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THE TRANSACTIONS

AND

Journal of Proceedings

OF THE

DUMFRIESSHIRE AND GALLOWAY

Natural History and Antiquarian Society

FOUNDED NOVEMBER, 1862.

SESSION 1905-1906.

PRINTED AT THE STANDARD OFFICE, DUMFRIES.
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SESSION 1905-6.

b—

ILLUSTRATIONS.

ERRATA.

Page 50—Ninth line, read "demesne" for "royal."
,, 51—Delete third line.
,, 53—Second line should read "for work" instead of "forward."
,, 76—Transpose two last paragraphs.
,, 81—Fourth line, second paragraph, delete ninth word, viz., "quarters."
,, 89—Second line in fifth paragraph the word "minion" instead of "minor."
,, 93—Delete second word (Dumfries) in tenth line.
,, 93—Second last line read "farm" instead of "form."
,, 143—For Lezuminosæ, read Leguminosae.
,, 197—For 1·59 in., read 1-50th in.

PROCEEDINGS AND TRANSACTIONS

OF THE

DUMFRIESSHIRE AND GALLOWAY

NATURAL HISTORY & ANTIQUARIAN SOCIETY.

SESSION 1905-6.

Friday, 6th October, 1905.

ANNUAL MEETING.

Chairman—Professor SCOTT-ELLIOT.

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

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

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

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

PRESIDENTIAL ADDRESS. By the President, Professor SCOTT-ELLIOT.

ADVANCES IN SCIENCE: ORIGIN OF VEGETATION IN NITHSDALE.

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

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

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

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

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

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

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

cept the water plants, would form a scattered open flora rooted in rock crevices or growing singly in sand and gravel.

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

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

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

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

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

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

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

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

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

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

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

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

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

14th October, 1905.

OPEN MEETING.

Chairman—The President.

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

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

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

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

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

WHAT THE STATE MIGHT DO.

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

Since I entered Parliament 25 years ago two enquiries have

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

A SCHEME OF STATE FORESTRY.

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

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

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

WILL IT PAY?

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

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

Next I took the official returns of the German State forests covering five years, and found that the average nett return was

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

BRINGING THE PEOPLE BACK TO THE LAND.

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

ALLEGED DISADVANTAGES.

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

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

graphs showing a forest of sessile-flowered oaks in France through all its stages.

A QUESTION OF FOREST MANAGEMENT.

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

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

WHAT PRIVATE OWNERS MIGHT DO.

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

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

Royal Forests and Woodlands—1903-4.

Receipts	... £32,481 18 8
Expenditure	... 58,402 16 1
Balance loss	... £25,920 17 5

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

THE RESULT OF THINNING.

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

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

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

LANDOWNERS' OBJECTS.

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

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

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

LANDSCAPE EFFECT.

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

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

THE AFFLUENCE OF LANDOWNERS.

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

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

GAME COVER.

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

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

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

SHELTER.

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

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

TIMBER FOR ESTATE PURPOSES.

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

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

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

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

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

3rd November, 1905.

Chairman—The PRESIDENT.

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

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

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

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

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

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

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

Mr Service, in replying, said the President had raised an interesting point, and that was as to the occurrence of some of those southern forms in our latitudes. It was pretty well known that a number of fish that really belonged to the Mediterranean fauna came up towards British shores each summer. There was a very well marked migration of the Mediterranean forms each July, continuing as far on as to the middle of September. He referred more especially to such fish as the Bonito, Germon Bonito, Pelamid, Swordfish, and now the Maigre. What caused these migration movements they could hardly ascertain. They did not come north to breed as many other fish did. It might be that they were after food, as the mackerel and some of their congeners came in advance in larger shoals. As to whether the Death's Head and other moths were ever likely to form permanent settlers here he was not sure from the information at present in their possession. Perhaps five years ago we saw the initiation of one of those warm periods—periods which were hardly recognisable in the midst of those curious masses of figures we got from meteorologists, but which were well enough defined. Well, the prevailing feature of such weather was that from the

end of April till perhaps the middle of June we have a long occurrence of pretty strong southerly and south-easterly winds. These were known to bring migratory birds to Great Britain in augmented numbers, and it would appear also that they brought these strong winged species of lepidoptera. That migratory process had again become very pronounced of late years. The last warm period occurring in the early spring months came to an end somewhere about 1865, but for thirty or thirty-three years before that it had continued. Since then there had been a marked absence of these seasons till within a few years ago, when these moths had become very noticeable.

HODDOM BRIDGE. By the late GEORGE IRVING.

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

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

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

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

"PATT. NORRIS.

"Halyards, ye 16 Novr., 1761."

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

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

Annan Bridge Tolls.

"My Lord,—I am told that all Black-Cattle pay two shillings per Score. Sheep I don't remember what. A chaise a shilling. A cart with two horses I sh. A cart with one horse 6d, and every person on horseback ½d. I know that the Cattle which come in droves from the North Country by Moffat, and so come not within 4 miles of Annan Bridge or town of Annan in their way to England have been stoped at Ecclefechan and at Burnswark by the Tacksman of the Toll till they paid the toll as alleged due to Annan Bridge. I do believe the Annan people never had any regular tables made up of these tolls, for I cannot recollect upon reading their act of Council sometime agoe there was any such. It is but of late years that they had either chaise or cart in that part of the country; and now all our chaises from Dumfries pay a shilling, and the Carlisle one horse carts with merchant goods sixpence each. I have been told that this bridge toll is yearly sett by Roupe sometimes at £100, and sometimes at £120; but the magistrates and Town Council who are possessed of the records can only answer this. I am told they have remitted £200 to their agent as part of the public revenue for the Town at the expence of the Country. . . . It appears there was a fund left for Building this Bridge and no doubt Annan has a copy of Doctor Johnstone's will as well as Dumfries. . . I would have sent you a copy of the will, but as Mr Johnstone of Carnsalloch can direct you where to have an authentick extract from the Register of the Prorogative Court of Canterbury,

I thought it was needless. The Exrs. nominate in the will and codicil did administrate 18th October and 4 Novr., 1639, and Lord Johnstone with Sir David Cunningham of Robertland were overseers to the Exrs. in seeing the Will duly executed. In the Codicil there is £3000 left to Lord Johnstone to be applied to pious uses in Scotland which I imagine went the same way with the £500. . . . We have reason to complain that the town of Annan did not get the family of Annandale to apply the money left, but rather took, as they alledge, that very sum by way of loan from that family, for that purpose, and we therefor obliged to pay a toll at Annan Bridge, while all the other Bridges in the County are free to them and every body. . . . The North Country have reason to complain of paying this toll for the Cattle that come by Moffat on their way to England which are never within 4 miles of either the town or Bridge of Annan.

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

"Dumfries, March 1, 1762."

Hoddom Bridge.

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

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

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

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

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

"Your most affect. humble sert.,

"MATTW. SHARP."

No address is upon the letter.

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

RAISING DOUBLE POLYANTHUSES AND PRIMROSES FROM SEEDS.

By the SECRETARY.

As is well known to most, a number of double Primroses and Polyanthuses have been cultivated in gardens for many years. From time to time additions have been made to their

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

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

17th November, 1905.

Chairman—The President.

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

REPORT REGARDING VOTING CARDS.

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

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

SEEDLING POTATOES.

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

The following are the varieties of seedling potatoes:

	Parentage.	No. of Tubers.	
A. 1.	Dobbie's Central	15	Late
B. 1.	Do.	23	,,
A. 3.	Northern Star	14	,,
A. 4.	The Crofter	12	,,
B. 4.	Do.	20	,,
C. 4.	Do.	17	,,
A 5.	Fidler's Record	12	Early
A. 6.	Duchess of Cornwall	25	Late
A. 7.	Up-to-Date	12	,,
B. 7.	Do.	20	2nd Early
C. 7.	Do.	17	,,
A. 9.	The Factor	7	Late

All the same numbers are from the same plum.

TREATMENT.

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

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

The Fauna of Glencairn. III. The Fishes. By Dr J. W. Martin, Newbridge.

1.—The Pike or Jack (*Esox lucius*).

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

2.—The Perch (*Perca fluviatilis*).

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

3.—Trout (*Salmo fario*).

The Trout is still fairly plentiful in most of the burns and streams of the parish and district, but not nearly so numerous or well-grown as it seems to have been fifty years ago. Odd fish,

however, still run to considerable weight, one killed near the village of Moniaive two years ago turning the scale at $5\frac{1}{4}$ lbs., while two others weighed over 3 lbs. The silting up of many of the old spawning beds, through the excessive draining on the hills, and the consequent sudden spates, may have helped to diminish their numbers; but it is also accounted for by the extra number of rods now on the water compared to former times. [Other agencies may be affecting the ova, such as tame ducks, otters, birds, etc.] The dastardly practices of the night poachers, with salmon roe, net, and other illegal methods, contribute also to decrease the number of trout. In the Cairn the trout vary very much in colour. In the deeper parts one often gets them very dark, whereas others are of a beautiful clear yellow colour, with the flesh of a pinky shade. The spawning season extends from November to February, and one rarely kills a well-mended "Kelt" before May. They quickly improve about the season of early spring. The burnie or moor trout might be called a distinct variety or species, seeing that it spawns in its habitat. It is dark in colour and of smaller size. The bulltrout, according to some, is probably a full-sized river trout. It is classified as Salmo eriox, and corresponds to the griseus or gray trout of the Welsh rivers. It resembles the salmon, but is inferior to eat. It is often mistaken for salmon or grilse, and is sometimes sold as such, but may be easily detected from the body being more thickly spotted with brown, and the paler colour of its flesh when cut. I have not heard of them being taken in the Cairn, although they have been killed in the Annan. They are very common in the Tweed. It ascends rivers to spawn, and visits the sea to recuperate, like the salmon. It is possible they may have been taken in mistake for salmon in this district. The great lake trout, Salmo ferox, is not found to my knowledge in any of the lochs in the district.

4.—MINNOW (*Leuciscus phoscimus*)

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

5.—LOACH (*Namaechilus barbatula*).

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

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

6.—THE STICKLEBACK (*Gasterosteus aculeatus*).

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

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

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

Here in this connection may be mentioned the

8.—GRAYLING (*Thymallus vulgaris*),

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

9.—EEL (*Anguilla vulgaris*).

The Common Eel is very plentiful in this district, and often proves a great nuisance to the juvenile bait fisher, from its sly

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

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

10.—LAMPREY (*Petromyzon fluviatilis*)

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

11.—SALMON (*Salmo salar*).

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

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

12.—Sea Trout (*Salmo trutta*).

