to W, by 40 feet from N, to S. It would stand from 6 or 8 feet above the exposed bottom of the loch, and the sides being sloped, the base was considerably wider than the dimensions above given. When first seen after the bottom was laid dry, a few upright piles were observed, and the curving narrow passage from the mainland appeared somewhat raised, and was hard below the immediate mud deposit, as if a sort of rough causeway had been formed; and when the water was at its height, or nearly level with the surface of the island, persons acquainted with the turn or winding of the passage could wade to it. The base of the slope of the island was laid or strengthened with stones, some of considerable size, so placed as to protect the wooden structure. Round the island could be seen driven piles, to which were attached strong transverse beams, and upon making a cut six or seven feet wide into the side of the island to ascertain its structure, we found a platform of about four feet in depth raised by transverse beams placed alter-





Section of Crannoge, Black Loch, Sanguhar.

nately across each other, and kept in position by driven piles. These last were generally self oak trees, but dressed and sharpened by a metal tool, some of them morticed at the heads where a transverse rail or beam could be fixed. The transverse beams, of various sizes, were chiefly of birch wood. Mr. Simpson informs me that the cut has since been made quite through the island, and that the structure continues the same. It is therefore very similar to that of some of the smaller Irish crannogs, only that in the latter the platform was frequently formed of stones. The wooden platform rested upon a hard foundation, either the natural subsoil in the loch or quarry refuse. The mud prevented this being ascertained correctly, but it was most probably the former, as the hard subsoil was soon struck when deepening the outfall. On the top of the wooden platform was a layer, of from 12 to 18 inches thick, of, apparently, chips or the debris from some neighbouring quarry of white or grey sandstone, upon which the vegetable mould now supporting the rank vegetation had accumulated. On the surface of the island there were some indications of building, but on examination these were found to be only the erection of curlers for fire or the protection of their channel-stones when not in use. No remains of any kind were found on the island nor around it, but, except on the passage from the mainland, the mud was so deep and soft as to prevent effectual search. Neither have we any record of any other remains being found in or near the loch except the canoe already alluded to. It is formed out of a single oak tree, 16 feet in length by 3 feet broad at the widest part, at the prow only 1 foot 10 inches. It is at present laying exposed to weather, and for protection a coating of pitch was lately given to it. It will thus ere long decay and be lost. The burgh of Sanguhar should endeavour to protect their curious and valuable relic. It would easily sling from the roof of one of the public rooms.

Around the loch the ordinary marsh plants were found —Menyanthes trifoliata, very small. On the island, Epi-

lobium augustifolium, probably introduced. But the plant of special interest was the little yellow water lily, Nuphar kalmiana, a plant very local in Scotland, Watson giving only the counties Lanark, Argyle, Elgin, Inverness, and we may now add Dumfries. This plant is considered identical with that of the North American species, which had been named after Kalm; minima and pumila are synonyms, the latter most generally adopted. The day was dry with a strong gale of wind, and the bottom of the loch on the top of the mud appeared as spread over with a pale covering. This was blanched plants of Hypnum fluitans, which sunk to the bottom when the water was withdrawn. Extremely little moluscous life appeared.

Towards evening the party divided,—the one to inspect some graves near a reputed old battlefield, but which time did not allow them to examine thoroughly: the other sought the Crawick Water to see the junction of the old rocks with the carboniferous series, which is well seen close to the old mill, and also the stratification of the latter, of which several good and interesting sections are presented, very fossiliferous, but here specimens are very difficult to procure entire. The members again met together at the ruins of Sanquhar Castle, which they examined under the guidance of Dr. Simpson, and I cannot do better than refer our members to the excellent little work of the Rev. Doctor, "History of Sanquhar."

Several ladies, both members and visitors, attended, and took great interest in the exploration of the Black Loch crannog; and when the members separated there, they made an excursion (on their own account) up the Euchan (ythan) Water, and brought in specimens of Campanula latifolia, which grew plentifully in several hollows of the glen, and also Vicia orobus in seed, abundant here, but by no means a common plant in the county. This glen alone would well repay an examination, and there is a full day's work in it, zoological, botanical, geological, and antiquarian. The members, having left the castle and inspected and measured the Black Loch canoe, dined a large party at the Queensberry

Arms. Many invited visitors attended. Dr. Simpson read an interesting sketch of the antiquities around Sanquhar, and the subjects of the day's excursion were discussed, until train time called off each to seek their respective homes.

The next expedition, being the turn of Galloway, was fixed for the Creetown district, Mr. M'Diarmid having undertaken to lead the party.

The general rendezvous of the members was at Dalbeattie, whence they proceeded by the Portpatrick Rail to the station at Creetown, where the excursion may be said to commence. Having gained the shore road, the party proceeded to examine the granite quarries, which supply the principal amount of stone used for the Liverpool docks. These quarries are situate close to the public road, and have a run or tramway to an embarking stage on the shore. On descending from the Creetown Station to the sea level, we perceive on the land or left side, looking seaward, large terraces running in a line with the estuary or firth. It is through one of these that the entrance to the quarries has been cut, exposing its structure above the granite, which stands in nearly erect beds, the tops of which have the appearance of being rounded off. The rock itself is of a grey colour, and is not so pure a syenite as that of Munches. but, nevertheless, it produces fine blocks of a very large size. The covering of the quarries is a very irregularly-sized drift, the parts of it laying in all directions, without arrangement, quite unrolled, and with sharp, square, or angular surfaces. This is well worthy of closer examination, as well as the wide terraces which could be traced skirting the road until they became concealed by the woods which cover them as Carseluith tollbar is approached.

Along the shore Aster tripolium was abundant, also, Arenaria marina; Statice limonium, not abundant. These were on the muddy banks. By the roadside Agrimonia eupatoria was common, and some patches of Innula crithmoides occur. East of the tollbar we pass a very neat

cottage, where considerable pains had been taken with the garden and flowers. At this time it was quite gay, and the mildness of the climate was marked by very large fuschias, in front and at the sides, in full flower, and which had not been in the least cut last winter. A Lycesteria formosa was above 10 feet high, and there were large plants of Lavatera arborea which had flowered luxuriantly, while thriving young ones were strong and healthy, and ready to take their place next year. We could not ascertain where these plants had been obtained, or that they were native to any part of the coast. A little further on was Carseluith Castle, an old square fortress, built upon the edge of a terrace to the base of which the tide has once flowed. This must have been in olden time a very strong keep. At present it is neglected, the walls covered with Asplenium ruta muraria. There is a carving above the fireplace of the principal room. The farm-steading, placed too near, interferes sadly with the old structure, and is in the way of any good sketch or photograph being taken. The farm dwelling-house is approached by a fuschia hedge 10 feet high.

Proceeding onwards to Ravenshall, where refreshments were expected, we met Mr Hannah of Kirkdale, who gave us information as to our best route to the farm of Cairn

Holly, with the cairns and standing stones there.

While refreshments were preparing for us at Ravenshall the party went to the shore, a few hundred yards distant, here very precipitous and rocky, and fashioned into arches and caves. To one of the latter has been given the name of Meg Merilies' Cave, but with what propriety it is needless now to enquire. The rocks themselves are silurian, and are very remarkable from the twisted and contorted state of the beds. They afforded Crithmum maritimum, Asplenium adiantum nigrum, and marinum, and at an earlier period of the season would be very gay with Geranium sanguineum, and the usual rock plants of the coast.

On regaining Ravenshall we found Mr Hannah had

come down to lend his assistance. That gentleman joined the party at lunch,—a very excellent one, thanks to mine host of Ravenshall. It consisted of fish, joints of various kinds, game, sweets, &c. Our dining room, a long, open but covered arbour in the garden, where we looked out upon the sea, the opposite side of the Bay of Wigtown, and Isle of Man,—a splendid view.

Refreshed, we started, under Mr Hannah's guidance, a short way through the woods to Barholm Castle,-an easy way to those who know it, rather tangled to those who do not. The wood consisted chiefly of oak copse composed of both species of oak, Q. robur and sessiliflora. The latter is by no means common in Scotland, but was here in nearly equal proportion, and was easily distinguished among the stock shoots both by its general aspect and by its lessile fruit.* Barholm Castle is nearly of the same plan as Carseluith, and is in rather better repair. The front door or entrance is ornamented by the rope moulding knotted at the two ends. Here the farm steading is also too near, in one part even attached, and close to the garden, some of the walls of which seem old. Instead of Asplenium ruta muraria which covered Carseluith we have a luxuriant crop of Asp. trichomanis on the castle and old garden walls. The garden in front of Barholm farm-house also bespoke the mildness of the climate; large fuschias were again seen in full flower, and Wigelia rosea stood eight feet high.

Leaving Barholm we crossed the country to Cairn Holly Farm, where the Galwegian King Galdus is supposed to have been buried. Of the fact there are various opinions and assertions. Here, in front of Cairn Holly steading, there has been a covered stone kist or grave surrounded by long standing slabs. It is stated that this kist had been long since opened, and on examination no doubt it had been so, and nothing was found or seen to induce any prolonged stay. Below the farm in the valley near to the

^{*} Professor Babington says "He has failed to learn how to distinguish them." Sir W. J. Hooker keeps them distinct.

burn there are several mounds having an artificial appearance, which would probably repay examination, and at the side of the road by which Cairn Holly is approached at the corner of one of the fields there are eight or nine standing slabs besides prostrate ones upon a rough mound which appears a likely spot to dig around. The day being far advanced, however, we were obliged to return to Ravenshall, where our omnibus waited. By the side of the road from Kirkdale Bridge there was Sedum reflexum upon the top of the walls. This may have escaped from a garden.*

While the omnibus was getting ready the members started to try to find a carved stone said to be near, upon the lands of Kirkclaugh, and after a search among the planted cliffs of the sea-shore we discovered what was sought for.

Just as the party was starting Mr M'Guffog, the tenant of the farm of Kirkmuir, which adjoins Cairn Holly, came up to us with some remains which had been turned up on his farm. It was impossible to examine them properly upon the spot, and Mr M'Guffog kindly entrusted them to my care. Mr M'Diarmid undertook to make enquiries as to the exact locality and circumstances of the find, and his report is as follows:—

"The articles were found in a turnip field about a quarter of a mile distant from the old church-yard of Kirkdale by the farm servant while harrowing the land. They were wedged together as if they had been packed in and covered with till, the whole being about the size of a man's head. The teeth of the harrow broke off a bit of the ball, by

^{*} Babington gives S. reflexum as Scotch with a?. Hooker gives walls, roofs of houses, Thatchet builds, rare; and gives a wall on Corstorphine Hill, near Edinburgh. We found the thatched houses at Aber, in Wales, and those in Antrim, Ireland, covered with it. [Same as S. glaucum—Smith.]

^{+ &}quot;This singularly rude stone at Kirkclaugh, in the parish of Anwoth, stands on a cliff overhanging the sea, near the partly artificial eminence called the "Moat of Kirkclaugh." It is of sandstone, very rudely sculptured. The nature of the markings or lines, which are deeply cut in the surface of the slab, are sufficiently indicated in the drawing. It will be observed that the cross like figure on the east face is partly raised on the stone above the surrounding surface. It may be doubted if the present be the original site of the stone."— Sculptured Stones, CXXIII. p. 38.

which it was seen that there was something unusual therein. The land where they were found was meadow and had been recently drained, but there was no appearance of cairns or tumuli on the ground. The whole articles were covered with till and rust, and the sculptured one with what appeared to be verdigris. All required a great deal of cleaning."

The articles thus found consisted of four axe heads, one or two of them broken, and all, as stated by Mr M Diarmid, very much rusted and corroded. The general shape narrow. The carved article of brass is the most interesting. I took it to Edinburgh and showed it to Mr Macculloch, the curator of museum of Society of Antiquaries, who at once pronounced it to have been the handle of a Roman vessel. Age about beginning of Christian era at least.

The party proceeded by omnibus to Gatehouse-on-Fleet, skirting Wigtown Bay and banks of Fleet, and afterwards made the Kirkcudbright rail, which carried them safely to their various destinations.

The last excursion of the summer was made upon the 7th of September to Newbie. The private excursion to the same place last year had given the hope that more stone kists would be discovered. Permission had been requested from Mr Mackenzie to make explorations on the banks of the shore and raised knolls adjoining for the search of the burying places. This was at once granted, and Mr Beattie, the tenant of the land, not only gave every facility for the exploration as well as information but also permitted his men to assist in excavating and digging into the mounds supposed to contain the stone graves.

The party was unsuccessful in finding any new kists. A part of one now only exists and the history remains a little obscure. The mound in which the end of the remaining kist is seen faces the sea. The sea bank there was formerly higher and extended much farther seaward, in fact the road now along the top of the bank once ran between the bank

and the sea. The sea washed away both road, bank, and part of the mound, and so exposed the kists in the latter. The account that we collected was that there were formerly three kists all placed in line with that now partly existing, the ends pointing to the sea. They all had bones in them when discovered, but they were mixed with sand and gravel, and as the workpeople expressed it when exposed "They went to meal." The part of the kist at present standing has the sides formed of strong sandstone flags, six inches thick, placed on edge; the width inside is about two feet and the top is covered with a flag three feet broad; the depth from the cover to the lower edge of the side flags is little more than two feet. When this remaining kist was discovered there was upon the north side a small hole formed of four flags not more than a foot square and about eighteen inches deep. There was no cover upon the top and it was filled with small pieces of bone. Over these two there was a mound of loose stones as if an artificial cairn had been made over all, and there is reason to believe that this was also carried over the other graves which have now disappeared.