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

Gleanings of Old Dumfries. By E. J. Chinnock, LL.D.

Upkeep of the Castles.

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

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

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

The Support of the Holy Friars.

1297, Novr. 23.—Edward by the grace of God king of England, lord of Ireland and duke of Aquitaine, to his treasurer of Scotland health. We command you to examine the rolls of Alexander, formerly king of Scotland, & of John, lately king of Scotland, which you have in your keeping as it is said, of the accounts themselves rendered of the farms of the towns of Berewyke, Rokesburghe, Hadintone, Dumfres, & Forfare, from which farm of Berewyke the Minor Friars of Berewyke each week in the year for their support 3 shillings and a pise of wax yearly (120 pounds); and of which farm of Rokesburghe the Minor Friars of Roxburghe each week in the year 3 shillings & 18 stones of wax for the support of the light in their church, and one cask of wine per annum for celebrating divine service there; and from which farm of Hadintone the Minor Friars of Hadintone 3 shillings each week in the year for their support, and from which farm of Dumfres the Minor Friars of Dumfres each week in the year for their support 3 shillings & 17 stone of wax and one pipe of wine per annum; & of which farm of Forfar, the Minor Friars of Dundee £10 of the Sterlings & 20 lbs. of wax per annum by different charters formerly of the king of Scotland; what the same friars have thence they have been accustomed to receive as they assert, of that which happens to be found in the aforesaid rolls of the receiving & allocation of all the things which the aforesaid friars claim to have, inform without delay our be-

loved and faithful John earl of Warenne, guardian of the kingdom & land of Scotland, remitting to him this brief. Witness J. Earl of Warenne, guardian of the kingdom & land of Scotland at Jeddeworthe, 23rd day of November in the year of our reign 25th. (On the back)—For the Minor Friars—In the time of King Alexander, in the year of Grace 1281, Dunfres. Item, in support of the Minor Friars of that year 117 shillings. Item, to the same Minor Friars of Dunfres from the enquiry of the sheriff of Dunfres it is found as follows:—Item, 17 stones of wax, 5 shillings.

COMPLAINTS AGAINST THE SHERIFF.

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

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

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

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

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

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

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

FORTIFICATION OF CAERLAVEROCK.

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

FORTIFICATION OF TYBRES.

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

FORTIFICATION OF DURRISDEER.

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

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

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

1st December, 1906.

Chairman—The President.

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

Old Public Libraries in Dumfries. By G. W. Shirley.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

In the Statistical Account of Dumfries in 1841 we find the following statement:—"The Presbytery of this district has a valuable library, besides which there are three others belonging to societies. Of what are called circulating libraries there are four kept by booksellers on speculation, and a select one, open to the public. There also exists a Mechanics' Institute, in the list of whose members appear many respectable individuals belonging to the town. There are already four public reading-rooms."

NOTES ON EXCAVATIONS AT MOFFAT SEWAGE WORKS. By JOHN T. JOHNSTONE, Moffat.

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

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

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

LIST OF WILD AND NATURALISED FLOWERS FOUND ON ST. MARY'S ISLE, KIRKCUDBRIGHT. By MRS JEFFREY, St Mary's Isle Gardens.

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

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

15th December, 1905.

Chairman—The PRESIDENT.

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

THE CASTLE OF DUMFRIES. By JAMES BARBOUR, F.S.A.Scot.

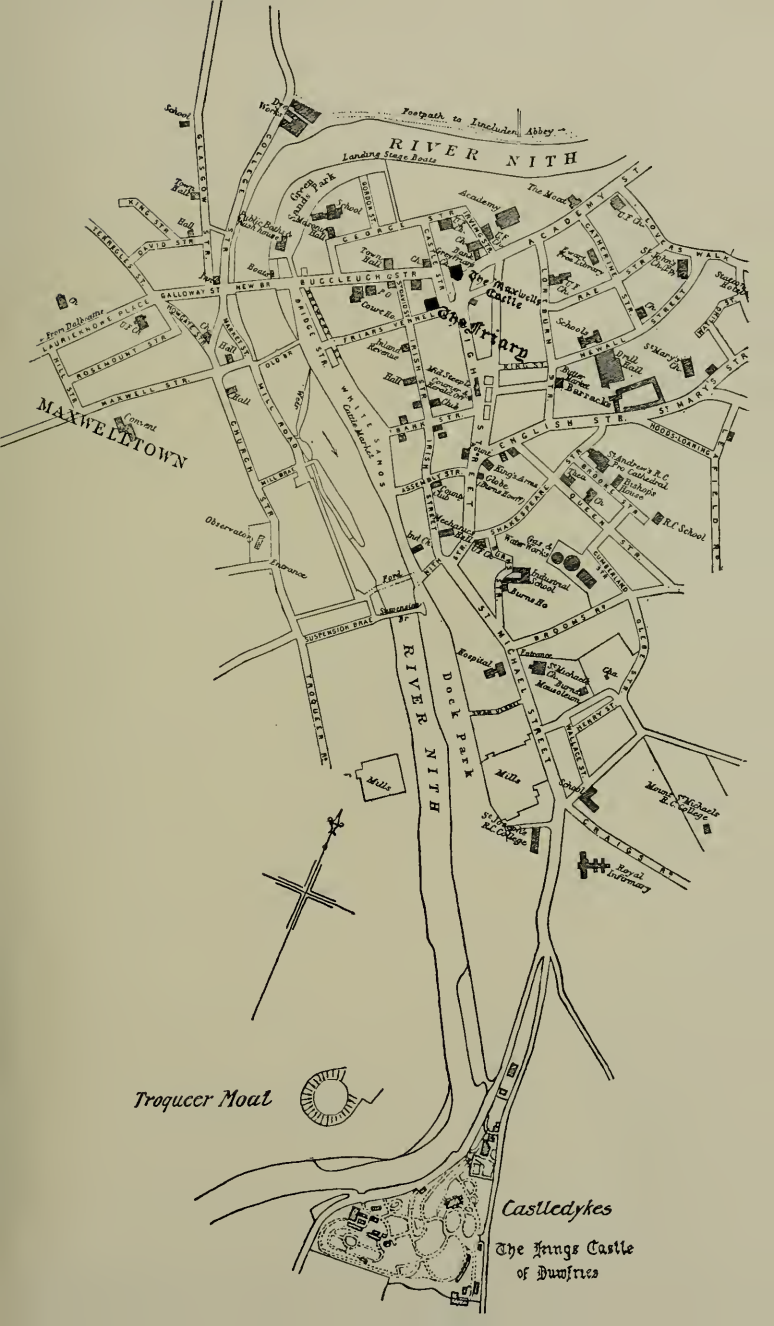
PRELIMINARY.

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

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

EARLY NOTICES OF THE CASTLE AND ITS SITE.

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


RIVER NITH
Footpath to Lincluden Abbey
Landing Stage Boats
The Friary
The Maxwells Castle
MAXWELLTOWN
RIVER NITH
Dock Park
Troqueer Moat
Castledykes
The Kings Castle of Dumfries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NATURAL HISTORY

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

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

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

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

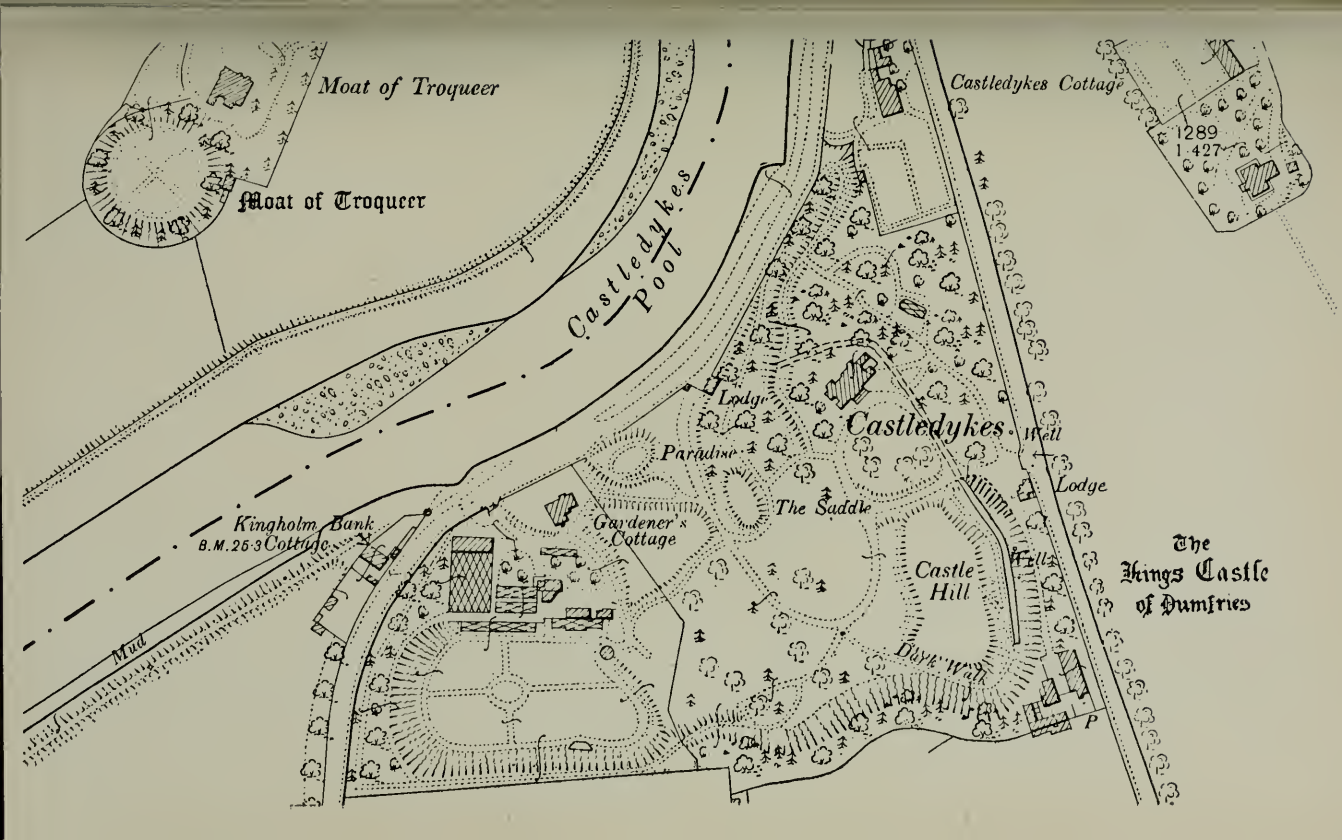
* Transactions of the Dumfriesshire and Galloway Antiquarian Society, 1892-93.