Upon a mound nearer Newbie House the kist opened last year remained as left. It may be remembered that on removing the covering last year pottery with herring bone pattern was found here. The form of this kist when opened was irregular; it is placed east and west, the width at the east end being two feet four inches, at the west only one foot two; but the flags—about four inches thick—appear to have been moved, and the kist most probably was originally square. The depth was about one foot ten inches, and the whole was covered by an irregularly shaped flag. Though searched for no other graves were found upon this or the adjoining mounds.

After as far as possible satisfying themselves that nothing farther would be found here, the party proceeded to the ridge at Annan Waterfoot on which the lighthouse is placed and where human bones were said to be

found. Upon making a trial human bones could be found in quantity at a very little depth below the surface. It had evidently been the site of a burying place, and as there appeared nothing of antiquarian research worthy of spending time here, those of the party who were independent of trains returned and examined the site and what yet remained of Newbie Castle, together with objects of a more recent kind,—the fine specimens of cattle, both Galloway and shorthorn, feeding and preparing to be tied up, for which Mr Beattie has been so long and justly celebrated. Mr Beattie was also so kind as to induce the remaining members to partake of refreshments before they endeavoured to find the ancient forest on the shore of which the billet gave notice.

Changes are constantly going on upon a sea shore, and some 15 or 20 years ago I made a sketch of the shore nearly opposite where the kists were discovered. Beyond the coast mounds the fields had not been reclaimed or drained, and there was a moss covered with heather then existing. This moss ran under the shore mounds and upon it the trees had grown. At that time the roots stood higher above the surface than they do at present, and at low water could easily be seen at some distance above the surface. These sand hills and mounds extended at one time much farther seaward, and as we have seen a gradual encroachment has been made. On examining the shore we found roots still remaining at the edge of the shingle and seawards, and Mr Beattie is aware of their existence as far northwards as Newbie House. What we saw and uncovered were the roots of oak trees of considerable size

Several good plants occur along the shore here, but the season was rather too far advanced for the botanist. The entomologists of the party were, however, much gratified by seeing several specimens of *Colias edusa* flitting along the sea beach herbage upon both sides of Newbie House, but in Mr Lennan's absence no one was provided with catching apparatus, and the colias proved more than a match for the hats and handkerchiefs of the most nimble members.

This butterfly, very rare in Scotland, has been taken several times about the Carse at the mouth of the Nith upon the same line of coast, but has not previously been observed so far northward.

The stake nets frequently take specimens for which they are not properly set. Birds are occasionally drowned therein: diving after fish they get into the netted houses and cannot find their way out.

The tunny, *Thynnus vulgaris*, has been taken in them; and Mr Beattie has in his lobby the head of a swordfish, *Xiphias gladius*, which was entangled in 1852 or '53 in the net opposite the house.

I have thus run rapidly over the principal work of our summer excursions. I have omitted any antiquarian history of the old keeps or towers which almost always come in our way, both because I am not sufficiently versed in these subjects, and also that it would lead to a length of historical description and detail much beyond our time at these meetings; and, thirdly, that we have members among us who are eminently qualified, and who, I trust, will draw up accounts, and gradually exhaust the history and legends of those interesting remains, and, assisted by the pencil or photography, we may have it in our power to illustrate them and preserve some records of what yet remain.

I have tried to impress upon our members the value of the Natural Sciences, and that antiquarian research was now so intimately connected with them that the study of both could not be separated. They must be worked hand in hand. These pursuits do not interfere with business, witness the many able men in public life who have worked much and well. They destroy superstition; attest the power and design of the Almighty, and so draw man nearer to God; explain popular errors, such as the belief that a horse hair if put into water will turn an eel. Many of you may have tried this, though I doubt if you succeeded. That, besides supplying a relief to the overworked mind, they may also assist

the health of the body. Lord Stanley, when lately opening the Gymnasium at Liverpool, dilated on the value and necessity even of muscular exertion for the continuing of health. The mechanical exertion of a gymnasium is a remedy, and is undoubtedly useful, especially in a large town, where getting out to the open air is impossible or at least inconvenient, but in smaller or less populous towns, where close work may be as common, a gymnasium is not always attainable. Our five summer excursions are a good substitute, and the scaling of Colvend cliffs will assist in strengthening the limbs, while a straightforward walk up Hartfell or Criffel will materially help the expansion of the chest.

The byegone season has been a remarkable one, perhaps the most so for a long period of years. The long-continued heat, accompanied by little moisture, great electricity, and a close atmosphere, has acted on both animal and vegetable structures. The condition of the atmosphere produced a want of energy, a certain lassitude, and a want of strength to resist particular affections, in fact a tendency to decomposition. Vegetation, especially where one series of plants was grown in quantity together, could not receive the usual nourishment from the lack of moisture, and was more easily exhausted by the attack of parasitic fungi, which finding weak and suitable subjects, spread and extended themselves over large areas. This was particularly apparent among the turnip and bean crops. In coming out of turnip fields with dark trousers the dress and shoes were quite white. In gardens the same was observed.*

Our district has also been visited by an ususual and extreme amount of disease among animal life. We may consider this as brought about by God as a dispensation wherewith he is pleased to try us: if so, it has been brought about by the working of natural causes, and not by any im-

^{* &}quot;Rust (anuredo) has been particularly abundant this year upon grass, giving sometimes a decided tint to whole fields, and covering the clothes and shoes of those who walked through it with a thick coat of orange powder."—Gurd. Chron., Nov. 25, 1865.

mediate interruption of laws. We are bound to study these causes and their variations, both as warnings and to gain the means if possible to anticipate them. This we are authorised by every means in our power to do, and in dependence on His will to try to avert these natural evils. In such seasons as the past and present, the animal frame, as well as the vegetable structure, are less able to resist those mysterious seeds of disease, which are ready to take advantage of any subject most suitable for their development and least capable of resistance; and after the indiscretion, foolhardiness, and senseless covetousness of some, with the little care that has been taken to restrain the intermixture of animals by public markets and roads, the evasion of the sanitary measures attempted to be imposed, it is not remarkable that these diseases should spread. If you will for a moment think of what we in common language call "Scent," no one can doubt how easily disease can be carried. See how far off in a favourable day a pointer will wind his game. See a good retriever follow the windings of a wounded bird long after it has passed. See a pack of fox hounds puzzle out a "scent" over the hardest road or dryest ploughed land, and when a long grassy pasture is gained (the scent clinging to the roughness) they go away breast high with no time even to give tongue: or in a cold hoar frost the fact that an animal has passed over the ground is uncertainly and slowly indicated, but the moment the sun has acted, the particles are loosened and the scent picked strongly up. Truly the particles are most subtle, but we cannot doubt their presence, and that they can be carried.

What the effect minute fungi have upon the animal frame has not been sufficiently attended to. The excess of them is extraneous and cannot be wholesome. Cattle could not eat the turnip leaves this year without consuming myriads of the white fungus. I did not think it would be wholesome, and did not feed with them. Our medical friends and members know very well the effect of Ergot. A species of this fungus is in some years very common upon

the grasses. Farmers very well know that in some years "casting of calves" is more frequent than in others, that it runs almost like an epidemic. It is nearly certain that this is caused by a preponderance of the fungus in those seasons. I do not wish all at once to give to animal disease a fungoid origin, but the same conditions of atmosphere (such as we have had this year) which stagnates the sap of plants and renders them more suitable for the development of parasitic fungi, also has an effect on the blood or sap of animals. You have heard of the vine disease. It is caused by a minute fungus Oidium. It has been found in France that wounds accidentally made on the fingers of the vinedressers when pruning the vines have proved fatal in from 20 to 25 days. The medical men are disposed to establish a coincidence between the circumstances necessary for the development of the fungus and a greater frequency of certain forms of inflammation of the mucous membranes; or, in other words. an atmosphere productive of fungus encourages also certain kinds of inflammation. The Rinderpest in Holland has been attributed by some scientific persons to the presence of fungi. and intermittent fevers, ague, &c., are traced by Dr Salisbury. of the United States, to certain species of Palmellæ. These facts should lead our members to give some attention to atmospheric influences, and to examine the effects which minute fungi may produce upon the animal functions and structures when from any cause they are brought near or introduced to them.*

The lowness of the water in lochs and rivers has also been productive of great profusion of low vegetable matter (plants that we term of lower life), which interfered with the higher forms. The running streams got crammed up with confervæ and like plants, to the interference even of animal life. Some of the smaller streams were dried up entirely, except pools of some greater depth. These were foul extremely,

^{*} For very interesting information on these points see a paper on the Rinderpest in Holland by M. Ammersfoord,—the Lancet,—Mr Tilbury Fox,—M.D.,—in Dr. Lancaster's Journal of Social Science, &c.

with germs of conferve; the water heated, and certainly not wholesome. The River Annan was so low that it could be crossed in places upon stones laid in. The bottom got extremely foul, and a green conferva grew in such abundance that no part of the gravel or stones was uncovered. A fish of any kind was scarcely to be seen.

But this state of the air and waters did not seem to affect injuriously the lesser mammalia, or birds, and was most favourable for insects. The smaller Rodents have bred remarkably, the field mice especially. The common rat has increased to a destructive extent. I never recollect rabbits having multiplied so exceedingly: they bred for nine months continuously. Birds have all bred largely. Entomologists will record this as a remarkable year, especially for Lepidop-In our range, the two species of common white butterflies* were never seen more numerous, and caught the eve of every one. The cabbages, &c., in our gardens suffered in proportion, and in some places were eaten so bare that the stems only were visible, and they grew up a sort of cabbage skeletons. It is curious that these butterflies feed also very freely on the leaves of the common Indian cress Tropeolum. Of the less frequent species Cynthia cardui was often seen. Vanessa atalanta was extremely abundant, and in the warm forenoons of August and September was a beautiful sight in the gardens, flitting everywhere, and settling ten or twelve at a time on one large sunflower. V. Io, on the contrary, was rather less common than usual. So also were the species of Hipparchia, including blandina. The hummingbird hawk moth was not uncommon; I have seen three or four on the wing at the same time. As you would observe from the newspapers, this species was also noticed more than usually common throughout England. The night fliers are not so easily observed, and Mr Lennan will, perhaps, some evening inform us what he has noted. The death's head moth has been generally obtained in various localities, and some specimens of Sph. ligustri have also occurred.

^{*} Pieris brasicæ and rapæ.

I have not received the account of any private excursions this year, such as I alluded to last. But one of our members, Mr Maxwell of Munches, has commenced the clearing out of an old castle upon his estate, Buittle Castle, once the stronghold of Edward Baliol. A well has been examined and emptied, and considerable excavations have been made, which will gradually expose the plan of the ruins. No pottery or metal instruments of much interest, nor any ash pit or kitchen midden has yet been come upon; but the bones and remains of the same small ox we have already seen so common in the old residences, whether land or loch, was one of the most common. There were found also bones of pig, and roebuck, and, in the well, a portion of the antlers of red deer.

I believe nothing actually new has been discovered by the Society during the past season in zoology, botany, or fossil remains, but fresh habitats have been added, and the knowledge of our range is gradually filling up. Our work in a great measure has been in another direction,—The fashionable subjects of the past year. It is scarcely fair to give them that title, but nevertheless certain subjects get into a more than ordinary interest and reputation, are talked of by every one, and for a time are pursued with extraordinary and far more than usual zeal. These were, the exploration of bone caves, and the history of lake habitations. They both bore upon the subjects which I have especially alluded to in my previous addresses to this Society, "The age of man in this world and the animals which lived contemporaneously with him." In regard to the first, our members who attended the meeting of the British Association at Birmingham could not avoid seeing the great interest this subject called forth. A large sum was voted for the exploration of various caves, both abroad and at home. In Malta, Dr. Leith Adams, surgeon in 22d Regiment for some time quartered there, made very important discoveries, and a second grant was made to continue these. This is an instance of a gentleman in active service employing all his leisure time in the pursuit of science. It has been the same wherever he was employed.