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

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

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

* Armstrong's "Leddesdale."


Moat of Troqueer
Moat of Troqueer
Castledykes Pool
Castledykes Cottage
1289
1·427
Lodge
Castledykes
Well
Paradise
Lodge
The Saddle
Kingholm Bank
B.M. 25·3
Cottage
Gardener's Cottage
Castle Hill
Hills
The Kings Castle of Dumfries
Mud
Dyke Wall
P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The report proves that the Castle stood on the side of the river five and a half miles within the mouth of the Nith, and the town was and a half miles within the month of the Nith, and the town was six miles within the mouth of the Nith, that is to say, half a mile further up the river than the castle. Castledykes similarly stands on the side of the river, and is just half a mile, as measured on the Ordnance Map, below the site of the South Port of the town at the corner of St. Michael's Cemetery; and so its claim to represent the ancient castle of Dumfries is fully confirmed.

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

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

Castledykes.

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

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

FIRST ENGLISH OCCUPATION.

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

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

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

THE DITCH, LOOKING ~~EAST~~. WEST.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sir Richard continued in office in Edward's service until the 18th November. On that day the King by letter from Berwick directed him to hand over the Castles to John de Balliol, to whom the King had granted seizin of the Kingdom of Scotland. So ended the first English occupation, extending over one year and four or five months. Balliol was now King of Scotland, but Edward, apparently without much regard to the change of circumstances, gave instructions for the collection of certain arrears of customs in that kingdom. In regard to Dumfries, the English King wrote from Roxburgh, 10th December, 1292:—"The King and Superior lord of the Kingdom of Scotland to his beloved John de Twynholm farmer of the Burgh of Dumfries, health. Know that those 18 pounds in which you are indebted to us, for arrears of your account from the farm of the aforesaid burgh, we have granted to our beloved Ralph de Handen to be received through your hands this year of the Lord 1292, on the day which may be arranged between you and him, for the 18 pounds which he used to receive annually by the grant of Alexander of good memory, the last King of Scotland, deceased, in return for certain losses which he sustained on the March of the Kingdom of England and Scotland, as he says. And therefore we command you to pay the aforesaid 18 pounds to the aforesaid in the form aforesaid, and we wish you to allocate them in the arrears. Moreover we order our beloved and

faithful John, the illustrious King of Scotland, to allow you to raise and collect freely and without hindrance the arrears of the aforesaid farm at the next term of St. Martin, wherein you were bound in your aforesaid agreement." And a month later:—Newcastle, 12 January, 1293. By letters patent, and closed, the burgesses of Dumfries are ordered to pay the arrears owed to the King, to Nicholas de Colle, Merchant of Luca, his assign, for the farm of the Burgh of Dumfries, the sum of eleven shillings and five pence.

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

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

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

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

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

English Occupation Resumed.

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

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

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

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

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

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

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

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

The Affairs of the Castle in the Year 1300.

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

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

The King's Movements about Dumfries.

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

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

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

THE COMPANY DWELLING IN THE CASTLE.

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

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

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

"The brave John de St. John
Was everywhere with him (the Prince),
Who on all his white caparisons
Had upon a red chief two gold mulletts.
. . . . . .
The St. John, the Latimer,
Were associated to him the first
Who were to array his squadron,
As those who best understood that;
For it would not be wise to seek elsewhere
Two more valiant or two more excellent men."

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

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

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

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

* Wright's Roll of Karlaverock.

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

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

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

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

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

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

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

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

Dumfries a Rendezvous.

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

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

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

> "Both in company and affection,
> With them were joined the followers
> Of the noble Bishop of Durham,

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

VICTUALLING THE CASTLE.

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

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

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

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

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

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

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

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

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

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

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

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

and 8 casks of wine, 30 fat hogs, 6 quarters of dried oats, 9500 herrings, 18 quarters of oats, and 4 quarters and a half bushel of salt."

"To Sir James de Dalilegh, clerk, for divers outlays and expenses incurred by the same about the victuals bought by himself and also the victuals sent to the parts of Carlisle by the care of divers persons, namely, for the carriage of divers victuals from the salt pits of Skimburness to Carlisle, and the Abbey of Holm, by water in vessels, and by land by horses and wagons, from the same places to Lochmaben and Dumfries, for the munition of the castles there, for the portage, loading, and discharge of the same victuals through divers places, for the cleaning and repairing of the houses in which the same victuals were deposited, for the pay of coopers binding casks of flour and wine, the wages of clerks and others receiving the same victuals, guarding, delivering, throwing, turning, and measuring them, under the same Sir James, between the 5th day of June and the 19th day of November in the present year ending, together with the wages of the same Sir James, within the said time, and for hemp, tanned hides, ropes, clamps, nails, and other binders, bought by the same for the aforesaid castles, within the same time, £175 5s 2½d."

A Re-Sale.

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

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

Prices ruled as follows:—Wheat, 10s a quarter, 8s, 6s 8d, and 5s, according to quality; poor wheat flour and meal, 4s a quarter; beans and peas, 4s 6d a quarter; oats, 4s a quarter; poor oats, 1s 6d, and half oats 3s a quarter; dried oats, 5s, 4s, and 3s 4d a quarter. The charge for baking was at the rate of 6s 8d for every quarter of flour used. Fat hogs brought 5s and 4s 6d each. Untrained horses, part of a number coming from Galloway, were in stock; and 900 horse shoes at 10s a hundred, and 2000 nails at 20d a 1000, were disposed of to Walter de Bello Campo, seneschal of the King's household. 24 casks 26 sects of wine at 4 marks a cask went to divers magnets and others living in the King's army; 20 casks of beer were sold to various persons connected with the fortifications of the district, at various prices, as 10s, 8s, 7s 6d, and one mark a cask. Beer of a higher quality was sold to Sir Robert de Clifford and Sir William de Rithre, at the price of 30s a cask.

ARTILLERY.

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

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

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

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

FRENCH AMBASSADORS AT ANNAN.

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

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

THE REINFORCEMENT OF THE CASTLE.

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

The work of raising the peel and reinforcing the Castle was begun on 5th September, and carried on with diligence, so that by the 2nd of November, when the King left Dumfries for Carlisle, men-at-arms were, as we have seen, dwelling within the fortification of the peel. Its final completion, however, was not accomplished until the 23rd of the month. Of craftsmen employed, there were carpenters, sawyers, smiths, masons, and quarrymen; also ditchers in great numbers. Clerks were assigned the duty of paying the wages of the workmen, and keeping the accounts. Godfrey de Wyndsore had charge of the expenditure for carpenters, and Henry de Brandeston paid the wages of the ditchers. Friar Robert de Ulm was the master carpenter, receiving 9d per day, his lad Alan being paid 4d. Ade de Glasham, the chief foreman, and the other foremen, had a wage of 6d, and other carpenters and sawyers had 4d; carpenters' labourers, pages they are called, received a wage of 2d a day. The ditchers had over them Ade de St. Edmonds, master ditcher, receiving 6d per day, and a number of foremen receiving 4d; the other ditchers were paid 2d a day, and women helpers had a wage of 1½d per day. The workmen were brought chiefly from Northumberland and Cumberland, but a number of the ditchers came from parts of Lochmaben. How many hours constituted the working day is not stated, but probably it extended from sunrise to sunset; the toil went on all the seven days of the week.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CHIEF FEATURES OF THE CASTLE.

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

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

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

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

LATER CONSTABLES AND GARRISON.

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

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

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

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

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

PROVISIONING AN ARMY.

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

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

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

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

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

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

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

KING EDWARD'S WARS.

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

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

CAPTURE OF THE CASTLE BY BRUCE.

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

THE MINORITE FRIARY.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Dumfries had become a centre from which supplies were dis-

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

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

Edward II., a weak and indolent Prince, found it incumbent that he should at least make some show of advancing the great scheme of conquest which his late father had so much at heart.

Accordingly, about a month after his accession to the throne, the King set out with an army for Ayrshire. He passed through Dumfries, and journeyed as far as Cumnock, but at this point turning round he made his way back to England without having accomplished anything.

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

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

MUNITIONING THE CASTLE IN M'DOWALL'S TIME.

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

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

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

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

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

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

BRUCE AGAIN IN POSSESSION.

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

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

STATE OF THE COUNTRY AFTER BRUCE.

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

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

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

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

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

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

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

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

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

The following relates to the Burgh :—

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

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

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

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

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

CONCLUDING REMARKS.

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

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

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

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

5th January, 1906.

Chairman—Mr Robert Murray, V.P.

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

Notes on Southern Nigeria. By James Watt, M.A.

(Summarised by the Author.)

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

The estimated area of Southern Nigeria is 65,000 square

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

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

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

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

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

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

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

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

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

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

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

Trading firms at the present day have large establishments upon land. Formerly hulks were used. When trade was first established ships went round the various trading towns and gave

credit to native traders. After completing their circuit, they went round again to collect the produce gathered by them.

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

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

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

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

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

The Chrysanthemum Sport Exhibited at Last Meeting.

By the Secretary.

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

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

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

26th January, 1906.

Chairman—The PRESIDENT.

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

THE WEATHER OF 1905. By Rev. WILLIAM ANDSON.

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

To begin with the barometrical pressure, on the variations of which the state of the weather so much depends, I find that the highest reading of the year occurred on the 12th December, when it rose to 30.890 in., and the lowest on the 15th March, when it fell to 28.365 in., thus giving an annual range of no less than 2.545 in. It is worthy of note that not only in December, but also in January, there was an exceedingly high reading, viz., of 30.856 in. on the 28th of that month. These are both abnormally high readings, occurring but rarely in many years. And taking the year as a whole, there were no fewer than six months in which the mean pressure (reduced to 32 degs. and sea-level) exceeded 30 inches. These months were January, February, May, June, July, and December; and they were all very favourable months in point of weather; while those which had the lowest mean pressure, viz., March, with a mean of 29.570 in., and November, with a mean of 29.601 in., were the most unfavourable. The mean pressure for the whole year was 29.933 in., which is a little above average. Low readings falling below 29 in. occurred in January, February, March, and November, which for the most part were accompanied by strong winds and heavy rains. But these cyclonic disturbances were on the whole less numerous than usual. One of the worst was about the middle of March, when a good deal of damage was done both by sea and land; and others occurred in the end of November and first part of December.

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

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

Lat., 55° 4′ N.; Long., 3° 36′ W.; Elevation above sea level, 60 feet; Distance from the sea, 9 miles.
Rain Guage, 70 feet; Diameter of Rain Guage, 5 inches; Height of Rim above Ground, 10 inches.