In India he devoted his time to zoology, visiting the Himalaya and Thibet;* in the Mediterranean the same; in Egypt the same, varying it with the ancient history of the mummied animals; in Malta the zoology was soon exhausted, and the geology was suggested to him, which he for some time worked out with the greatest success. Another grant was made to explore caves in the Mauritius and adjacent islands, and already a consignment of Dodo bones has reached this country. At the same meeting an association of a more private kind was formed by the Anthropological Society, for the purpose of exploring the Kirkhead Cave, on the shores of Morecamb Bay, near to Ulverstone. This will be under the superintendence of J. P. Morris. But by far the most important was the grant (a second) of £200 to explore Kent's Cavern, in Devonshire. No one who heard the report by Mr Pengelly of the works already carried on could doubt the interest or importance attached to this exploration, or fail to be gratified by the careful and systematic manner in which it is carried out. There is a stalagmitic floor, above which a considerable depth of black earth has accumulated, in which the bones of recent animals, human and other remains leading to a date, occur. Above this, very large blocks of rock occurred, so large as to require blasting before they could be removed, and which also showed that no modern exploration or interference with this black earth could have taken place. Immediately below this and the floor of stalagmite lays the red earth or cave loam, four feet in depth, and which is now being excavated in layers of one foot each. This red earth contains the bones of the usual extinct cave animals, intermingled with works of human manufacture. The position or layer in which these occur is carefully kept and recorded, and many of the human implements are found in the lowest layer. A large number of the bones are scored with teeth marks.

^{*} The Excursions in India are now passing through the press, and "Wanderings of a Naturalist," by A. Leith Adams, M.D., will soon be before the public,

It would be useless to theorise or draw conclusions until the explorations are completed. We shall then arrive at the facts of the case, and I believe shall be able to rely upon them. The point that will, I think, strike most people, is, Where did this deep deposit of red earth come from in which these bones and implements are irregularly imbedded? and I think that this must be traced and satisfactorily answered before we can arrive at any conclusion.

In reference to this subject, I cannot now refrain quoting a short passage from the work of a modern traveller, an author with his eyes open, and quite aware of all the difficulties of the question.

The Rev. Mr Tristram, in his Travels in Palestine, published under direction of the Committee for General Literature and Education, states that at Sumvah there are extensive stone quarries, from which ancient cities evidently have been built. That they were very extensive, and had been worked as mines, excavating the rocks, and leaving large chambers supported by pillars. These chambers or "caverns are now the dens of wild beasts, and the excrement of the hyæna covered the floors. Vast heaps of the bones of camels, oxen, and sheep had been collected by these animals, in some places to the depth of two or three feet, and in one spot I counted the skulls of seven camels.

"We had here a beautiful recent illustration of the mode of formation of the old bone caverns, so valuable to the zoologist. These bones must all have been brought in by the hyænas, as no camel or sheep could possibly have entered the caverns alive, nor could any floods have worked them in. Near the entrance where the water percolates they were already forming a soft breccia." (p. 237.)

In relation to the second or lake habitations we have during the past year works published increasing our know-ledge of their range in Europe. "Lake Habitations and Pre-historic Remains in the Turbaries and Marl Beds of Northern and Central Italy," by Bartolomco Gastaldi, has been translated and published by the Anthropological Soci-

ety, and will repay perusal and comparison with what we have been doing. Sir John Lubbock in "Pre-historic Times"—not pretending to be an original work—presents you with an excellent summary of information, and has a chapter specially upon the "Ancient Lake Habitations of Switzerland;" and it will have been seen that our Society, following the example or affected as by an epidemic, has devoted a great portion of its time and the direction of its excursions to the exploration of the lochs within its range, and not without success. From all the information that has come to us of these curious buildings they have been of very ancient origin as well as of comparatively modern use among European nations, while among some uncivilized tribes such dwellings are at present inhabited. Some curious questions arise as to the use of all the different forms of them, and of the manner in which they were built or constructed.

The larger erections, or where there have been several placed together like villages, as those of the Swiss lakes or at Dowalton, were the natural habitations and defences of early They knew no enemy except some neighbouring tribe as ignorant as themselves or the wild animals of the country, the attacks of which they were able to cope with. So it is that we find the same kinds of habitations used in New Guinea and elsewhere at the present day. It was very natural for the early inhabitants of a country or for tribes now living without any intercourse with civilization to build themselves structures raised above an element always chosen as a defensive one, and where they were not easily approached or entered when the access passage was drawn in or removed. They were the residences, or as it might be the refuge from danger. Their moveable access the analogue of the more modern but disused drawbridge; and we had the evidences of their living there by the utensils, weapons, ornaments, and remains of a varied commissariat which we can still gather in and around them.

The large Irish crannogs, again, are known historically to have been the strongholds of petty Irish chiefs, but it is more difficult to understand the use or purpose of the small crannogs we have been investigating this year. They must have been constructed with very considerable labour, but their small size would unfit them for any lengthened residence. Utensils have been found upon or near them, but I am not aware of any clue being given to their real use unless they were store places where larger habitations were near. They are perhaps analogous to the *Packwerkbauten* of the Swiss lakes which were formed of a solid mass of mud, stones, &c., with layers of horizontal and perpendicular stakes.

We have this year examined two of these small structures as I have already described to you, and I visited a third in the Castle Loch, Lochmaben. It was during the fishing for vendace when I was making enquiry if anything of the kind was known there that a man present said he knew of one and could take me to it. He did so, and we found what appeared to be a large heap of stones only a few yards across, and then from 12 to 18 inches below the surface. He said that he and his brother had some years since taken from three to four cart loads of oak wood from it. I think that round this loch there may have been at a former period some larger stockaded habitations.

The buildings raised upon platforms we can more easily understand: in those of very early date the piles would be cut, sharpened, driven, and the entire habitation erected with the rude intruments then in possession. In the case of Dowalton and those we have examined the marks of metal tools are clearly evident, but these structures could scarcely be made when the water of the lochs was at its present height. The habitations in Dowalton stood upon a foundation of stones, heather, fern, and brushwood; the piles and stockading was to strengthen them. They were inhabited, and when so they were above water. The suggestion made by Sir W. Maxwell of Monreith was an easy explanation:—
"The waters originally discharged themselves into the sea from the western end of the valley, a portion of them only now finding an exit that way in consequence of the forma-

tion of the moss towards the centre of the valley which compelled the remainder to flow into the loch."* In an Irish crannog lately described by Professor Harkness:—"Drumkeery Crannog," writes the Professor, "was certainly not formed by first raising the surface above the water level. There is evidence of the rising of the level of Drumkeery lake 5½ feet since man left records of his existence on its banks. The elevation of the water, it might be assumed, has been brought about by earthquake influences, but there is no necessity to have recourse to mere conjecture in this matter. On the east and west sides of Drumkeery lake extensive peaty tracts occur. These peaty tracts have invaded the margins of the lake, reduced its area, and caused its waters gradually to rise in level." (Archæologia, vol. xxxix., p. 8.)

We did not sufficiently examine the outfall of the Barean loch at Clonyards to ascertain if it could have been closed up naturally and so have allowed the water to accumulate. But at Sanquhar loch the builders of the crannog there either lowered the water by the outfall we made use of or the loch then was not nearly so deep as when we examined it, and the peat gradually forming both stopped the outfall and encroached upon the bounds of water. The latter is the most probable; an opening or well upon the west communicated with the loch, and upon that side the peat or moss rested upon water. The regular pile of building could not have been raised as it exists in four or five feet of water. I believe that in all those instances where the structures are now submerged that it arises from this cause, and although nothing may appear upon the margins of a loch to awaken curiosity we should not be satisfied until we have examined the bottom some distance from its shores.

With these observations I would close this address, recommending our members to continue their researches among the many lochs of their district. The subject has the advantage of being there almost quite untouched, and will most amply repay investigation.

^{*} Rep. B. Ass. Newcastle, p. 143.

TRANSACTIONS.

Notes on some Rare Minerals occurring in the District. By Patrick Dudgeon, Esq. of Cargen.

THE granite or rather syenite of this locality—including the districts of Criffel and Dalbeattie-is remarkable in having diffused through it in more or less abundance crystals of sphene (a silicate of lime and oxide of titanium). Sphene is not a common mineral in Great Britain, and is found in few localities, generally in small crystals disposed through gneiss and syenite. In this district the crystals are generally small, the largest I have met with not being over \(\frac{1}{3} \) of an inch across; colour hair brown, lustre adamantine. The crystals are generally sparingly distributed through the syenite, but I have met with it in patches in such quantities as almost to form a constituent of the rock. Some books on mineralogy mention zircon as being found in the syenite of the district. I think this is a mistake. The late Mr Copland of Blackwood, who carefully surveyed the district, could never find any crystals of this mineral, and I also have looked for it in vain. The error-if it is one-has probably arisen from the peculiar form of some of the crystals of sphene, which, examined superficially, have much the appearance of zircon crystals.

Professor Heddle and I also found in blocks of syenite about a mile up the Newabbey Burn small crystals of allanite, a mineral containing the rare metal cerium: this is the first time this mineral has been found in Great Britain. In the same locality we found small granular masses about the size of a pea of a black vitreous mineral supposed to be gadolonite. The crystals of allanite though small were quite

distinct, and were sent to Mr Greg for examination, who at once pronounced them to be allanite, and the mineral is now recognised as a British one in Greg & Lettsom's late work on British mineralogy. Gadolonite is rarely found well crystalized; what we found at Newabbey not at all so, and the quantity was too small for analysis. The only other locality in the United Kingdom—if this should prove to be one—where the mineral has been found is in the county of Galway, where a single specimen was got of small size.

I may mention I lately carefully examined the large granite quarrie near Creetown—this is not syenite—but could find no trace of the minerals above referred to in it.

In some places owing to the greater abundance of hornblend the syenite is much darker in colour than in others: it is owing to the presence of this mineral that the stone obtained from the recently opened quarry at Kirkconnel is darker than that of the Dalbeattie quarries; it also contains a larger proportion of mica than the latter rock and is much richer in sphene crystals.

SPHENE-

Titanic acid,	41.33
Lime,	
Silica,	30.45

100

Chemical Formula—

Ċa Si + Ti Si.

ALLANITE-

Contains about 20 per cent, of oxide of cerium.

 $\dot{R} \ddot{S}i + \ddot{R} \ddot{S}i$.

R being Ca, Ce, Fe, and R (alumina) Al.

THE ABBOT'S STONE IN DUNDRENNAN ABBEY. By JAS. STARKE, F.S.A. Scot.

Among the old monuments at Drundrennan Abbey is the Abbot Stone. It is lying in the abbey on the ground, but not being a mere slab, it may have been raised a little, or even originally stood upright.

It has on it an incised figure, full length. This figure is a monastic dignitary. He is a monk, with shaven crown and in loose vestments, holding in his right hand a small cross or crucifix, and in his left an episcopal staff or crosier, the end of which is resting on the left temple of a small figure recumbent under the Abbot's feet.

This small figure is that of a person bareheaded and kilted, with something like a snake in his hand. His legs are hanging down from the knees to the ground, having on them large brogues or boots, and the abbot's right foot is clasped under the left arm.

This is what we find on the Abbot Stone. There is no legend or inscription, nor any date upon the stone. The figures are supposed to tell their own story; and what appears meant to be represented is, the subjugation of the small figure under monastic power and influence.

The small figure under the abbot's feet is, of course, a representative man; and he may represent the wild Scots of Galloway.

Galloway was in early times a separate and peculiar district, with its own lords or reguli, and its own people, with their own language, laws, and customs. They were a Celtic population, and retained their native language, which Tytler says was the Erse, down even to Buchanan's time. Ea magna ex parte patrio sermone adhuc utitur. This would be in the latter part of the sixteenth century, the History of Scotland being published in 1582. A Gaelic-speaking population is obviously under great disadvantages in the march of civilization: for, by their want of the

language, they are shut out, in great measure, from the literature, and learning, and the civilization of England.

We have some account of their condition at the Battle

of the Standard, in 1138.

On this occasion the Galweygians claimed to lead the front van of the Scottish army; and, as Nicholson's "Gallo-"way" expresses it, "dreading dissention or sedition, the "King reluctantly complied with the request of the turbulent "Galweygians."

They were a fierce people, and were accused by the English of all sorts of barbarity and impiety. They drove people before them like herds of cattle—they tossed up little children in the air and received them again on their spears in frolic and diversion,—and were so utterly regardless of the rites and ceremonies of the Church, that we must conclude their religion, whatever it was, was not the religion of Rome: caring nothing for the consecrated host, even trampling it under their feet, as the English general said, and eating flesh in Lent as at other times.

They were perhaps Culdees; and as to their barbarities, which appear savage, something is perhaps due, both in the facts and colouring, to the old enmity between Celt and Saxon.

If the view here taken of the Abbot Stone sculpture is correct, this people were, however, at length brought under monastic power and influence; and the Abbot Stone may be found to bear the very earliest pictorial representation of a Galloway man. And, making allowance for the exaggeration natural to a subduing over a subjugated people, the representation may be taken as correct.

This is the conclusion which, in a general way, we would draw from the Abbot Stone sculpture.

If a more special object of commemoration be supposed to have been intended, it might be the conversion of the Culdee population to Rome. That event was a great event. Perhaps it was regarded as of more importance than the original conversion of the Picts to Christianity. Their be-

coming Christians was good, but their coming within St. Peter's fold was better.

It would be interesting to know, if, in any other district, there is any similar sculpture, commemorative of the same event.

These are the few observations I have to submit respecting the Abbot Stone sculpture.

ON CERTAIN "MARKINGS" ON THE DRUID CIRCLE IN HOLYWOOD. By Dr. DICKSON, the Secretary.

THE object of the following brief communication is to bring before the notice of the Society certain markings upon the stones of the so-called Druids' circle in Holywood. This circle stands, as most of you are probably aware, in a field upon the Dunscore road, about 150 yards beyond the New Bridge toll-bar. The stones are eleven in number, and although forming in themselves a tolerably exact circle, I am disposed to think, from the irregularity in their distances from each other, that there may have been originally more. No tradition, however, exists of any having been removed. or that the group has ever been otherwise than it is at present. A certain superstitious respect still attaches to the spot, and may even have had something to do with the preservation of these curious relics, for gossip still records how upon one occasion some farmer, more zealous in the cause of agriculture than of archæology, attempted to remove one of them, and that the work was immediately arrested by a violent storm of thunder and lightning. The stones are rough blocks, for the most part boulders, which may have been left, probably near their present site, during the glacial period. They differ much in size and appearance, but are all equally rugged and irregular as nature has fashioned them.

The attention which the whole subject of rock symbols and stone sculpture in relation to the early inhabitants of

this country is at present receiving, led me to examine these stones in search of some traces of a similar character; and I shall now describe, as carefully as I can, what I found, without expressing any opinion as to their origin or signification. Of the eleven blocks, four are granite and seven greywacke or whin, and it is upon the latter only that the markings to which I have to refer are found, and upon four only of these. These markings are simply hollows or depressions upon the surface of the stones. In one case they are upon the exposed and weather-worn face of the stone: in all the rest. I think they are upon surfaces more or less sheltered by their position. It would be difficult -almost, I think, impossible-to trace any order or regularity pervading their arrangement; perhaps a tendency to a linear order might be observed, but even this is doubtful, and admits of marked exceptions. hollows themselves are pretty uniform in size, especially where protected from the weather, and are generally of an irregular oval shape, tending sometimes to circular. This latter feature is especially marked on one of the larger stones, -indeed, the largest of the group-and as, from its position, the surface upon which these are found has been almost completely protected from the weather and other destructive influences, it is here that these peculiar markings may be best studied. It is impossible not to be struck with the perfectness and singular freshness, so to speak, of some of the depressions upon this stone,—at the same time, it is here that they are most irregular and capricious as regards arrangement. By far the larger surface of this stone slopes outward from the circle, and contains no markings whatever, and it is upon what must have been the base, had it ever stood upright,-which is doubtful,-that these hollows exist. I have been informed, however, that it is not unusual in such circles to find the broader end forming the summit, while the narrower is sunk deep in the earth. If such has been the original position of this stone, then the broader end or base, upon which these markings occur, would have been uppermost. As regards the dimensions of the hollows and depressions referred to, they vary considerably, although not so much so as to interfere with their character as a whole, or to destroy their general resemblance. I should say that their average diameter is an inch and a-half, and their depth one inch, but the departures from this rule are very marked and various. It is obvious that the rock surface has not been prepared in any way for these markings, but is in its natural state, broken and irregular and ragged. No trace of the operation of any tool or instrument is discoverable, either within the hollows, or upon the face of the stone. It is difficult to convey anything like an accurate idea, in words, of these singular markings. I must refer you therefore to the diagrams before you.

I have said that I wish to express no opinion as to their origin and signification. This need not, however, prevent me from anticipating one or two possible and seemingly plausible explanations which may suggest themselves, and I do so at present, more especially for the sake of clearing the ground for connecting the subject with that of rock markings in general, and of showing the remarkable similarity which exists between what we have been describing and certain forms of marking which are now regarded by antiquarians as undoubtedly artificial and symbolical.

And first, that the markings on the Holywood stones are due to natural causes, to the slow operation of atmospheric agencies. To this explanation I have no objection, only it must first account for their greater prevalence in situations where the protection from atmospheric influences is greatest, which, as I have already pointed out, is a marked feature in the case,—the base of the larger slab being positively honeycombed with these hollows and depressions, and conversely it must account for their non-existence, comparatively speaking, where the exposure is greatest, only one of the slabs presenting them on its exposed surface, and where it may be remarked moreover that atmospheric

causes are silently operating rather in effacing the old markings than in creating new ones.

Another explanation which may readily suggest itself is that these depressions may have been formed by the falling out of rounded pebbles and nodules of other kind of stones, as may be seen every day in the rocks around us. To make this explanation plausible, however, we should expect to find the same cause at work on the Holywood stone now as heretofore, which is certainly not the case; indeed the homogeneous structure of the stones precludes even the possibility of such a cause.

Doubtless many other similar suggestions and explanations would arise from a consideration of the various operations of nature in the wear and tear of material. I should not, however, have thought it worth while to bring this subject before the notice of the Society but for the connection which I think will be seen to exist between the Holywood markings and certain markings of a similar character which have been found in other parts of the country, whatever may be the importance which may be attached to either. I allude especially to the figures described by Mr Tate in his paper on "Ancient Sculptured Rocks," published in the last issue of the proceedings of the Berwickshire Naturalists' Club, which was laid upon the table at our last meeting. On a considerable number of the stones there described there are hollows and depressions precisely similar to those on the Holywood circle. They are. however, almost invariably found accompanying or forming part of other figures, recognized as undoubtedly artificial and symbolical. It is impossible, therefore, not to believe that both are designed, and bear some relation to each other, and if so in the case of those described by Mr Tate, we may readily suppose that the same will hold good as regards the Holywood circle.

Notes on the Druid Circles in the Neighbourhood of Inverness. By Dr Gilchrist.

HAVING during the summer been in the neighbourhood of Inverness, noted amongst other antiquities for its Druidical Circles—having had two or three days to spare, and stimulated by a paper previously contributed to the society by Dr Dickson, on certain markings found on the Druidical stones on the banks of the Cluden, I paid a visit to as many of them as were within reach, and now give you the results.

First, I visited a Druidical Circle on the top of the ridge, between the well-known hill of Dunanc and Craig Phadrich, 3 miles south-west of Inverness.

Having probably contributed to the erection of two or three successive generations of cottages in the neighbourhood, I found it in comparative ruin and disorder; three concentric circles were, however, still traceable.

Second, visited another about 3 miles south of Inverness, on the east side of the road along the right bank of the Ness. Here the dilapidation was nearly as great as that of No. 1, the three concentric circles were, however, much more obvious, and easily traced, and besides there was a passage, distinctly visible, leading from the outer to the inner.

Third, visited a third at Leys, about 4 miles south-east of Inverness.

Found this very much in the same condition as the last described, with three distinct concentric circles and passage. It is, however, on a much more extensive scale than either of the two previously mentioned, many of the blocks are immense boulders of granite, and one, a sandstone conglomerate, locally called the sacrificial stone, is 18 feet in circumference, and 8 feet high above ground.

Fourth, my fourth visit was made to Clava, which appears to have been the sacra sacrorum of the Druids.

The spot is situated about a mile east of the field of Culloden, in a much secluded pastoral valley running north and south, bounded immediately on the west and east by a ridge of hills.

Here, in this solitary and well chosen spot, we have three distinctly separate yet closely contiguous sets of so-called Druidical Circles.

The first to the north consists of the usual outer circle of isolated blocks; within this, in the centre, is a circular chamber, the wall of which extends outwards and is nearly equal in thickness to the diameter of the chamber itself.

The diameter of the chamber is 15 to 20 feet, is approached from the outer circle by a passage of about 2 feet wide through the thickness of the surrounding wall.

Several feet of this wall remain to prove that it was built of stones in their natural condition, and so constructed as to form, over the chamber, a spherical arch, constituting the latter a hollow cone, so that when entire it must have appeared very much like those unæsthetic structures called bottle-works, familiar to all who have visited Leith.

The interior and exterior sides of the wall are faced with large slabs of stone, inferior in size, however, to those constituting the outer circle, the interspace being filled up with loose stones, apparently thrown in at random.

The same construction is observable in the passage of communication.

The spherical arched roof of the interior chamber is formed by the gradual approximation to each other of the successive courses of stone as they rise higher and higher.

No. 2, which lies immediately south, is in a much more dilapidated condition than that already described, but amidst the paucity of its remaining materials there can easily be traced the same form and construction.

No. 3 is again in very much the same condition as No. 1, and the description of which will equally apply to it.

In short, however dilapidated they may be now, enough remains to shew that as to material, form, structure, and arrangement they have been fac-similes of each other.

Allow me now to generalize these facts.

1st, In the whole of these six Druidical structures there are distinctly traceable three concentric circles in each.

2nd, With one exception, the first visited, and that apparently due to the scantiness of its materials and disarrangement of structure, the same can be affirmed with equal certainty of the approach alluded to, viz., a narrow passage leading from the outer to the inner circle.

3rd, This passage was found in every case to be nearly due south, or, so far as my imperfect observations may be depended upon, a little west of south.

4th, The more perfect condition of the remains at Clava, especially as regards two of the structures, appear to me to give the key to the formation of those whose less perfect remains do not so easily indicate their original form, and thus warrant the inference that the whole six were originally precisely the same, viz., that each separate structure originally consisted of an interior chamber enclosed by a thick wall, and entered through it by a narrow passage from the south, and surrounding all an exterior circle of isolated blocks.

My general conclusion is that the three circles so often mentioned are,

First, the exterior one, consisting of isolated blocks, and corresponding to that with which we are more familiar in similar structures in our own neighbourhood.

The second consisting of the foundation slabs which originally formed the base of outer side of the wall inclosing the interior chamber.

The third consisting of the corresponding blocks on the inner face of the wall—that is, constituting the boundary wall of the chamber itself.

I am further of opinion that all this is capable of simple explanation, if not of easy proof. It is well known that wherever the demand existed the materials of these structures have been devoted to utilitarian purposes, from which it naturally follows that where the demand was greatest the perfection of the original structures would be least.

Thus in the three first structures visited, which lie nearer to Inverness, and in a more populous district, and where the

demand was great, we find all the manageable materials removed while the less useful and unmanageable are left, viz., the large and unwieldy masses forming the outer circle, and the basement of the outer and inner sides of the chamber wall.

At Clava not only is the supply greater from the increased number of structures but the demand less from its isolated position, hence here even the manageable materials have been only partially removed.

May I further hazard a conjecture: may it not be in our own neighbourhood, where, so far as I know, only one circle occurs, the outer, as I suppose, that the absence of the two interior are due to the greater demand for material in a populous district. The slabs, of which these two are constructed, being always much less in size and therefore more manageable than those forming the outer circle.

Let me now say a few words as to the marking found.

So far as I know those markings have not been hitherto discovered or described, at all events they are not mentioned in the last edition, 1863, of Anderson's well known scientific Guide to the Highlands. I must state, however, that I am not acquainted with and have not time to examine the literature of the subject.

These markings were found by my companion, Mr. Browne, and myself, on the most southern of the three structures at Clava.

The first on a slab in the basement of the interior face of the chamber wall, contiguous to but on the western side of and at the interior termination of the entrance passage.

The slab was a tolerably fine sandstone, apparently in its upright and original position, but covered with debris to an unknown depth.

Three to four feet square of its upper portion was exposed, exhibiting ten markings seen in the diagram, and which as to form, size, and relative position may be considered pretty exact, as they were transferred to the present sheet from a rubbing taken on the spot.

The markings are cup-shaped, cup-sized, somewhat irregular in outline, different in size, and in depth vary from a quarter to an inch. Their irregularities probably to some extent depend on the weathering of the stone.

On revisiting the northern-most structure similar markings were found on the last slab of the western side of the entrance passage, fewer in number but in all other respects the same as those alluded to.

Other markings were found, or supposed to be found, but too obscure to be thought worthy of note or comment. In making these observations I have endeavoured to confine myself to the facts which came under my own observation.

The only allusion to theory I wish to make is a suggestion offered by one of my patients, to whom I am indebted for the construction of the diagrams—viz., that the thirteen blocks which constituted the outer circle of the structure, in which the markings were found, represented the thirteen moons of the year, and prove that these temples were dedicated to sun worship.

THE REGULATION OF FARM SERVANTS IN DUMFRIES-SHIRE IN 1751. By W. R. M'DIARMID.

As at present something like an agitation has sprung up among the farm servants in the midland counties of Scotland, it may not be uninteresting to obtain a peep into their condition and the relations betwixt them and their employers in Dumfries-shire 115 years ago.

The following extract is taken from a minute of a meeting of Quarter Sessions held at Dumfries on the 5th of March, 1751, the sederunt consisting of Sir Robert Laurie of Maxwelton, Commissary Goldie, Collieston and Guillyhill.

The first proceeding of the Trustees, by the way, at this meeting was to banish from the shire three persons named

Mary Cuthbertson, William Beaty, and Charles Stewart. No information is given as to the offences which they had committed. If these persons were farm servants, unless other eounties were under the same regulations as Dumfries-shire, the punishment inflicted might not be held as a severe one.