1905.	BAROMETER.				S.R. THERMOMETER. In Shade, 4 feet above grass.					RAINFALL.			HYGRO-METER.		Temperature of Dew Point.	Relative Humidity. Sat. = 100.
Months.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean for Month at 32° and Sea Level.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean Maximum.	Mean Minimum.	Mean temper. of Month.	Heaviest in Month.	Amount for Month.	Days on which it fell.	Mean Dry Bulb.	Mean Wet Bulb.		
	In.	In.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	In.	In.		Deg.	Deg.	Deg.	
Jan.	30·356	28·941	1·915	30·158	54·	25·	29·	44·7	34·7	39·7	0·43	1·77	21	40·	38·3	35·8	86
Feb.	30·660	28·650	2·010	30·016	55·5	25·8	29·7	46·8	35·4	40·	0·58	1·94	15	40·2	38·	35·2	83
Mar.	30·260	28·365	1·895	29·570	61·	29·	32·	50·7	37·2	44·	0·43	4·06	24	43·	40·9	38·3	84
April	30·220	29·130	1·090	29·803	63·	25·3	37·7	51·6	37·	44·3	0·65	3·42	19	43·8	40·9	37·5	79
May	30·473	29·075	1·398	30·115	73·	31·8	41·2	60·2	42·6	51·4	1·37	2·01	12	52·	47·8	42·5	73
June	30·550	29·700	0·850	30·053	84·5	38·7	45·8	68·6	49·1	58·9	0·59	1·82	6	58·8	54·2	50·	73
July	30·273	29·629	0·644	30·036	84·5	41·3	43.2	70·8	53·1	62·	1·06	2·33	14	61·6	56·7	51·7	73
Aug.	30·300	29·181	1·119	29·822	75·5	39·3	36·2	65·	49·1	57·1	0·51	2·95	14	57·2	53·4	49·9	76
Sept.	30·347	29·273	1·074	29·933	71·	33·	38·	61·1	46·1	53·6	0·25	1·86	16	53·2	50·6	50·8	82
Oct.	30·550	29·003	1·547	29·997	63·	24·5	38·5	51·6	36·5	44·1	0·63	2·72	12	43·6	41·1	37·3	80
Nov.	30·221	28·670	1·551	29·601	52·5	19·	33·5	45·5	35·1	40·3	0·77	3·86	21	41·1	39·1	36·5	84
Dec.	30·390	29·371	1·519	30·091	52·	28·	24·	47·	40·	43·4	0·49	1·33	19	43·	41·3	38·9	86
Year..	30·390	28·365	2·546	29·933	84·5	19·	63·5	56·3	41·3	48·2	1·37	30·57	194	43·1	45·2	41·7	80

WIND—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Var.
16½	36½	29	46	20	86½	59½	53½	18½

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

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

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

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

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

With regard to the hygrometrical observations, I have only to add that the mean reading of the dry bulb thermometer for the year was 48.1 deg., almost exactly the same as the annual mean temperature, which is 48.2 deg. And the mean reading of the wet bulb was 45.2 deg.—from which the temperature of the dew-point was calculated as 41.7 deg., and the relative humidity at 80 (saturation being equal to 100). This is lower than the average by 3, the annual mean over a series of years being fully 83, and corresponds with the comparative dryness of the year. With regard to wind direction, the most prevalent, as usual, was S.W., which blew on 86½ days; the next, W., with 59½ days, and N.W., with 53½. South blew on 20 days, S.E. on 46; N.E. on 36½; E. on 29; N. on 16½; and calm or variable was 18½. The sum of those with a southerly and westerly direction was 206, and of those with a northerly and easterly was 135.

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

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

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

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

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

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

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

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

2nd February, 1906.

Chairman—Mr JAMES BARBOUR, V.P.

EXTRACTS FROM THE RECORDS OF THE BURGH OF LOCHMABEN.

By E. B. RAE, Town Clerk.

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

* A plan of the wall is preserved in the Society's Portfolio.

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

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

existed as a royal burgh for at least a century before, and owed its origin to King Robert the Bruce.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

to summons him to appear upon Monday, the 21st curt, at 6 o'clock at night.

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

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

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

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

On 29th September, in the same year, another violent disturbance took place in the burgh on the occasion of the annual election of the Magistrates and Town Council. Eight members of the Council having met in Bailie Dickson's house prior to the meeting, they proceeded at the ringing of the town bell to leave for the Council House. When near the foot of the stair leading thereto they were obstructed and interrupted by a numerous and outrageous mob, who seized Bailie John Bryden and violently thrust him into a post chaise, in defiance of every resistance that could be made at the time, and carried him off to Annan. The Magistrates and Councillors were compelled by the violence of the mob to return to Bailie Dickson's house, where they waited until Bailie Bryden joined them after regaining his liberty, and thereafter proceeded to the election of Magistrates and Councillors in due form, Bailie Dickson being appointed Provost. Whilst this election was taking place an opposition meeting under the protection of the mob was being held in the Council House, also for the purpose of electing a new Town Council, and the result was that two sets of Magistrates and Councillors were elected. To complete this remarkable state of matters, Mr Francis Shortt was elected Town Clerk at the meeting held in the Provost's house and Mr John Lindsay was elected Clerk at the meeting held in the Council House. Both sides presented petitions and complaints to the Court of Session, and at a meeting of Council, held on 12th August, 1791, Provost Dickson reported that the Court of Session had decided that the election which took place in his house on 29th September, 1790, was the only legal and valid election of the Magistrates and Councillors of the Burgh of Lochmaben, and that those elected had the only

good and undoubted right to take the government and administration of the burgh till Michaelmas next; the Court had, therefore, dismissed the complaint in name of Robert Maxwell (who had been elected Provost) and others, and found them jointly and severally liable to Provost Dickson and the other complainers in expenses, which they modified to the sum of three hundred pounds sterling, besides the fees of extract, which amounted to £82 11s 0d.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The Vendace. By Robert Service, M.B.O.U.

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

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

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

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

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

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

gonus, viz., (1) the Gwyniad (c. clupeoides), which occurs in Lake Bala, in Wales, in Ullswater, and some other of the Cumberland and Westmoreland lakes, where it is known as the "Schelly," and in Loch Lomond under the more familiar name of "Powan;" (2) the Pollan (C. pollan), which is found in some of the loughs of Ireland, notably that of Lough Neagh. The cry of "Fresh Pollan" is said to be quite a familiar sound in the streets of Belfast at certain seasons. The third species is the Vendace. Not one of our three British species has been found elsewhere outside of our islands, nor is ever likely to be. I present the distribution of this genus and its component species as a puzzle in evolution. How did our three British species originate and how may their present distribution be accounted for? Once that problem has been solved the exotic species may be investigated. Some of them live isolated in remote sheets of water, and at depths so great that when chased to the surface by other fish, or brought there by accident, they die at once owing to the pressure of the expanded air in the blood vessels, or by the reduction of atmospheric pressure so inflating the body as to burst the abdominal walls. Let me now leave its congeners and discuss for a little the Vendace itself.

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

all, the difficulty of arriving at an estimation, not to say a census, of an under-water population, is rather baffling.

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

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

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

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

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

16th February, 1906.

Chairman—Mr ROBERT MURRAY, V.P.

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

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

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

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

Witchcraft.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The Lapsi, or Fallen.

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

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

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

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

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

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

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

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

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

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

A Troubler from Urr.

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

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

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

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

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

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

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

The Hepburnians.

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

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

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

A Double Offence.

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

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

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

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

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

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

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

Drinking on the Sabbath.

Next year, 1698, another Hepburnian figures in our records. "August 28—This day was delated William Wallat in Casehead (who is an Hepburnian) for Sabbath-breaking, it being a 'fama clamosa' of his sitting in a change house drinking all the last

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

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

A Brutal Ruffian.

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

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

Sabbath-Breaking.

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

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

"Quis Custodiet?"

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

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

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

The Lord's Supper.

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

Collections.

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

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

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

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

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

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

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

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

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

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

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

One special collection, made in November, 1695, has a very old-world association connected with it. "Collect for the poor slaves in Turkie, £5 1s." Probably for the victims of the Barbary pirates, who in these times ravaged even the coasts of Ireland. Another collection, taken in 1697, brings us in touch with the greatest of modern philosophic thinkers. In 1697 a petition was presented to the session from the Scots congregation in Konigsberg, backed by the Council of Scotland, for funds to build a church. Elders were appointed to go through the congregation and receive the people's offerings, which amounted to £29 Scots. Twenty-seven years later Immanuel Kant was born at Konigsberg. He is said to have been of Scottish descent, as his name implies, and perhaps some of his forbears belonged to that Scots congregation.

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

Notes on the Tastes of Bees in Colour.

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

By Professor Scott-Elliot.

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

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

(2) In a garden, so many flowers are crowded together and such quantities of insects are abroad that it is by no means safe to take any observations made in a garden as generally applicable.

(3) To understand thoroughly the pollination of any one species, it would be necessary to watch that species in at least ten

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

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

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

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

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

I think, however, a very strong personal opinion is always formed if one takes the trouble to examine the visitors of wild flowers patiently and systematically in their natural habitats. It is very striking to notice the difference between the red Geum rivale with its regular Humblebee visitors as compared with the yellow

Geum urbanum, which has swarms of miscellaneous insects. When a Ranunculaceous plant becomes highly specialised, like Aconite and Larkspur, then its colour becomes purple or blue and its visitors become select.

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

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

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

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

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

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

I have always felt that this question should be again taken up and a new book written about it. I wish some one present would do this.

ROOKS' NESTS. By Mrs THOMPSON, "Inveresk," Castle Street.