"The Justices of Peace considering that, notwithstanding of the former regulations and acts made anent servants' fees, and the time and manner of hiring servants, the said acts are broken and disregarded to the great hurt and prejudice of the tenants and land labourers occasioned by the extravagant humour of servants by reason of the present plenty. For remedy whereof, the said Justices, to the effect that there may be due order and regulation anent the premisses in time coming, do ordain and enact that the fees of servants within this shire from and after the term of Whitsunday next, 1751, until it shall be thought expedient to make new regulations concerning the same, shall be as follows, viz.:—

"That a domestick servant man who can plow, thatch, mow hay, bind, cart, car, and harrow, and work all husband work, and is an ax-man for all husband utensils, shall have any fee agreed upon betwixt his master and him, not exceeding two pounds ten shillings sterling yearly, or two pounds five shillings sterling, and two pairs of shoes.

"Item, that a barn man who can thresh in the winter season, herd a sufficient hirsel in summer, and can lay on loads and drive carriages, and is capable to serve at kiln and miln, shall have any fee agreed on as said is, not exceeding £1, 16s, 8d., or £1, 11s, 8d. sterling and two pairs of shoes,

"Item, a young man or lad who can lead or drive the plough in winter, or herd calves or stirks in summer, shall have any fee, agreed on as said is, not exceeding 18s. 4d. sterling yearly, or 13s. 4d. sterling and two pairs of shoes.

"Item, a strong sufficient servant woman for barn, byres, shearing, brewing, baking, washing, and other necessaries within and about the house, shall have any fee agreed on as said is, not exceeding 30s. sterling yearly, or 25s. and two pairs of shoes.

"Item, a lass or young maid who can spin or card in the winter season, and herd in summer, shall have any fee agreed on, not exceeding 16s. 8d. sterling yearly, or 13s. 4d. and two pairs of shoes.

"Which respective fees above mentioned are hereby declared to be in full satisfaction to men and women servants of all that can be asked or craved or shall be given to them for their year's fees as above mentioned. Declaring that where the master gives or the servant receives any greater fees than those above expressed, such feeing is hereby declared not only void and null, but also both masters and servants who shall presume to contravene the premises shall be liable in ten pounds scots each to be paid to the procurator-fiscal upon their being convicted thereof before the Justices of the Peace either by their own oaths or by witnesses, and that toties quoties: which fines shall be applied by the said Justices as they shall think proper, and declaring that where any surplus or bounty such as grazing or wintering of nolt or sheep, shoes, shirt, linen apron, or any other additional bounty whatsoever shall be given and received by any master servant more than what is particularly above appointed, the same shall be accounted a transgression of this Act, and the parties transgressors fined and punished conform thereto as above: and because there may be several private pactions and underhand dealings between masters and servants which may be so privately transacted that neither the Justices of the Peace or constables can have any knowledge thereof, Therefore for redressing such abuse it is hereby declared and ordained that whatever person or persons shall dilate any master or servant who have contravened the premises by giving or receiving greater fees than those mentioned, and shall prove or make out the same by witnesses or oath of party, the informer shall have one-half of the fine incurred for any such transgression with his expenses off the other half of the fine to be modified by the And whereas great inconvenience happens by servants feeing at any time they please and by their feeing

for less than one full year, therefore for preventing such inconveniences for the time to come it is hereby enacted and ordained that no servant shall hereafter fee or engage with a new master for less than the space of one year to serve his said master: and it shall be in the power of the master to keep him or her as his servant for that time: and albeit he or she should fee to another such feeing is declared void and null, and the servant shall be liable to be fined as above: and it shall not be in the power of the masters to turn off their servants for one year after feeing, under the above penalties, unless when sufficient cause can be shown before some of the Justices. Provided always that if both the masters and servants voluntarily agree to part at the end of half a year they shall have liberty to do so: and it is hereby farther enacted that no master hire domestic servants, male or female, for ordinary household service or labour and husbandry within or without house within this shire, and that no servant hire himself or herself preceding the first day of March as to those whose entry shall be at Whitsunday, and the first day of September as to those whose entry to their service shall be at Martinmas, (excepting always that masters may hire their own servants at any time,) certifying the contraveners hereof, either masters or servants, that they shall not only be liable in a fine of half a year's fee conform to the regulations above mentioned, and shall be further proceeded against as the Justices shall think fit, but all agreements made with servants before the times above mentioned shall be void and null and of no effect: and whereas there is a great penury of good servants, and that many of them are frequently much inclined to idleness, and both men and women servants very often leave their service and keep themselves idle without any visible lawful employment, for preventing all which inconveniences for the future the said Justices hereby enact and ordain that no persons who have been in the use of hiring themselves as domestic servants to husbandmen or labourers of the ground shall betake themselves to any other employment without a license from

two Justices of the Peace, under pain of twenty shillings sterling, besides being liable to be obliged to serve as a domestic servant for the space of a year to any person who shall apply to a Justice of the Peace for that purpose, and if any person want a labouring servant, either man or woman, and can discover any person fit for service not engaged who is not following some lawful business, or who has been formerly a domestic servant and who has not got a license to employ him or herself otherways, upon a complaint thereof to any one Justice of the Peace any such servant shall be obliged to enter home to such master claiming him or her, or shall be obliged to give security for his or her appearance at the next quarter sessions, to be tried and punished in terms of this Act, according as the Justice before whom he or she is brought shall see cause; and in case the Justice shall take security for such person's compearance before the Quarter Sessions he shall inform the Procurator-Fiscal thereof that he may prosecute him or her accordingly: and farther, the said Justices enact and ordain that when any servant inclines to remove from his or her present master, he or she shall be bound to give over their master's service three months before the time of removal and that before two witnesses, otherways his or her service is to be continued for the next ensuing year; as also that the said servant's master is and shall be obliged to accept of his or her service: entertain and pay him or her for the same unless that he can instruct that three months before the term of removal he did discharge and free his said servant from his or her service before two witnesses: and for the encouragement of servants the said Justices ordain that their masters make timeous and punctual payment of their fees: and if any servant complain to any one Justice of the Peace of their not being punctually and thankfully paid of their fce, the said Justice is empowered to compel the deficient master complained upon to make present and complete payment to the complaining party of what shall be found justly due, with such reasonable expenses as the said Justice

shall think fit to modify to be paid with and over and above the resting fee. And, further, the said Justices enact and ordain that all persons who have been ordinary servants or are in any capacity or ability to serve, both men and women, older and younger, and are not presently in service, that they immediately apply themselves thereto and fee themselves to such persons as have occasion for them, not exceeding the said fees and wages above mentioned, otherways to be reputed and holden as vagabonds, and punished as such, and that the Justices in their several districts cause apprehend all such idly disposed persons as shall after the term of Whitsunday next be found within the same and incarcerate them until such time as they go to service or find caution or enact themselves to serve in the foresaid terms: Declaring that the above regulations with respect to the extent of fees shall not be extended to Annandale or the Five Kirks of Eskdale, where because of their vicinity to England different rules are necessary to be observed, which the Justices in that bounds are desired to make, and in the meantime they are to proceed as formerly. And the Justices ordain these presents to be immediately printed and published and a copy thereof to be sent to the precentor of each parish kirk to be by him read the first Sunday after receipt of the same immediately after divine service, and retained in the custody of the said precentor that all persons may have access to see this Act, and appoint copies thereof to be fixed on the several kirk doors and on the mercat crosses of the several burghs within this shire that none pretend ignorance thereof."

The allowance made in the scale of wages fixed by the Justices for pairs of shoes enables a comparison to be drawn betwixt the real value of wages in 1751 and in 1866. I find upon enquiry that the present price of the strong shoes worn by workmen is 12s. 6d.; in 1751 the price was 2s. 6d. The average wages of experienced ploughmen at present is £18 per annum, giving a purchasing power of nearly thirty pairs of shoes; the wages in 1751 possessed a purchasing

power of twenty pairs. Taking shoes as the standard of value, the ploughman's wages in 1751 were equal to £12, 10s., so that the wages in 1751 were rather more than two-thirds of what is now paid.

The wages of experienced female servants hired for farm work are at present £9 per annum, and the price of their shoes is 8s. 6d. This shows a purchasing power of twenty-one pairs of shoes. In 1751 their wages had a purchasing power of twelve pairs. Taking shoes as the standard of value, the wages of women servants in 1751 were equal to £5, 2s. per annum. In 1751 the Justices state the cost of shoes for men or women at the same figure, 2s. 6d.: at present women's shoes are about a third cheaper than those of men.

CLERICAL CUSTOMS IN THE OLDEN TIME—PREACHING AND THE PULPIT. By Rev. D. Hogg, Kirkmahoe.

To even a mere superficial observer of men and manners, it is evident that there has no greater change come over the face of Scotland during the last one hundred years than that connected with the clergy in the discharge of their professional duties. In their pulpit ministrations, church discipline, and pastoral superintendence in general, very great alterations have taken place, and it is gratifying to know that so far as these have been effected they have generally received the approbation of those whose opinion is entitled to regard. No doubt further modifications are thought necessary and are desiderated, and it is only reasonable to suppose that in the course of time they also will be carried out, for there is nothing truer than the common maxim. "tempora mutantur et nos mutamur." One of the best encomiums which man can receive after he has passed away is the assurance by posterity that he served his day and generation, and the same may be said of all other things as well.

Some of the clerical customs which were supposed to edify and enlighten in olden time have undergone considerable modification, while others have died away altogether, and without any disrespect to the memory of these latter, or those men who carried them into practice, it may be said of both, that the day of their death was better than that of their birth. They had their day, and they were in some degree suited to the character of the people, and were intended to be beneficial to the interests of religion, though we fear it must be said that their self-importance greatly exceeded their usefulness even when most effectively carried out. The edification of these times seems to have had a close affinity to its namesake terrification, as we shall in another paper show. To see men and women with the almond tree in blossom, trembling before their minister, like malefactors before a judge, or school boys before their master, but yet unconscious of any reason why, was by no means an agreeable sight; and it is now matter of wonder that such a state of things should ever have been tolerated in a Christian land. However, the ban of the clergy was an irresistible power, and excommunication from the privileges of the church was regarded as tantamount to exclusion from the kingdom of heaven itself. We shall now give a sketch of some of these customs which have now either become obsolete, or are greatly modified in their observance, and we shall begin with those having reference to Preaching and the Pulnit. Our illustrations shall be drawn from whatever reliable sources are within our reach, whether oral or recorded. though a special preference will be given to such as are original, or have never been met with in print.

The Clergy seem to have affected a display of gaudy colours and costly material, as well as rich ornamentation in the style of their costume, from the time of the Reformation for more than a century and a half downwards; and the General Assembly of 1575, in order to check the tendency, considered it necessary to pass the following Act on the subject:—" Forasmuch as comely and decent apparel is requisit

in all, namely in Ministers, and such as bear function in the Kirk, we think all kind of broidering unseemly, all Begairies of velvet in Gown, Hose or Coat; all superfluous and vain cutting out, steeking with silks; all kind of costly sowing-on of Pasments, or sumptuous and large steeking with silks; all kind of costly sowing or variant hews in shirts; all kind of light and variant hews of clothing, as red, blue, yellow, and such like, which declare the lightness of the minde; all wearing of rings, bracelets, buttons of silver or gold, or other finge metal; all kind of superfluity of cloth in making of hose; all using of plaids in the Kirks by Readers, or Ministers, namely in time of their Ministry and using of their office; all kind of souning, coating, doubleting, or breaches of velvet, satine, taffaty, or such like stuffe; costly guilding of whingers and knives; silk hats of divers and light colours. But we think their whole habit should be of grave colour; as black, russet, sad-gray, sad-brown, or searges, worsat, chamlet, grogram, syles, warsat, or such like. To be short, such as thereby the Word of God be not slandered through their lightness or gorgeousness; and that the wives of Ministers be subject to the same order."—(Calderwood's History.) From this it will be seen that the home-made dark-gray cloth in which the clergy clad themselves was not altogether of their own choice, or necessitated by their poverty, but was worn as obedient sons of the church.

The pulpit costume of the preacher was by no means a matter of indifference, or left to his own selection. As gowns of various colours, but generally gray, continued to be worn in the pulpit, and were thought unbecoming the graveness of the profession, the Synod of Dumfries in 1696 passed a recommendation to the following effect:—"The Synod, considering that it's a thing very decent and suitable, so it hath been the practice of ministers in this Kirk formerly, to wear black gowns in the pulpit, and for ordinary to make use of bands, do therefore, by their act, recommend it to all their brethren within the bounds to keep up that laudable custom, and to study gravity in their apparel and deportment every manner of way."

The use of the gown was long objected to by the people as being a "remnant of Popery," as well as the bands, called the "bib," and in some parishes at the present day the hostile feeling is not extinguished. The first time the minister of Kirkmahoe appeared in this vestment, which had been presented to him by Mrs Hannah of Carnsalloch, many of the congregation demurred, fretted, and threatened to leave the Church. The Precentor was not forthcoming from that day afterwards, without giving any reason or intimation of his absence; and it was only after a year had elapsed that a pencil-writing was found in the inside of the precentor's book declaring he would no longer precent to a minister that wore a black gown. In some of the Dissenting churches this "remnant of Popery" has never yet been allowed.

The psalm sung at the commencement of public worship was called the "inganging" or the "gathering" psalm, from its being sung at the gathering or assembling of the worshippers. It was always prefaced or explained for about 15 or 20 minutes, the occasion of its composition, the feelings and aspirations of the author being fully dwelt upon, and a suitable application made of the whole to the circumstances and condition of the present audience. This was peculiarly favourable to devotional sentiment, and a good preparation for the portion of the service which was to follow. But it was apt to degenerate into mere religious disquisition in order to fill up a certain amount of time, as all psalms were not equally pregnant with spiritual thought; and as some of them came to be given out again at no great intervals of time, the exposition, if textual, would begin to appear monotonous from repetition. On the whole, however, the practice was a good one, and ought not to have fallen into desuetude, leaving the people to make their own application of the psalm, if they make any at all.

From the want of psalm-books in the congregation, each line of the psalm was read out by the precentor immediately previous to its being sung. This was called "reading the line," and it enabled those who had no book, or whose eye-

sight was dim, to join in the celebration of praise with the mouth and the understanding also. When the Scriptures with the psalms, paraphrases, and hymns, attained greater circulation, and every worshipper was understood or supposed to possess a copy, the reading of the line began to be discontinued as no longer necessary, an innovation which was greatly resented by the majority of the people, some of whom refused to join in the psalmody thereafter, and some left the church and united with others where the practice was unchanged. The reading of the line was performed with a peculiar intonation, the last syllable being protracted beyond any of the rest; and as the pronunciation was not always the most correct strange blunders were sometimes committed. Thus the 2d line of the 42d psalm was always read, "In thurst doth paint and breiy." The 16th line of the 35th psalm was read, "They ganshed their teeth at me." The word soul was pronounced sowle—incessant was called innocent, and similar other mistakes were made. Even when no such mistake occurred, the very separation of the lines sometimes created awkwardness and confusion. Thus "Be silent, but speak out"—and the line too, "I'm like a broken pot," sometimes tickled the fancy of the hearers from its striking appropriateness to the precentor himself on the occasion. From his position in the desk he obtained a full view of the audience, and from his long tenure in office he assumed a freedom and a familiarity which does not seem to have been taken amiss, and he would occasionally interpolate the singing with reference to the conduct or the duties of those before him. In a church in the West of Scotland the family of a noble house was one day walking up the aisle to the communion tables, when the precentor, seeing a person obstructing the passage, called out in the middle of the singing, "Stan' back, Jock, and let the noble family of Eglantine in "-and then in the same key and without stopping, he read out the line, "nor stand in sinners' way!" This custom of reading the line was suited to the times in which it was practised, but these times have now passed away.

The sermon had several characteristics, without which it would not have passed muster at all as a religious discourse. in the minds of those to whom it was addressed. It was always long, very long. One of the shortest then was equal to two of the longest now. From an hour and a quarter to an hour and a half, and even two hours sometimes, were expected and given. No matter what the subject might be, whether pregnant or barren of thought, necessity was laid upon the preacher, by whatever means he might employ, to spend upon its consideration the usually allotted time. Then the divisions and sub-divisions were almost infinite, and the saying about 8thly in the 17th place was no great exaggeration after all. This multiplicity of particulars, as they were called, arose, perhaps, not so much from the necessity of a right classification of ideas illustrative of the doctrines propounded, as from the extreme length of the discourse, this fragmentary manner of composition admitting great discursiveness of fancy by which abundant matter might be introduced without the fear of coming too soon to a conclusion. The winding up of the whole had also its several divisions of lastly, finally, in conclusion, and one word more. A third characteristic of the sermon was the peculiar tone in which it was delivered. This was called by various names, such as the "sough," the "whine," the "clerical wail," and the "drant." It was supposed to add considerable dignity and unction to the discourse, and was greatly approved of by the hearers. On the first Sunday after the ordination of a minister in the Cameronian meeting-house at Quarrelwood, the congregation at the close of the service remonstrated with the new minister, and insisted on his using the drant in which his predecessor had been a great proficient. However, he sternly refused, declaring he would preach in the natural voice which God had given him.

Considering the great length of the sermon, the heads, and particulars, and uses, and directions, into which it was broken up, the tone in which it was delivered, and the dry character of its composition, it is not to be wondered at that

the interest of the hearers often flagged, and a soporific tendency stole over the greater part of the audience. The sudden physical change of the body from a state of activity to that of rest, the quietude of the place, and the recumbent attitude often assumed as the text was announced, assisted in no small degree the influence of the drowsy god, to the great annoyance of the preacher. Various methods were adopted to put an end to the evil, with more or less success, but the effect was only temporary, as a Sunday or two afterwards showed the habit as inveterate as ever.

The Relief Minister of Auchtermuchty was one day preaching for his brother minister in Kettle after the communion there. The day was very hot, the church crowded, and a considerable number of the hearers were either nodding or fast asleep. The preacher felt this annoying, and had recourse to the following plan to rouse them. He took occasion to introduce the word hyperbolical into his sermon, and immediately stopping short as if he had used an improper word, he said,-"Now, my friends, as some of you may not understand this word hyperbolical, I will explain it. Suppose I were to say that the whole congregation in this church was asleep at the present time I would be speaking hyperbolically, because I don't believe much more than the half of you are asleep." This had the desired effect, for every one was roused, and the speaker went on as if nothing particular had occurred.

A former minister of Terregles was much annoyed by his people sleeping in church, and he resolved one day to put an end to the habit if possible. When he had reached the 3rd head of his sermon, he stopped suddenly in the middle of a sentence, and shut the Bible forcibly, saying "he had not composed his sermon when he was sleeping, and he did not mean to throw it away upon sleeping folk."

The Rev. Walter Dunlop of Dumfries did not mince the matter in rousing the sleepers of his congregation. One day he paused in his sermon and said, "I see some o'ye hae taen owre mony whey porridge this mornin' Sit up and shake it aff ye."

Strange as it may seem, we have heard of a preacher himself falling asleep in the pulpit while delivering his sermon. On the previous day he had been dining with a nobleman in the parish, and had afterwards played at cards with him till a late hour, when he returned home. Next day in the pulpit towards the end of his discourse, a drowsy stupor suddenly fell upon him, and he called out, "Hearts is trumps, my Lord," to the great amazement of the congregation, but immediately recovering himself, he exclaimed, "I say, let our hearts triumph in the Lord!" and thus adroitly got out of his awkward position. Sleeping in the pew is bad, but sleeping in the pulpit is worse; and when there is drowsiness in the one it is natural to expect nodding heads in the other.

As clocks and watches were not so common then as now, and as sermons were not read, the preacher had no idea how the time was going; a sand-glass was therefore erected on a stand in front of the precentor, whose duty it was when run out to hold it up before the minister as a hint that his sermon should come to a close. Though this piece of antiquity is not now found in our churches, a representation of it is occasionally met with in our churchyards on the gravestone of some forgotten worthy, where, along with pick and spade, it symbolizes the end of life and the grave.

After the blessing was pronounced the minister bowed from the pulpit to the principal heritors according to the right of precedence. Two heritors in the parish of Lanark so keenly disputed about the right to the first bow that the matter was referred to the presbytery, who forbade the minister to bow any more in the church, and admonished the two heritors with regard to their conduct for the future. Dr. Wightman of Kirkmahoe paid a very complimentary remark to Miss Miller of Dalswinton, who was greatly noted for her beauty, and who rallied the minister one day for not bowing towards her on the previous Sunday when she alone was in the family pew. "I beg your pardon," he replied, "but you surely know that angel worship is forbidden in the Church of Scotland;" and, lifting his hat, passed on.

The ordinance of communion, or the "preachings" as it was called, from the amount of preaching which attended it, afforded a favourable opportunity for the exercise of ministerial gifts of various kinds in the several addresses which were delivered. At the close of public worship on Saturday before the blessing was pronounced the minister himself entered the pulpit and gave some directions about the next day's worship. This done, then followed a long and minute recapitulation of the sermons which had just been delivered, as well as on the fast-day preceding. This was called "perlequeing," and was considered advantageous to the hearers, as bringing into a focus before them the lessons of instruction to which they had listened. Sometimes the sermons were found fault with and severely criticised. The minister of L-n, in Galloway, was accustomed to speak very freely when engaged in this duty. On one occasion he attacked the discourse which had just been given by an experienced clergyman, and tore it to shreds, declaring it heterodox and unsound. The people knew their minister's tendency, and paid no attention to it, and the preacher did the same.

The Sunday was the greatest of all the days in importance, solemnity, and outward excitement, several ministers arriving to assist in the work. As the pulpits of the neighbouring parishes were always thrown vacant on that day, the populations gathered in crowds, and were addressed from a tent in the churchyard, while the more solemn part of the duties was conducted inside the church. Sometimes, for the greater accommodation of the worshippers when the weather was favourable, the tables were arranged in the churchyard in front of the tent, and the whole services of the day were conducted in the open air. This had a solemnity and a sublimity not realised within the walls of the church. The simple mind looked up without obstruction to the heavens high above his head, and he felt the homage of his heart and the utterance of his lips rising in sweet memorial to the throne of God. The field of death around brought the worshippers, as it were, into closer proximity with their God, with the

great resurrection, and those kindred spirits who had gone before to the mansions above. There, seated on the green graves, or the grey tombstones, with the dust of generations beneath them, it required but little imagination to consider both dead and living listening to the Word of Life, or standing for judgment before the great white throne. The old trees around, venerable with age, like the Cedars of Lebanon, and the blue yault of heaven far above, gave additional impressiveness to the scene, and imparted a charm to the occasion which wrought a beneficial influence upon the hearer's heart. Besides, suitable topics were often suggested for discourse to those who addressed the assembly present. Some of the ministers were very felicitous in adapting their addresses to the peculiar circumstances in which they were placed, which always produced a solemnizing effect. The following is told by James Hislop, though not quite in his own words:-

On one of these occasions the Ordinance was just about to be dispensed in the churchyard of Sanguhar, which is picturesquely situated in the shade of aged trees, and surrounded with high hills. The long tables, covered with snow-white cloths, were filled with devout worshippers, while hundreds were seated around, waiting till they could be admitted in turn. The action sermon and other devotional exercises were over, and the minister at the head of the tables had read the latter portion of the 116th psalm, usual at such times, when an awful peal of thunder burst over their heads, echoing and re-echoing among the hills. All were struck with the profoundest awe, and held their breath till the sound had died away. It seemed as if the Almighty was giving an audible approval of the religious ordinance in which they were engaged. When all were hushed in deathlike stillness, the minister addressed them in the following terms :- "My friends, how dreadful is this place! This is none other but the house of God, and this is the gate of heaven. He, before whom we must appear in judgment, from His pavilion of dark waters, and thick clouds of the skies, in a voice of thunder, is now addressing us, who are

assembled around His table; and I have no doubt that if the thin veil by which we are separated from the invisible world were drawn aside, we might discover, among these dark clouds where the thunder is rolling, the throne of Him from before whose face the earth and the heavens shall flee away —we might behold on the mountains around us the bright armies of heaven, drawn up in their shining ranks, under the banners of the King of Righteousness—we might behold those who have joined with us at this table, whose graves are now rising green beneath our feet, but whose spirits are in glory. I say we might behold them looking upon us with heavenly joy and satisfaction, while we join ourselves unto the Lord in a perpetual covenant never to be forgotten." Every worshipper there might well remember that Communion season till the latest hour of life.

In Fencing the tables, what was called the Debarring was always lengthened and minute, while the Invitation was comparatively short and general. The Debarring was so called from the several classes of sinners addressed being solemnly debarred from approaching the ordinance. minute and comprehensive was the enumeration of these classes that one would have thought the tables were prepared in vain, as none could be entitled to come forward with impunity. As a specimen of these debarrings, one clergyman is reported to have said-"I debar from these tables all those who use any kind of minced oaths, such as heth, teth, feth, fegs, losh, gosh, or lovenenty." No doubt the great object of such particularity was to preserve the purity of the ordinance and prevent the commission of aggravated sin, though there was a seeming inconsistency in what followed, the earnest persuasiveness in inviting and urging communicants to come forward and partake of the memorials of redeeming love.

While the church was filled in every part, pews, passages, and stairs, the tent was the great attraction, and the service in the churchyard began as soon as a considerable audience had collected, and was continued by relays of preachers till

the worship in the church was over, far towards evening. Those clergymen who did not require to use the MS. always got on well in the tent, for besides the stroke of popularity in not using the "paper," it was a great oratorical advantage to be able to lean over the fauldboard and glance at all around, making some allusion to the sleeping dust beneath; while those who used the MS, had sometimes considerable difficulty in keeping it before them from the fitful gusts of wind that would rush in through the trees. We once saw the papers of a preacher in this position whirled out of the tent altogether, and as the stitching seemed to have given way, they were blown in various directions over the churchvard. The tent was immediately deserted by the surrounding audience, who ran in pursuit of the lost treasure, while the preacher acted as well as could be expected, and quietly gave out a psalm which was joined in only by the precentor and himself. As it was likely some time would be necessary to collect and re-arrange the "parchments," a message for another minister was sent into the church, while he engaged the audience in prayer till the required assistance arrived.