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

Having recently come to reside near a rookery, I have been much interested this spring in watching their building operations, and, in consequence of being confined to my room with a cold, had ample opportunity of so doing. The first nest was begun about the 23rd of February, and I discovered that five birds were occupied upon it. First, I noticed three birds in particular, one much larger than the others; he and one of the others always flew away and returned together, and then this larger bird, which I called the architect, perched near and watched the other two building, flying down every now and then to lend a helping hand, and returning to his perch, waited till one flew from the nest, when he always went too. Being interested in all this, I frequently looked to see how they were getting on. It was then I observed two other birds were always sitting close by, one above the other. They looked what I supposed to be young, they and the builders being much smaller than the architect. I thought these two were engaged in pulling down the nest, but, to my surprise, I saw the upper one break off a twig, pass it on to the lower bird, who passed on to the next. This nest took nearly ten days to finish. Latterly, one of the builders never seemed to leave it whilst I watched. Its head popped up now and then, but I imagined it was lining the nest. I must, however, premise that I only watched them at intervals, and not with any idea that my observations would be of any use. Since I have been here a puzzle has been solved also with regard to bird habits, which may be of interest. Before coming here I lived at the Craigs, and the last spring I was there, for the first time, I saw in a grass field at the top of a steep bank below the wood numbers of little bundles of twigs laid crossways on the grass in a straight line, a short distance apart, and I wondered what game the village children could be playing. This drew my attention to the fact that the path I was on had also little bundles of twigs at intervals, and these went on in another direction to another field. The children were not

allowed in the wood, and I thought it beyond their patience almost to do such work, so I simply knocked them all away with my walking stick, and wondered if they were poachers' signals. Now, however, the mystery is partly solved, for a great many of the rooks have been walking about my garden, and a few days ago I saw a bunch of crossed sticks lying on a walk. No one had been in the garden I knew for a fact, but the next morning they were gone. I immediately thought of last spring, and connected them with the rooks and their nests. We had no rookery in the country, but the rooks came after poultry food, or other birds may do this. I know not, but I should be glad to know more about it. This rookery here may be about two miles from my old home, and there is none nearer. I may mention that the twigs were not very small—some, I am sure, two or three feet long in the wood, but as I remember, those in the open field seemed short, but they were all crossed diagonally.

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

24th February, 1906.

Special District Meeting at Lockerbie.

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

Chairman—The President.

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

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

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

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

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

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

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

"In reply I am instructed to say that it is impossible to give definite answers to either of these questions.

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

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

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

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

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

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

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

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

The Vendace. By R. Service, M.B.O.U.

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

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

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

classes, so far as those at least of Great Britain were concerned. (1) Those that were exclusively marine and never left the sea; (2) those strictly confined to fresh water; (3) those that bred in fresh water, but spent a large portion of their lives in salt water, otherwise anadromous fishes; and (4) those that bred in the sea, but spent practically their whole lives in fresh water, or catadromous forms. Of the marine fishes many, perhaps all, and certainly all our British species, performed certain movements of more or less extent. These might only be from deep to shallow water, or vice-versa, or backwards and forwards from where food was plentiful or the reverse. The mackerel was a well-known species that had a rather complicated series of movements, which were only partially understood. Their principal move shorewards took place in early summer, and it was most interesting to watch the shoals of this beautiful and agile fish out on the sunlit sea of early June, leaping and swimming along just under the dancing wavelets. A couple of species of fish of considerable interest to local faunists were the garfish and the saury, both of which were of some scarcity in our waters late in summer. They came in for a week or two and disappeared, and although one could guess, no one could say from actual knowledge whither they came or whither they went. The case of the anchovy was a very peculiar one, of more than usual interest. A good many years ago they were suddenly found in the Solway, off Annan, never having ever been known here before. Within a few days the whole Solway and the adjacent waters were found to be filled with them. Then by-and-bye young anchovies were found in abundance, and since then, anchovies have been of annual occurrence. It is difficult to account for the local history of this fish. Herring were rather capricious and uncertain in their movements. It used to be accepted as an article of faith that these most important fish came in vast shoals from the Arctic seas and encirled our shores, but so far as their Arctic origin is concerned we know better now. They breed within our own waters in suitable depths, and when large enough come nearer the surface in the great shoals with which we are all familiar. Most seasons they enter the Solway from the shoal which lies betwixt the Mull and the Isle of Man. Only within these last few weeks some most unusually large shoals entered Loch Ryan, and kept the fishermen engaged in making big hauls. Cod and haddock had left the Solway to a consider-

able extent, and were not now seen in the quantities they once exhibited, although these visits were still made late in summer. There was one particular group of fishes that were of much interest to the student of Solway fishes, inasmuch as some of them had occurred on our western British coast, there and nowhere else. This group was composed of species from Mediterranean waters and the Western Morocco coast. They evidently came along with the warm weather and warm water, and were not found until summer was well advanced. The tunny was one of them, and had been taken in the Newbie nets and elsewhere. Both the common bonito and the belted bonito had been secured. The maigre had been added to the list only last summer, and by himself, from a specimen taken at Port Ling. One of the same group was the "John Dory," although much more commonly found than any of the others. And lastly, the swordfish, though a great rarity, was from the same region as the others named.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Border raids and forays, it must be remembered, were as yet unknown. It was not until Edward had besieged Berwick, mercilessly butchered without respect of age or sex some seven-

teen thousand of its inhabitants and burned the town, traversed the country as far north as Elgin, hoisted the red flag with the three gold leopards on every stronghold, and garrisoned with English every town and castle, that the bitter feelings of enmity and hatred were first inculcated, which were in after years and for centuries to cause such devastation and desolation all along the Borders. After the proud and brutal monarch had gone back to England, poor Scotland lay stunned by the swift and crushing blow which had struck her down. Nearly all the nobles and leading men in the country had been forced to swear allegiance. Wasted by the ravishes of war, the country suffered miserably from famine. Bands of cruel and broken men, bitter of heart and fierce at the abhorred oppression of the Southron, hunted in the forests and mountains living by the chase, and when the chance offered plundering the provision convoys of the English. By thousands of cottage hearths in the dismal winter following brave men in shame and sorrow bemoaned to each other over the untold miseries and the galling scorn which their native land had to endure. It was from this time onwards—and who can blame her?—that Scotland viewed England as her bitterest enemy; and then began between the two countries that system of perpetual robbery and murder which continued unabated for centuries. I simply mention this in passing to recall to you the fact that this system of plunder and reprisal, which ultimately attained such an extraordinary development, did not always exist, and that during the time with which we are dealing the Borders enjoyed for the most part a state of comparative calm and repose. No doubt there were wars between the two countries, but these were infrequent. Abundant warning was given, and the necessary preparations made for the preservation of life and property. During the reign of Lockard, therefore, at least comparatively speaking, the little village flourished and its inhabitants enjoyed prosperity and peace. Money was a commodity scarce, in fact almost unknown, and perhaps it was well. The avaricious passion for accumulating was practically impossible. Each lived by the fruits of his handiwork, and the produce was perishable. If one had too much, rather than waste, his less fortunate neighbour would be welcome to a share. The whole farming operations were carried on on a system of co-operation. Their purpose of living

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

BONSHAW TOWER. By Colonel J. B. IRVING.

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

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

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

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

SOLI . DEO . HONOR . ET . GLORIA.

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

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

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

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

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

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

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

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

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

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

Having made peace with England in 1550, which lasted to the end of the century, the Border clans started their old feuds and fought amongst themselves. An old heredity feud had long existed between the Irvings of Bonshaw and the Bells and Carlyles. But the greatest of their feuds was with the Maxwells,

which lasted to the end of the century. Notwithstanding the strong opposition as it would unite two such powerful clans, Christopher Edward Irving's eldest son married Margaret, eldest daughter of the Laird of Johnston. Marriage contract signed 11th September, 1566 (the contract, which is in my possession, is very curious). Bonshaw took Queen Mary's side and suffered accordingly. In 1584-5 Maxwell attacked Johnston with an army and took Lochwood Castle and Lochhouse and burnt them both.

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

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

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

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

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

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

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

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

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

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

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

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

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

This was seconded by Mr Arnott, and also heartily awarded.

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

2nd March, 1906.

Chairman—The PRESIDENT.

GYPSIES. By A. M'CORMICK, Newton-Stewart.

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

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

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

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

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

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

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

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

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

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

16th March, 1906.

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

New Member.—Mrs M'Lachlan, Dryfemount, Lockerbie.

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

The Scoto-Norse Period in Dumfriesshire. By Rev. W. L. Stephen.

The forces which have in the past moulded our national life are the natural objects of study in societies such as this. Many of these old world forces have received adequate study. In the case of the Roman occupation, for instance, there has been no lack of eager, careful, exact students. The traces or relics of that period are sufficiently familiar to us; but with the withdrawal of the Roman legions this country was subjected to a force and an influence which have not been, it seems to me, sufficiently investigated. That influence was the Norse, and in using the word Norse I use it as including the Scandinavian and also in certain points the Danish races. You have, first of all, to appreciate the influence of the Norsemen on Europe before one can sufficiently appreciate their influence on Scotland. The bleak and somewhat grim conditions of life in the desolate regions of the North had sent out a race of men who were fitly nursed for fighting under all conditions. Revelling in "the hazard of trackless ways" they wandered over all Europe. One group, passing across to the east of the Baltic, in course of time set their leader

upon the throne of a principality which was subsequently to develop into the great Russian empire. Rurik the Norseman laid the foundations of the Russian rule, and his descendants occupied the throne of Russia until the close of the 16th century. Another group made their way along the Mediterranean, actually reaching Constantinople itself, and soon the Eastern capital was face to face with the alternative of a sack or the payment of an enormous indemnity. The association of the Norsemen with the Byzantine capital was to be long continued in the famous Verangian Guard. Returning from the East and glancing at Normandy you find there a settlement of the Northmen, subsequently to be disguised under the name of Normans. That was to be a fateful settlement for England and for Europe. From it was soon to spring the Norman conquest. The colonisation of Iceland was achieved, and there is a growing tendency to accept the theory of the discovery of America—Vinland—as historic. East and West in turn they spread. Turning now more especially to Scotland, we find the Norsemen in the Viking age stepping across, first to the Orkneys, then to the mainland in Caithness, where there were Norwegian jarls or earls for fully four centuries, and then passing westward they established an over-lordship of the Western Isles. Ere long they passed southwards to Dublin, and in course of time founded Norse kingdoms on the coast of Ireland. Crossing to the Isle of Man, they quickly set up a kingdom there, and to-day you have the laws of that island once promulgated from the Tynwald Hill, which, of course, is simply a relic from the days when the Norsemen were in occupation. It is the same name to be found in Dingwall and Tinwald, in Dumfriesshire. From the Isle of Man successive expeditions of Norsemen made their way to the south, ravaging the coasts. The common conception of these Norsemen is that they were pirates and freebooters. Doubtless there were aspects of their expeditions which justified the description. They themselves looked upon the viking's occupation as the only occupation worthy of a nobleman and gentleman. They called themselves sea kings. Later ages have chosen to stigmatise them as pirates. They themselves in the time-honoured way held they were conveying the blessings of a higher civilisation to less progressive races. The Norsemen, having sown their corn in Norway like quiet, respectable citizens, set out on excursions to Scotland. While