The performances of the various preachers were all freely criticised by the hearers on the way home when the day's duties had come to a close, and their criticisms were often of a peculiar character. Dr. Scott of St. Michael's, Dumfries, was once assisting at the communion in Urr, where the other officiating clergymen were great guns from Edinburgh. Though a distinguished preacher in the locality he greatly exerted himself that he might not be eclipsed by the strangers from a distance. He gave one of his best discourses as a table address, the subject of which was the resurrection. which he treated as possible—probable—certain. It commanded the most solemn attention and interest. tent he preached from the text "There is joy in the presence of the angels of God over one sinner that repenteth," and made a great impression. A little band of old women on their way home in the evening, shortened the road by discussing the merits of the several preachers who had addressed them, when a worthy dame who had not spoken before on being applied to for her opinion, gave it honestly thus:—
"Leeze me abune them a' for yon auld, bell'd, clearheaded man that spoke sae bonny on the angels, when he said Raphacl sings, and Gabriel strikes his goolden herp, and a' the angels clap their wings wi' joy. O but it was gran! It just put me in min' o' our geese at Dunjarg, when they turn their nebs to the south an' clap their wings when they see the rain's comin' after lang drooth."

The abolition of tent preaching on sacramental occasions was one of the greatest reforms in the Church of Scotland, and for this we are, in a great measure, indebted to Burns's satirical poem "The Holy Fair." The various descriptions there given of men and manners may be thought more plain than pleasant by some, but thousands can bear testimony to the truthfulness of his representations as having been witnessed in their own parishes on similar occasions. It is well known that in times not very long ago, when servants were engaged at the hiring fairs in the west of Scotland, at Ayr or Maybole, they always stipulated for a day either to Kirkmichael Sacrament or Ayr Races. Amusement was their object, and they made assignations with friends and sweethearts to meet at either of these places as might be most convenient, or where the greatest amount of enjoyment was likely to be found. The results of such gatherings we shall not seek to follow, but wish them blotted from the Church Court Records, and forgotten as if they had never been. So far as we are aware there is no such thing now in any of the Lowland parishes of Scotland. It is a thing of the past, and many of the present generation do not know it even by name. Would it had been always so! Doubtless the clergy did not allow, far less approve of, the indecorous scenes which then took place; and doubtless also they admonished, and exhorted, and rebuked in no lenient degree those accused of their participation, but nevertheless the custom continued to prevail with unabated vigour, and amelioration was scarcely to be hoped for, if it could only be

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restrained from going further, supposing that possible. Burns was, however, longer-sighted. He saw the effect must continue while the cause existed, and therefore taking one of his sharpest pointed shafts he aimed at both, and the world can now testify as to the result.

When the tent at C—, in Ayrshire, was laid aside from further use, a discussion arose at an heritors' meeting with regard to its disposal, and it was unanimously agreed that the sides should be converted into backs for the communiontable seats, which heretofore had been only long moveable forms. The top, however, from its peculiar shape, presented a difficulty. There was no purpose to which it could be adapted; but on the suggestion of one more liberal than the rest it was finally resolved to present it as a "hopper" to the parish miller. Had it been able to quote Shakspere, it might have cried out in retaliation "To what base uses do we come at last!"

A FEW DUMFRIESSHIRE WORDS NOT IN Burns and NOT CURRENT IN OTHER COUNTIES, e.g. RENFREWSHIRE. By Mr James Shaw, Tynron.

for

supple, clever.

	Kir	_	tight, clean.
To	Stell		to stick, to stand.
	Bask	_	hard, dry, (applied to weather.)
To	Chun	_	to sprout.
	Reeves	_	sheep folds.
	Channel-stones		curling-stones.
	Wad		black lead pencil.
	Caum	_	slate pencil.
To	Trone (the school),	_	to play the truant.
	Gellic	_	iron, pinch, or lever.
	Lauchter	_	a brood, a litter.
To	Buist	_	to mark sheep with the initials of the owner.

Stampcole	for	hay rick. [districts.
Yaws		throat-disease peculiar to certain
To Wear (a gate)		to open and shut it at sheep shearing.
Hoshens		footless stockings, Renf. huggers.
Bedstane		a flat stone used in a girls' game, Renf. Peever.
Wented		soured, (an English north country word.)
Launer		dressmaker.
Hirsel		shepherd's flock, flock's pasture ground.
Cosy		baby's cap.
Pingle		pan.
Snoysters		pork puddings.
Sevendle	_	secure.
Boiler		kettle.
Steekers		shoe laces.

In districts where manufactures and dense population have made several animals, &c., scarce, the following phrases are unmeaning, but are generally understood in Dumfriesshire yet:—

- "Stinking like a brock."
- "As greedy as a gled."
- " As mad as an ettercap."
- "Reeking like a kilnogie."

Stank-hen, heather-bleet, kaid, gowk, are understood; as also the phrase,—

"As blae as the blawart."

A line of Burns unintelligible to a Renfrewshire man, I have found understood by Dumfriesshire peasants, i.e.,

"A daiman icker in a threeve."

Curious pronunciations of proper names in Dumfriesshire—

Frizzle for Fraser. Tremmle for Turnbull.

Hodson — Hewison. Mingas — Menzies.

Foster — Forrester. Dusdeer — Durrisdeer.

The Sanquhar, the Keir is current, never the Dumfries, the Thornhill. The use of as for than is very marked, e.g.

"better as it," for "better than it." The word of is used for some, e.g., "there were o'them," for "there were some."

There is a marked difference in the pronunciation of vowel sounds, and the transposition of letters in Dumfriesshire from Renfrewshire, e.g.

Renfrewshire hame.

nfriesshire	hyame.	Renfrewshire	hame.
_	tüch.	_	tŭch.
_	dück.		dŭck.
	twāy.	_	twau.
	reed (colour.)	_	rid.
_	teeming (emptying.)	_	tumming.
_	buddum.	_	bottom.
	slid. '	_	slippy.
	shillying (making grimaces	s.) —	showling.
-	shiny.	_	shinty.

Poor Laws in Dumfriesshire in 1750. By W. R. M'Diarmid.

THE existence of a portion of the population, either unable or unwilling to work for their living, the latter with a constant tendency to form part of the class not quite unwilling to work, but working by taking the fruits of the industry of others, has been a constant difficulty in almost every nation, and especially in old and densely peopled countries. Even in early times when the population of Scotland was sparse, vagrancy became a serious evil, of which we have a vivid description from the pen of Fletcher of Saltoun. In 1424 the Scottish Parliament passed an Act prohibiting all begging without a badge under the penalties of burning on the cheek and banishment, and in 1535 these penalties were extended to all who begged beyond the bounds of the parish of their birth: a repetition of these offences involved the extreme penalty of the law. About the end of the 16th century the execution of these acts was entrusted to the

Sheriffs and the Magistrates of Burghs. The case of the aged and disabled poor was dealt with by the Act of 1535, who were to be provided for by a tax levied in their native parish: and in parishes where the assessment and the voluntary contributions at the church-doors were not sufficient to maintain the poor they were allowed to beg, but not beyond the parish bounds. There is, however, reason to believe that these provisions were not strictly enforced in Scotland. For a systematic poor law in vigorous operation the country is indebted to the legislative labours of the present President of the Court of Session: the subordinate subject of vagrancy still requires to be thoroughly dealt with.

A description of the state of Dumfriesshire as regards vagrancy is given in a presentment by the Justices of the Peace in 1751, in which it is stated that notwithstanding the Act punishing by imprisonment and death vagabonds, sturdy beggars, sorners, or Egyptians, commonly called gipsies, for these many years past, and especially of late years, this shire and county hath been greatly infested by vagabonds, sorners, and Egyptians who frequent it and travel together in bands, occasioning great terror and fear to the inhabitants of the county, who are forced to give them quarters in their barns or kilns in order to save their houses from being burnt.

Soon afterwards in the same year the Sheriff-Depute took up the subject and convened a meeting of Justices and landed proprietors to whom he proposed a plan which had been found to work well in the county of Berwick. The meeting expressed their approval of the proposals made by the Sheriff, but delayed a final decision until the Duke of Buccleuch and Queensberry, the Marquis of Annandale, the Earl of Hopetoun, and Viscount Stormont, who have great property in the shire, be consulted. At a subsequent and numerous meeting of Justices and Commissioners of Supply and heritors, held on 6th August, the proposals of the Sheriff were ratified, though not without a division, a minority wishing to deal with vagrants only, while the majority

decided to provide for the home poor as well as meet the case of vagrants. The provisions adopted in Berwick were that every parish should maintain its own native poor by means of an assessment, the management of which was entrusted to the parish minister, and that all begging should be prohibited: that all vagrants should be ordered to depart by a certain day from the shire, and to enforce this district constables were appointed whose main duty was to apprehend and take to prison any such vagrants as might be found in the shire: the constables were also bound to see that the parish poor were properly attended to, and note down the names of persons who gave alms to vagrants.

Dumfriesshire was accordingly divided into eight districts,—two in the Presbytery of Penpont, two in Dumfries, three in Annandale, and one in Eskdale, and a constable was appointed for each district, at a salary of £4 sterling per annum, 2s. 6d. for every vagrant apprehended and imprisoned, 3d. sterling for each mile they carry them, besides a suitable allowance for any party that may be necessary for their assistance.

In September it was reported that at the different parochial meetings for taking into consideration the prosecution of the scheme for the poor, it had been found impracticable to levy an assessment, in consequence of the valuation of the lands of several considerable heritors being in cumulo; and it was in consequence resolved in the meantime that the poor of each parish should be allowed to beg therein, being liable to be taken up as vagrants if they went beyond the bounds.

Peter Graham, in Hillside, was appointed riding constable for the whole county in general and for one of the Annandale districts in particular, and parish constables were also appointed: each of the district constables had general powers over the county.

In September, 1752, in consequence of the riding constables appointed for apprehending vagrants and strange poor being put to great inconvenience and trouble in hiring

horses for carrying such poor people as are unable to travel on foot to the prison, because the people in the country refuse to lend their horses unless they are paid at an exorbitant rate, the Justices granted warrant to the constables to press for horses for carrying vagrants to the Tolbooth of Dumfries, payment to be one penny for each mile and one penny half-penny if the owner sends a person along with the horse to take care of the same.

In June, 1753, a committee was appointed, which was to meet monthly in Dumfries, to look after the working of the measures regarding the poor, in consequence of a representation that the constables had not been so diligent as they ought to be. The committee was especially directed to consider the proper measures from time to time to render the said scheme effectual; and particularly to take into their consideration the conduct of the several parishes as to the maintenance of their poor.

Inconvenience having been felt in the county through the suppression of vagrancy checking the travelling tinkers and braziers, braziers who had a settled residence, could produce certificates of character, and find caution for good behaviour, were to be licensed to travel through the county and exercise their trade.

John Morrine, in Braccoch, was fined £5 for refusing to accept the office of constable for the parish of Keir: the money was apportioned for different purposes, among which were thirty shillings to Mr Riddell of Glenriddell to be applied for placing a mid pillar under the timber bridge at Crossford; and twenty shillings to the minister of the gospel at Holywood, to be by him applied towards the support of Mary Anderson, in that parish, disordered in her mind.

On 7th May, 1754, warrant was granted for setting Michael Lawson, a vagrant, and prisoner in the Tolbooth of Dumfries, at liberty upon his enacting never to be seen again within this shire.

In October, 1757, the Justices considering that by the blessing of God the harvest is happily gathered in and plenty

restored, and notwithstanding thereof sundry complaints have been made that the poor do not keep within the parishes to which they belong, and that vagrants, gypsies, and sturdy beggars are going up and down the country and become very burdensome, do therefor strictly enjoin the riding constables to put the instructions in relation to the poor, vagrants, and sturdy beggars into the strictest execution, and to take up and bring before some Justice of the Peace any poor that shall be found begging without the limits of the parishes to which they belong, to be by him committed to the county jail, therein to remain and to be fed on bread and water for such space as the Justice shall think reasonable not under five days: the constables are also enjoined to seize all vagrants, sorners, &c. If they are negligent in their duty they will not only be dismissed without payment of their salaries but otherwise punished. Copies of this resolution were ordered to be made out by the clerk, and read at the door of every church in the county by the parish constable on Sunday.

It would appear from this and previous passages that much difficulty was felt in dealing with the poor, and that no assessments were levied for the support of the parish poor, the difficulty in regard to *cumulo* valuation not having been got over. From the numerous entries of the appointment and swearing in of constables, some of whom were invested with staffs of office for which they gave a receipt, it would seem that the office was not coveted.

No point has been more fruitful of difficulty and litigation in the management of the poor than that of settlement. Under the old Scottish poor law the settlement was the parish of birth, and if that was not known the parish where "he has had his most common resort for the three years immediately preceding his being taken up, or his applying for the public charity." Here is a question which was raised in 1758. John Dargavel, weaver, represented to the Quarter Sessions that he was born in the parish of Penpont, where he lived thirty years; from thence he went to Glen-

cairn, where he resided one year; and thereafter he went to Penfillan, in the parish of Keir, where he now resides. That he is now about to be removed from the parish of Keir, and is much difficulted about a place of residence, as he is denied admittance into the parish of Penpont, because he has been three years out of that parish. Which representation being considered by the Justices, they find, providing what is above represented be true, that the said John Dargavel hath just title to reside in the parish of Penpont.