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

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

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

Johnstone is simply the Norse Johansen—to this day the most common name in Iceland, the oldest of the Norse colonies in whose sages we have a perfect mine of wealth in regard to Norse habits and customs. So are Annandale and Iceland curiously linked together. The place-name, Merkland, has a remarkable association. You have there a rather striking relic of the Norse occupation. These Merklands, with their Half Merklands, Two Merklands, Three Merklands, are very significant from a legal point of view. Innes, in his "Scottish Legal Antiquities," in a suggestive passage, emphasises the significance of the Norse system of rental—not classifying by acreage, but classifying by another method of valuation; and he lays it down broadly that the west of Scotland bears the traces of the Norse occupation from this Merk taxation classification, differentiating it from the east coast. That is interesting from another point of view. It means that the Norse were familiar with coinage, that is, they did not wish rent paid in kind or produce. We infer from their famili-

arity with coinage that they had reached a comparatively advanced state of civilisation. We were all watching the action of Paris just now, and we know that if Paris continues to hoard gold it means war, while if the Stock Exchange quotations show gold is being set free the probabilities are peace. As a fighting race, "soldiers and sailors, too," the Vikings saw that they had the sinews of war fit and ready. They preferred carving their way to paying their way. The sword was fame-giver and land-giver. Large sea expeditions had, however, to be financed. Their naval bills had to be met. Let us now glance at two departments of lowland life—shepherding and fishing—in which we find Norwegian terms presenting themselves. The shepherd in the lowlands of Scotland has a method of reckoning as to his sheep in which the term "gimmer" is employed, as well as "twinter" and "trinter." These are all Norse words, and the last two bear unmistakable traces of the Norse method of reckoning by winters, "twinter" meaning simply two winters, and "trinter" three winters. The more peaceful colonising aspect of the Norse association is brought out by such pastoral memories. Then, with regard to the fishing industry, you have on the Solway the uncommon haaf net. Now, that word "haaf" is really Norse, and with regard to the term for a salmon spear, a "leister," you have again a word that is almost pure Icelandic. Leaving these well-defined traces of the Norse occupation, we come on another piece of evidence—that relating to the tenure of land for pasture or other purposes. The Norse tenure was what is known as udal tenure, as opposed to feudal tenure. Land passed from father to son practically without document. It was at the opposite pole from the feudal system, and, in fact, the effort by Harold to induce the Norse to accept feudalism led to prolonged conflict. The udal system was in force among the conquerors. The conquered possibly held land as Merkland. In the "kindly tenantry" of Lochmaben you have something that has long interested the legal mind. Its origin is usually ascribed to the days of Bruce, but it is not at all improbable that the "kindly tenantry" tenure of land may be a far off relic of the Norse udal tenure. It suggests a remarkable parallel with the "statemen" of the Cumberland shore. Wanlockhead and Leadhills furnish something analagous. We now extend our survey to the literature of the Borders. One clear, outstanding feature of Border

literature is the ballad. That reaches its climax in the group of ballads associated with Yarrow—the most remarkable group in Scottish ballad literature. Now, in the ballad of the Borders you have action, daring. It has all the Norse qualities of love of adventure. Dr Nansen has singled out as the two characteristics of Norwegians—love of adventure and love of independence. The ballads of the South, curiously enough, as has been shown by Professor Veitch, can be nearly all paralleled with Norse folk songs. In the ballads of Yarrow you have the steady tendency to the place of the duel or the conflict. There has arisen a curious dispute as to who was the far-off unknown singer whose strains first gave the keynote to the music that was to be for ever associated with

"The dowie holms of Yarrow."

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

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

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

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

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

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

> Eerie tramp and horses' tread
> Fill forgotten ways,
> Breezes whisper overhead
> Buried minstrels' lays;

Soldiers of the legions,
Northern sea kings,
Mediæval knights, Border reivers,
Bustle it bravely side by side.

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

THE SALMON DISEASE.

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

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

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

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

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

Continuing, Mr Arnott went on to say that Mr Rutherford had discussions with Professor Huxley and Mr J. Stirling, and that his paper further pointed out that "unless there is a predisposing cause, fish will not contract the fungoid part of the disease. . . . I am rather inclined to believe that salt water is not very favourable to the growth of 'salmon ferax,' but, as far as the bacteria in the muscles are concerned, no washing by any solution will affect them."

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

Dr Ross, who presided, said it might be recalled that this was not the only instance when Professor Huxley, great scientist as he was, went off the rails, but he was a thoroughly honest scientist when he saw himself at any time in error. It was of interest that

one of the oldest of the members of the society—who was, unfortunately, not able to be with them so often now—had made such a far-sighted suggestion.

EDWARD I. AT SWEETHEART ABBEY.

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

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

1. "Paid to Sir John de Langeford, sent from Gerton upon Flete in Galloway to Carlisle to get money coming from the Exchequer, and bring it to the King to pay thence the expenses of his household and army, for his own expenses, those of Richard de Merewell, and of the others who were in his company, for bringing and guarding the said money, for 15 days, between the 10th day of August and the 24th day of the same month, going to Carlisle as is said before, staying at the port of Skynburness, waiting for a favourite wind, and also returning to the Court at Douzquer (Sweetheart)—£2 6s 0½d."

2. "Paid to Thomas le Convers, valet of the King's chamber, for mending the iron dogs for the King's chamber several times in the present year, by his own hands at Stamford on the 2nd day of May, 3 shillings; and at Douzquer (Sweetheart), in Scotland, on the 25th day of August, 10 shillings—total, 13 shillings."

3. "Paid to Sir John Lestrange, banneret, for his wages and those of his 2 knights and 7 esquires from the 6th day of July, on which his horses were valued in the aforesaid war, till the 23rd day of August inst., on which he retired from the King's army at

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

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

6th April, 1906.

Chairman—Rev. JOHN CAIRNS, M.A., Vice-President.

NEW MEMBERS.—Provost Halliday, Esthwaite, Lochmaben, and Mr D. Manson, Acrehead, Dumfries.

THE HOUSE OF THE MAXWELLS OF NITHSDALE AT DUMFRIES.

By JAMES BARBOUR, F.S.A. Scot.

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

independence, and which Bruce captured after the death of Comyn.

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

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

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

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

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

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

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

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

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

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

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

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

This eighth lord is characterised in "The Book of Caerlaverock" as a nobleman of great spirit, humane, courteous, and

learned; and the beautiful seals illustrated in that work are proof of a refined taste.

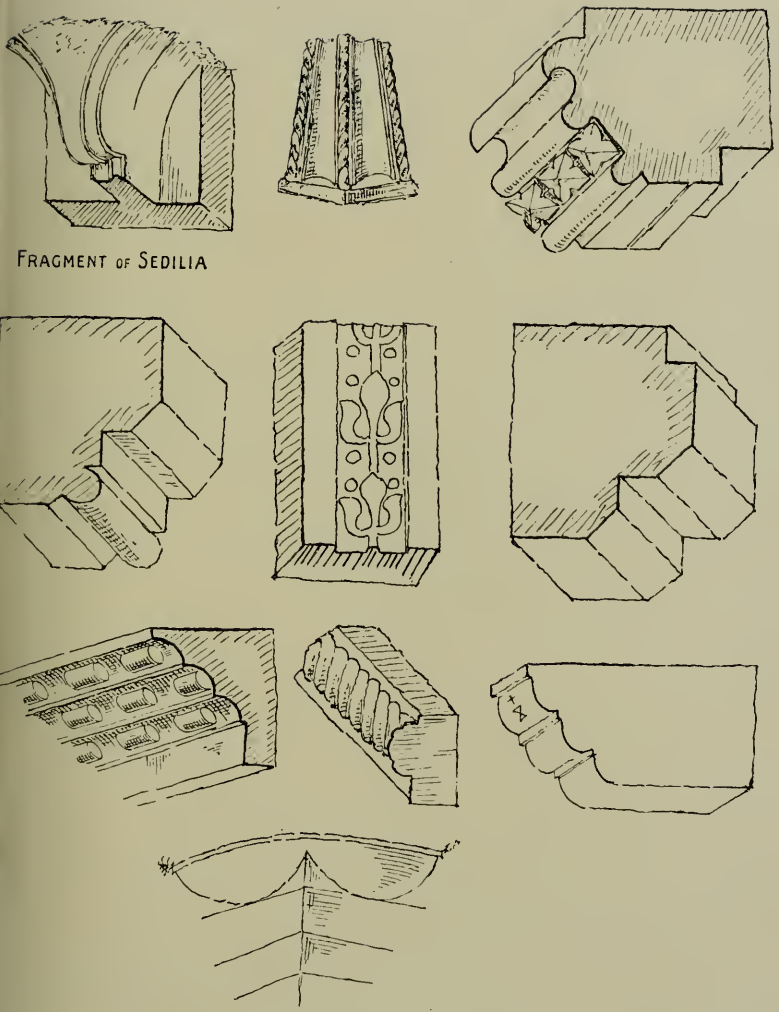
John, 8th Lord Maxwell, 1593-1613, brought on himself dire calamity and odium. Having broken prison from Edinburgh Castle, the King, very angry, issued a proclamation that none should harbour him under pain of death. Outlawed and in hiding, Maxwell thought to better his condition by securing the friendship of the hereditary foes of his family, the Johnstones. With that view a meeting took place according to appointment between him and the chief of the latter clan. Maxwell's motive will never be known, but conceivably the meeting with his ancient enemy reminded him of the disgrace of Dryfe Sands and his dead father, and roused in him uncontrollable passion. However that may be, he treacherously shot the laird of Johnstone in the back, who, coming to the ground, shortly expired, exclaiming, "I am deceived. Lord have mercy on me! Christ have mercy on me!"

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

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

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

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



FRAGMENT OF SEDILIA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Authorities: "Book of Caerlaverock," Sir Herbert Maxwell's History, Dr Burnside MS., Mr William Dickie's "Dumfries and Round About."

The Honey Bee: Its Natural History, Anatomy, &c. By Henry Marrs.

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

probably, all the rest of the young unhatched queens. On the third day, if weather is suitable, she will fly out of the hive to be fertilised, which, when once accomplished, lasts her lifetime, and rarely leaves the hive again except with a swarm. I say rarely, because some beekeepers maintain that queens do sometimes take an airing flight in the spring, which I doubt. Bees gather nectar from flowers, most single blossoms containing some. This nectar contains a large proportion of water, which is evaporated by the heat in the hive, which never falls below about 60 deg. even in winter. Nectar is cane sugar, but is converted by the bee into the grape sugar or honey by secretion from its salivary glands. Pollen is gathered from flowers, and is used as bee food —propolis also, and is used as a glue for stopping up any air holes in hive. Water is also gathered, but not stored. The eggs laid by the queen are of two kinds. The egg hatches on the third day usually, but sometimes is delayed a little longer, it depending on the temperature. The larva lies at the base of the cell, slightly curved, and as it grows forms a complete ring. The larvæ are fed on chyle food for three days, during which time the food is absorbed by the body as well as the mouth. After three days the food is changed, and honey and digested pollen is added for workers, and honey and undigested pollen for those intended as drones; but those intended for queens are fed abundantly on the same chyle food during the whole of their larvæ existence. It will be noticed that the difference between a queen and worker is a question of food. When the larvæ have grown their full length feeding ceases, and the cells are sealed over with wax and pollen. This is to keep the cell porous and allow the bees to breathe. The larvæ spin a cocoon with silk from the silk glands, which takes one day for the queen, two for the worker, three for drones. Then they all have a period of rest for two, three, and four days. They each take a day to be transformed into nymphs, and the time in nymph state is three, seven, and seven days respectively. The queen takes, therefore, 15 days to develop, the worker 21, and the drone 24 days. It will be noticed that the food is changed at the end of the third day. It is then that the genital organs in female larvæ appear, and if the chyle food is continued, the ovaries are developed. If the food is changed, we have only the rudimentary ovaries. Reproduction without fecundation is called partheno-

genesis. This was known to exist in some insects 200 years ago, but it was only about 50 years ago that it was known in bees. All eggs which come to maturity in the ovaries are one and the same kind, which, when without coming into contact with the male fertilising germ develop into male bees. Those which are fertilised produce females. If we cross an Italian queen with a black drone, the female progeny will show qualities of the two races, but the drones will be Italians. The drone, therefore, has no father. This was anatomically proved by Siebold, who crushed eggs newly laid, and eggs laid in drone cells were found to be without the fertilising germ, whilst in the eggs found in worker cells the germ was plainly seen. In the head of the worker bee are the compound and simple eyes, antennae, and mouth parts. In the worker the three simple eyes are on the crown of the head. Set in triangular form, they are much the same in the queen, but in the drone the compound eyes are so large that they displace the simple ones, which appear right in front of the face. The antennae, of which there are two, are in the centre of the head of each bee. The mouth parts consist of several organs, of which the most interesting is the tongue. The thorax gives place to the two pairs of wings and three pairs of legs. The abdomen contains the honey sac, true stomach, etc., etc. The compound eyes consist of a large number of simple eyes placed together, with sensory hairs between each facet. There are never less than 3500 in each compound eye. The queen has more, and the drone which has to seek its female many more, displacing the simple eyes entirely. The compound eyes are for seeing at long distance, it being calculated that the angle formed by the lenses enables the bee to see an object of half-an-inch at seven yards. The simple eyes are for short vision, and useful in dark places. Mr Cowan thinks Lord Avebury's experiments not conclusive; they simply show bees can become accustomed to certain colour. Recently a lecture was delivered before the Academy of Science in Paris on the life of bees by Mr Gaston Bonnier, who said: "With respect to the visual powers of bees scientists are not agreed, but after a long study of them had noticed that bees were not attracted by bright and showy colours, but were evidently guided by the scent, which draws them towards those containing nectar." This is exactly my opinion on the subject. The antennae in the worker have twelve separate joints, and near the end

have sensory hairs. Many scientists maintain that it is in the antennae that the auditory and olfactory organs are situated; others say that organ of smell is in the labrum within the mouth. Cowan thinks the weight of evidence is in favour of their being considered olfactory. There are two pairs of wings, the larger in front, and the bee can at will join the two at each side together, the hind wings having a series of hooklets which fit into a trough in front wings. Bees can fly backwards at a speed of about 12 miles an hour, but I think this can be exceeded. Young bees just hatched cannot fly owing to their trachea not being sufficiently charged with air. The first pair of legs has an arrangement for cleaning the antennae exactly like a comb, and it has also brushing hairs for collecting pollen gathered on the hairs of thorax. The hind legs are provided with a basket for carrying pollen, and also with a pair of pincers for removing wax from the wax plates on the under side of abdomen. The foot of the bee has claws which enable it to hang on to any rough surface. There is also a cushion which secretes a sticky substance, enabling the bee to walk on smooth surfaces where there is no hold for the claws. The abdomen is made up of six imbricated rings of chitine connected by a membrane, which by creasing allows the plates to pass over each other so that the abdomen can be expanded or contracted. There are six dorsal and six ventral plates. Bees do not breathe through the head, but by openings on the surface of the body, called spiracles; they are double, the inner closed with a valve, and the outer, with hairs to keep out dust, lead to large air sacs inside abdomen. There are two pairs of spiracles on thorax, five pairs on abdomen. Spiracles are connected with tracheal tubes, which extend to antennae. Newport says the use of air sacs is to enable the bee to alter its specific gravity at pleasure by enlarging its bulk, and thus rendering it better able to sustain itself on the wing. The ovaries of the queen, of which there are two, are placed on each side of the abdomen—they are tubular glands. Over each side there are about 200 tubes or follicles, each follicle containing about a dozen of eggs, making about 5000 altogether. On the ovary on the right side is the spermatheca, which contains the fertilising spermatozoa. The queen allows the egg to be fertilised or not as the egg passes out of the ovaries. The wax glands are below the ventral plates of abdomen. Wax is a voluntary secretion; yet can only be pro-

duced at a high temperature, a temperature of 90 degrees being required. This the bees obtain by close clustering. Huber found that bees produced slightly more wax when being fed with sugar syrup than honey syrup. Pollen is not needed in the production of wax, except to make up for wear of tissue, which is great when secreting wax. It is estimated that bees consume from 10 to 12 lbs. of honey to produce 1 lb. of wax, but temperature must influence the quantity used. The way in which bees form the hexagonal cells is said by Mullenhoff to be that of mutual interference, as all circles coming into contact with each other assume that form, and also shows that the cells are like soap bubbles, which if alone are round, but when touching form a wall, and if there are many the centre will be hexagonal. We come now to the sting of the bee. It is formed of a pair of feelers, a sheath, and two lancets having barbs like a fish hook. Attached to the sting is a poison sac worked by a set of muscles which pumps the poison into the wound. The bee first uses the feelers to see if the object is stingable. It then drives in the sheath, and then the lancets, which move alternately or together. The pain of a sting is caused by the poison introduced into the wound, and not by the wound itself, as the sting is only 1.500 in. in diameter, and is driven in to the depth of 1.50 in. While bees die from the effects of a sting, the poison, which is formic acid, can be given them in their food without any ill effects. Formic acid is one of the remedies used in foul brood.

20th April, 1906.

Chairman—The President.

Bird Life and Bird Photography. By Hugh Steuart Gladstone, F.Z.S., &c.

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

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

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

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

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

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

Here we see the spotted flycatcher at its nest.

This slide shows a young spotted flycatcher.

The Pied Flycatcher.

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

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

TREE CREEPER.

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

THE LITTLE GREBE.

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

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

White Wagtail.

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

Meadow Pipit's Nest and Cuckoo's Egg.

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

Red Necked Phalarope.

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

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

BLACK GAME.

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

PHEASANT.

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

WOODCOCK.

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

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

Snipe.

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

Wood Pigeon.

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

Curlew.

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

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

LAPWING.

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

MERLIN.

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

BLACK HEADED GULL.

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

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

Puffin.

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

Great Auk.

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

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

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

SEA BIRDS ON FLAMBOROUGH HEAD.

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

LESSER TERN AND ARCTIC TERN.

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

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

Our next six photographs concern the Arctic tern. This photograph shows an islet on the Langa river, in Iceland, which was resorted to for nesting purposes by these birds. The next, taken in Ireland, shows two eggs in the nest. The eggs, which vary enormously, in colouration, are in this case dark chocolate brown, blotched and spotted with black, and with undermarkings of grey. Here we see an interesting photograph. You will notice that one egg is normal; the other is abnormal, being spotless and pale blue in colouration. When speaking of the black headed gull, you will remember that I said that to find one egg of a clutch lacking in pigmentary colouration was not very unusual. This picture shows the Arctic tern brooding its young, which can just be made out below the bird's breast. This photograph is of the same bird as in the preceding, and was taken in Iceland. It shows the bird at the nest, with its wings uplifted in a truly characteristic manner. Our next photograph, taken in Ireland, shows the Arctic tern contentedly incubating her eggs.

4th May, 1906.

Chairman—Mr Robert Service, V.P.

It was agreed to record in the minutes an expression of regret at the deaths of three members of the Society, viz.:—The Right Hon. the Earl of Mansfield, Captain W. Stewart of Shambellie, and the Rev. Joseph Hunter.

Mr J. Rutherford, Jardington, exhibited an equatorial star finder of his own design for the use of beginners. The following is Mr Rutherford's description of the instrument:

A few years ago, when learning the stars, I sometimes had a good deal of trouble in finding the ones that I saw in the sky on the map; also, trouble and doubt were experienced in regard to stars I saw on the map in locating them in the sky. Under those

circumstances, I very much felt the need of something to assist in searching, and for confirmation of my observations. After some consideration, I designed and made the finder you now see. The circles are made from old clock dials roughly divided by hand (cardboard would do quite well). The right ascension circle is divided to minutes, the dec. to degrees. The finder requires to be placed on a level stand (I used a large flower vase). It must stand when in use in its proper position in regard to the meridian of the place. To do this, find the longitude of the place on a map, and for every degree that it is west of Greenwich it will be 4 minutes later than Greenwich time; for every degree that it is east it will be 4 minutes earlier. This will give the time of the place when this is found. Stick a piece of wire upright on the top of the stand, and at the correct time of noon draw a line along the shadow made by the wire and the sun; this line will be the guide for placing the finder. To find the polar axis, take a piece of wood or cardboard, say, 14 by 18 inches, stand it with its 14-inch end on the top of the stand or table. Look along its edge, and tilt it until the edge comes in a line with the pole star; this will give the required angle. To use, place the finder in its proper position as to north and south on the stand, guided by the line already drawn, and I will assume that the top star (Delta) in the belt of Orion is known to the observer. Look for its position in the star map, which will be found to be: R.A., 5 hrs. 26 mins.; Dec., 0 deg. 23 mins. S. Look through the tube, and bring the star into the centre, turn the R.A. and Dec. circles until the pointers are on these figures. Now, suppose you want to find Castor in Gemini: Find its position on the star map, which is R.A. 7 hrs. 27 mins., Dec. 32 deg. 9 mins. N. Without touching the circles, turn the Dec. and polar axis until the pointers are on these figures, and the tube will be pointing to the star, or very near it. Now, suppose you see a star or group of stars in the sky, and you wish to know what this particular star is, or in what constellation the group is. Again adjust the R.A. circle on Delta (Orion) or any other star the position of which is known; turn the tube to the star or group, and the pointers will give the R.A. and Dec.; find this place on the star map, and this will show what the star or group is, and in what constellation it is situated. It is not to be expected from this roughly-made and imperfectly-divided finder that its readings will be quite accurate, but it cer-

tainly is a great help to anyone just beginning to learn the stars and constellations. I designed and made it in a hurry, and used it along with the telescope until I got pretty familiar with the different constellations and principal stars; it may be constructed in a short time by any amateur mechanic of ordinary capacity. I may add that to get a familiar acquaintance with the stars a telescope is not really necessary, but a good star map is required, and I can recommend to all beginners Proctor's small atlas, price 5s, and when used along with Webb's "Celestial Objects for Common Telescopes" and a good 3 in. glass, and all mixed up with a real desire "to know," it is all that any amateur astronomer may desire.