The authorities had in these days another system in operation which was intended to benefit the poor: it was also one of repression, a restriction upon the internal trade of the county: its working will be seen from the following passage, of date 7th December, 1756:-The Sheriff-Deputy and Justices of the Peace, taking into their serious consideration that notwithstanding this county in general was remarkably favoured in the last harvest by being blessed with good crops and good weather for cutting down and ingathering the same, so that by the mercy of God the harvest was in many places happily finished before the great storm of wind and the bad weather that followed it came on, so that we had no reason to fear a dearth of victual: yet that sundry wicked and evil-disposed persons have, with a view to their own profit and private gain, and to the great oppression of the poor, gone through the country and bought up at extravagant prices all the victual they could purchase. and thereby prevented the same from coming to public mercat, in manifest contempt and violation of sundry Acts of Parliament: and that if a stop is not immediately put to such practices there is great reason to fear that the poor may be reduced to hardship and the peace of the country endangered: All which being considered by the Sheriff-Deputy and the meeting, they declare that they will put the laws against Forestallers and Ingrossers of Victual into execution with the utmost rigour: and they strictly prohibit and discharge all persons within this county from buying or selling meal or any other kind of victual in any other place

than in some of the public mercats within this county, without a license for that purpose under the hands of two Justices of the Peace for the county, except it be in small quantities not exceeding four stones at a time for the support of labouring persons or the poor in their neighbourhood, and the constables and all other officers of the law are hereby strictly enjoined to give notice of any persons that shall presume to contravene the premises: and that no person may pretend ignorance they appoint a copy hereof to be sent to the minister of every parish within the shire of Dumfries, who is hereby required to read the same immediately after divine service on the first Sunday after it shall be delivered to him before dismissing of the congregation, and further appoint copies of this Act to be affixed upon the mercat crosses of the burghs of Dumfries, Annan, Lochmaben, and Sanguhar, and of the mercat towns of Thornhill, Minnyhive, Moffat, Lockerby, and Ecclefechan.

At the next meeting on the 11th of the following January, it was found that this Act was likely to become a hardship upon persons who have bear to sell for payment of their rents, and upon the maltsters in the country who used to buy, in regard bear has never been in use to be sold in public mercat except for seed only. It was therefor declared lawful for farmers to sell bear at their own houses to maltsters.

In a paper which was read at the last meeting of the Society regarding the condition of servants, it was shown that one of the qualifications of female servants was ability to brew, indicating a common use of home-brewed ale. The passage just read shows that there was a considerable manufacture of ale in the county in addition to the home-brewed. About this time an Act (29th G. II.) came into operation in Scotland levying a duty upon licenses for retailing ale, beer, and other exciseable liquors, which licenses were granted by the Justices. The number of licenses may be taken as some measure of the consumption of ale. There were 18 licenses granted for Moffat, 7 for Dryfesdale, and 10 for Hoddam.

THE APPRECIATION OF BEAUTY BY ANIMALS. By Mr James Shaw, Tynron.

The question of the origin and preservation of vegetable and animal beauty is one which deserves more attention than it has yet received. We are assuming, of course, that the Beautiful exists, and that there is a faculty within us similar to what is called "an ear for music" in the case of melody, which is responsive to loveliness and prompts us to conserve what is grateful to the sight. This faculty of ours is as universal as an instinct. The lowest savage pays tribute to external beauty of colour or of form. His tattooed body, his head gaudily decked with feathers, his elaborately patterned weapons or articles of luxury have suggested to a great modern writer that the wild man's love of ornament rather than his desire of comfort has been at the origin of clothes.

Confucuis, who lamented that personal beauty was preferred to virtue, only said what our preachers and moralists everywhere repeat. Wordsworth says that his heart leapt up when he beheld a rainbow in the sky—it did so when he was a boy—it did so when he was a man, and it did so with his grey hairs.

But if beauty merely existed for man—if he were the only creature for whom it had charms, then well might we wonder at the prodigality of nature, which, through all times and places, spreads this rich legacy, altogether heedless whether the most gifted of her sons be present to admire or not. It has been said in well-known lines:—

"Full many a flower is born to blush unseen, And waste its sweetness on the desert air."

Yet not only in the solitudes of the tropical forest but in the awful solitudes dimly pictured out by the geologist or revealed betimes by the microscope, flowers, and colours, and patterns of symmetry exist in all their glory, far out of our reach in space or time, and accusing nature of waste or prodigality if man alone is supposed conscious of her charms.

And so we have a distinguished writer (see Reign of Law

by Duke of Argyll), removing the question from the naturalist to the theologian as formerly people did with the earth-quake and the eclipse. Doubtless, we may believe that God makes his works beautiful to please himself, and yet try to find out whether the creatures are pleased with it as well.

For if in a thousand cases beauty is hid from human eyes, are we safe to assume or deny that it is hid from all eyes? Very many observations go to strengthen the notion that the inferior animals share with the lords of creation in rejoicing at the sight of their eyes and at the hearing of their ears. The infant who, in its nurse's arms, smiles and attempts to clutch the light, suggests comparisons with the moth or bird that often become victims to the same allurement. The lady who spends hours at her mirror, on her toilet, invites analogies with many birds and quadrupeds which show similar pride in personal decoration; and with the inferior animals as with man, the most loving and the most lovely are not the least distinguished for the development of these tastes.

Take, for instance, that gorgeous animal the Bird-of-Paradise, Naturalists, who have observed it caged, have given us many glowing accounts of its behaviour. It is said to spend hours surveying its splendid self, jealous lest the least stain should darken the glory of its plumage, while, stretching out its pinions, it cleans in succession every tuft within reach of its bill. Its admiration of its own image in picture or mirror elicited the wonder of the spectators. It has been observed to caw with satisfaction at the completion of its toilet, and look archly at the onlookers as if ready to receive all the admiration that it considers its elegant form and display of plumage demand, of which, says a naturalist, "it appears as proud as a lady of her full ball costume." The bird's vanity even acted as a check on its appetite. for it would not descend to these insects, which, thrown into its cage, alighted on the floor, lest its plumage should suffer a soil, and indeed never put its foot upon the ground, except to get into the water-dish for the sake of its ablutions.

It would scarcely be safe in presence of such testimony

to deny this lovely bird all esthetical faculty. Evidently here too we have a connoisseur. The eye which is delighted with cleanliness, gracefulness, and colour, has its preferences. He who asks of what avail is beauty, of what avail are plumes of green and blue, of spangles of the ruby, or spangles of the emerald in the struggle for life, may be answered thus: if the love of beauty be so powerful in this bird as to neutralize the demands of appetite, we may well infer that at the pairing season the loveliest birds will be attracted towards each other, and thus the charms of beauty greater than that of strength secure for itself a perpetuity in the battle of life.

Mr. Montagu has well described the manner in which certain singing-birds, as nightingales, woo the females and draw them towards them by love-burdened ditties, conquering their mates, or exciting the preference of the females by their valour and their song. Mr. Montagu thinks that the ear alone is that by which the female selects its mate, but to this it has been justly objected that nature at this season is at as much pains to please the eye as to delight the ear. Every one must have noticed that wonderful renewal of ornament in plumage, that wedding suit, as the French call it, which spring bequeaths to all the feathered tribes, suggesting to the most superficial observers that fine feathers play a part similar to fine garments with a human bride.* What we have already said of the Bird-of-Paradise will have been understood by every one who has paid attention to the Peacock. We have admired the gracefulness of this bird's curving neck, its hues of gold and azure, green and brown, the eyelike or moonlike spots on its train dissolving or growing brighter-its metallic lustre intermixing with its gloomier tapestries, and the delicate crest of it faintly set with stars. but what is more to the point, we could not deny that the Peacock was sharing our feelings, that it was strutting about, and by means of powerful muscles was displaying itself to

^{*} As with melody so with beauty the male generally far excels the female.

advantage, and that by its participation in human sentiments it has succeeded to make itself proverbial for ostentation and for pride. Both these animals are fond of a mirror, and the first became courteous to a picture of itself.

The great taste displayed in nest building—the passion which some birds, especially of the family *Corvidae*, have for glittering pieces, shining or brilliant metallic objects, and even for snatching up bits of burning wood (witness the Cornish Chough), and when possible storing past their acquisitions, seems to arise from a feeling equally prominent in the rude African and the nursery child, and common to many who are neither Africans nor children.

Not only do the magpie and raven exhibit their taste in proximity to human habitations, but in the solitary wilderness of America.

The Bower-bird of Australia is perhaps the most striking instance of the appreciation of beauty, the desire to conserve it, as any which we could select. Its extraordinary tunnels, which are its bridal chambers, are made with wonderful neatness of architecture, and the entrances profusely garnished with gay feathers of parrots, easily picked up in Australia, with sea shells, with pebbles, coloured bits of rags, or pottery, or whatever odd scrap that glitters which the animal can most readily pick up. In this tunnel it struts ridiculously until it attracts its mate, which, at the pairing season, it easily does, and then the two gallop in and out most merrily. When the colonists lose anything, they invariably look for it in these so called "bowers" or "runs," just as we look a magpie's nest in similar circumstances. The sea shells are often carried from afar and piled up in bushels.

The dazzling lustre and charming variety of colours in the eyes of animals, the profusion of ornament around the face and head, or in those parts either most readily seen or capable of being seen by erection or expansion, through means of powerful muscles, we can conceive to be due to natural selection working unconsciously, just as the bird-fancier brings out his favourite tufts and spangles by pairing the most suitable

animals. Among savages we find everywhere attempts to heighten the awfulness or splendour of the face, and even in civilized society the crown and the coronet, and the natural and artificial graces thrown around these parts of the body most readily noticed, are patent.

We have all observed the child's passion for flowers.* Can it be anything more than coincidence, or is it that beauty is attractive to the beautiful that humming-birds and butterflies are so often found hovering around flowers, which are their rivals in gorgeousness? It seems as if the conspicuousness and sometimes the form (as in the bee-orchis) of those gaudily-coloured petals, as Mr Darwin remarked, may be a decoy for the purpose of making insects the agents for intercrossing the seed. We have alluded to the allurement of light for certain beings, of which the French practice of twirling for larks is an example. In the case of the lark it may be replied that, although eagerly drawn towards the light by the epicure's invention that it has very little flame-colour, or any colour in its plumage, as might have been expected in a bird so easily victimised by its love of glitter, and selecting, from its devotedness to light, for long ages, for mates, the gayest of its kind. Other powerful laws in this country of soberest sunshine may have repressed the tendency, and the sexual charms seem to be expressed by northern birds more by the ear, and by tropical birds more by the eyc. What the lark, although so sensitive to light, has failed to bring about has, nevertheless, been realized in the case of animals of another order to which we have already referred-namely, in the case of insects.+ Those magnificent beetles, the fire-flies, the charm and wonder of the tropics, outshining our lunar-tinted glow-worm exceedingly, the blue cold light of which is ex-

^{*} Dr. Grierson's monkey annoyed him by plucking his garden flowers.

⁺ These are curious facts bearing on this argument :-

lst. In the asexual stages insects are not remarkable for loveliness.

2d. Those butterflies which habitually crect the wings have them beautiful on the under side, which is not the case with those insects which have not that habit.

³d. Male butterflies are generally most magnificent.

changed for a warmer yellow, and the source being the thorax, not the abdominal segments, are examples suitable to our purpose. Our male winged glow-worm has too little luminosity to receive the appellation of fire-fly. The fire-flies of Canada, and of the East and West Indies, are in millions. They are attracted into the houses by means of torches to destroy musquitoes, which they eagerly devour. They are enclosed in glass vessels for reading with at night. They are worn as ornaments in ladies' head-dresses at evening parties. Here, then, are facts worth comparing. The savage's adoration of light—the civilized man's confession of its beauty, distinct from its use, in his expensive illuminations when princes marry or victory is won—the insect's passion for it, which seems to intoxicate it and to overleap its more cautious instincts-until by long eager seeking, and selecting of the feeblest spark, those fairy tapers have been developed in its very organization in those regions where the sun conspired with the insect's own appetancy.

Space forbids us to take up the subject of the effects of light and loveliness of colour or form on quadrupeds, or we might tell some stories of pretty cats and vain apes in clothes.

Our deductions are but tentative, and by no means account for the grand phenomenon of vegetable and animal beauty, but merely afford hints as to its agency and development. Beauty is wide spread, but so, be it recollected, are eyes—eyes fashioned after a manner wonderfully like our own, and, no doubt, having preferences in the things which they see. Low down in the kingdom of nature, in star fishes, in molluscs, we still meet with the optic nerve and the faculty of sight; and if beauty be a solace, beauty meets those eyes even when the waves and billows hide it from the sight of man.*

^{*} Sticklebacks and lizards, for instance, brighten in colour with love or victory, and wane greatly with terror or defeat.