The Birthplace of Anna Laurie. By W. Dickie.

This note is a sequel to the very pleasant visit which the Society paid to Glencairn last summer. You will remember that our host at Maxwelton House, in the very interesting account which he gave us of the house and the Laurie family, mentioned an idea which has lately prevailed in some quarters, that the heroine of the song which has made the house and its "braes" celebrated was born, not in Maxwelton, but at Barjarg Tower, in the neighbouring parish of Keir. In conversation with Sir Emilius I learned that the only basis for this theory was the record of her birth in what have come to be known, somewhat vaguely, as "the Barjarg Manuscripts." I expressed the opinion that it rested on a misapprehension of the nature of these records, and I undertook to make inquiry on the subject. I have since done so, and it has been suggested by the Secretary that the result should be recorded in the Transactions of the Society.

The Laurie family records of the sixteenth and seventeenth centuries, I ascertained from Sir Emilius, have not been preserved at Maxwelton; but I found in the valuable library at Barjarg, to which I was kindly given access by Mrs Hunter Arundell and Mr Wadd, a transcript of that record, covering the period from 1674 to 1731. It is this copy of a Maxwelton document—not an original record kept at Barjarg—which contains the entry of the birth of Anna Laurie. The following is a complete copy of the record:—

MAXWELTOUN REGISTER.

At the pleasure of the Almighty I was married to my wife, Jean Riddell, upon the 27th of July, 1674, in the Trone Kirk of Edinb. by Mr Annane.

At the pleasure of God my da. Cath. Laurie was borne upon the 15th of June, 1675. She was baptized upon the twenty 2d of the same month by Mr Geo. Hunter.

At the pleasure of the Almighty God my son Robt. Laurie was borne upon the 21st of July, 1676, about 2 o'clock in the afternoon, it being upon a Wednesday, and he was baptised upon the 8th day of Augt., 1676, by Mr Geo. Hunter at the Kirk of Glencairn.

At the pleasure of the Almighty God my Da. Jane Laurie was borne upon the 12th of July, 1677, about 9 o'clock in the morning, it being upon ane Thursday, and she was baptised upon the 25th of the same month by Mr Geo. Hunter, our minister.

At the pleasure of the Almighty God my Da. Violat Laurie was borne upon the last day of June, 1680 years, about 12 o'clock at night, it being upon Wednesday, and was baptized by Mr Geo. Hunter.

At the pleasure of the Almighty God my Da. Susanna Laurie was borne upon the 15 of July, 1681 years, about 6 o'clock at night, and was baptised at Glencairn Kirk by Mr Geo. Hunter upon the 26th of the forrsaid month.

At the pleasure of the Almighty God my Da. Anna Laurie was born upon the 16th day of Decr. 1682 years, about 6 o'clock in the morning, and was baptised by Mr Geo.

At the pleasure of the Almighty God my sone Walter Laurie was born upon the 3d of May, 1684 years, being Saturday about 7 o'clock at night, and was baptised by Mr Geo. Hunter our minister.

At the pleasure of the Almighty God my son John Laurie was borne upon the 14 day of Oct., 1685 years, being Tuesday, about ten o'clock of the day, and was baptised by Mr Geo. Hunter our Min.

At the pleasure of the Almighty God my father Sir Robt. Laurie was called by Death, the 23d Augt., 1698 years, it being upon a Saturday betwixt 4 and 5 in the morning, his age being 57 on the 7 of Sepr.

Signed ROBT. LAURIE.

At the pleasure of the Almighty God my brother, Sir Robt. Laurie, was called for by death upon the 28th of Feby., 1702 years, it being upon a Tuesday before 12 o'clock in the forenoon, his age being 27 come the 21 day of July ensuing.

Signed Walter Laurie.

At the pleasure of Almighty God my father Sir Walter Laurie was called for by death upon Tuesday, the 23 of Novr., 1731, at six o'clock in the morning, being aged 47 from the 3d of May last.

Signed Robt. Laurie.

The preservation of the terms of this interesting record we owe to Mr W. F. Hunter Arundell of Barjarg, who died in 1827. He cherished the idea of writing a history of the county of Dumfries and the county families, and had amassed a great deal of genealogical material; but he was not spared to cast the fruits of his industry into literary form. They were, however, placed at the disposal of the late Mr M'Dowall, and largely drawn upon in the compilation of his "History of Dumfries." The "Maxweltoun Register" is copied into a volume containing entries relating to many other families, and arranged in alphabetical order. The title prefixed to it, as well as the nature of its contents, shews that it is a register of events occurring in the Maxwelton family, and, except where otherwise stated, at their own residence. Maxwelton had been the life-long home of Sir Robert Laurie, the first baronet, who succeeded to the estate as a boy in 1648; and there his sixth child, Anna, was born on the 16th of December, 1682.

I communicated the result of my inquiries, with some other material, to Sir Emilius Laurie, and I received from him a letter, in which he wrote:—

"Let me again thank you for the very interesting article, a copy of which you have so kindly sent me. You have certainly completely cleared up the doubtful question of Annie's birthplace. I, too, had carefully read, as I thought, M'Dowall's History, but I do not remember to have read the preface, and, therefore, accepted the Barjarg myth. It is a case in which the injunction 'verify your references' needed application, and you have done well to all who love accuracy in historical statements in clearing it up. You have also cleared up to me another difficulty, namely, Anna's age at marriage. I had always supposed that the date on her marriage stone at Craigdarroch was the date of her marriage.

This appears not to have been the case. You also show, which I was not aware of, that she was three years older than her husband, Alexander Fergusson. In the portrait which I have at Maxwelton of Annie and her husband she certainly looks the older of the two, and if the portraits were taken at the same time, which would seem to be probable, the circumstance is explained."

I may add that Sir Robert Laurie was first married to Marion, daughter of Sir Robert Dalziel of Glenae, their marriage contract being dated 21st April, 1662. Of that marriage there were born three daughters, one of whom became the wife of Alexander Ferguson of Isle, advocate. Sir Robert's second wife, mother of the heroine of the song, was Jean Riddell, daughter of Walter Riddell of Minto. Anna's marriage to Alexander Ferguson of Craigdarroch took place on 29th July, 1709.

PHTHISIS AND SANATORIA. By Dr JAMES MAXWELL ROSS.

Dr Maxwell Ross first showed a set of lantern slides illustrating the effect of the disease on the lung, the bacilli from which it originates, and methods by which it may be disseminated. Thereafter there were thrown on the screen tables and diagrams shewing the mortality from consumption in various countries. Those relating to England and Wales shewed a progressive decrease in the death rate from this cause in recent years, it having now fallen to 1.2 per thousand. The lecturer further stated that there was a more rapid fall in the death rate among females than among males. It might be that the dust occupations affected the latter to a greater extent; and factory legislation had probably affected females more than males. Taking into account the increase of population, the tables shewed that as compared with fifty years ago there was an annual saving of about forty thousand lives which under old conditions would have been sacrificed to this disease in England and Wales. The Registrar-General's reports shewed that about seven thousand people die from consumption in Scotland each year, and that the mortality per ten thousand of the population had dropped in thirty years from 27 to 16, representing a saving of nearly five thousand lives per annum. This gratifying improvement was more largely the result of what had been done by the sanitary authorities in large towns than of any change in rural districts or small towns.

Tables of the consumptive death rate for five-years' periods in Edinburgh and Glasgow shewed a fall in each period. This was markedly the case in the city of Glasgow, and was a most gratifying result of the action of the Town Council in regard to sanitary matters. Dr Ross also shewed a diagram illustrating the consumptive death rate in the burgh of Maxwelltown, for which he is medical officer. It shewed the extreme fluctuations which you got in small communities. To get a proper idea of the rate of mortality in Maxwelltown you would require to take a longer period than ten years. Last year it was below one per thousand. If that would only continue, they would have great reason to congratulate themselves on the reduction of the death rate in that burgh. Exhibiting a diagram which shewed by curved lines the rate of mortality in Scotland generally and in the county of Dumfries from consumption during the last twenty-five years, Dr Ross said this would almost make one pessimistic, as it shewed that the death rate of Dumfriesshire had often been the largest of any county in Scotland. A coloured map indicating the distribution of the disease in the county during the past fifteen years shewed that the death rate was highest in Nithsdale. Another diagram shewed the death rates in the landward part of Dumfriesshire during the last twenty-five years from consumption and from zymotic diseases respectively. The zymotic diseases, he explained, include smallpox, scarlet fever, diphtheria, typhoid, whooping cough, measles. From the period 1881 to 1890 the zymotic diseases and the phthisis diseases had a mortality not very greatly differing from each other; but from 1890, when the change in local government occurred, as the years went on, and more and more was being done by the local authorities for prevention of zymotic diseases, the death rate from these diseases gradually declined, while there was very little difference in the death rate from phthisis, for which nothing had been done. This was an indication to local authorities that when they had done as much for phthisis as they had done for zymotic diseases they would bring about a corresponding improvement. Turning to the consideration of preventive measures, Dr Ross showed photographs of bottle spittoons for use by consumptive patients, and he spoke of the great danger from infected sputum. When he went about the infirmary, he remarked, he was struck by this, that there was an enormous number of cases of glandular

diseases of the neck. Many operations were performed on children for removing glands and so on. A number of the children came from the closes about High Street and Queensberry Square. He would like them to think what the loafers in that square and "Monument rangers" were doing. They were loafing about there, spitting broadcast, and some of them them were known to be suffering from phthisis. The sputum became dry and was carried about as dust. The children, playing about, inhaled that dust and the bacilli of phthisis which it contained; and so they contracted the disease. Touching on conditions tending to promote the spread of consumption, Dr Ross mentioned the want of sufficient sunlight and of free movement of air in the closes of towns. He finally showed a set of slides illustrating the construction of sanatoria and the results of the treatment.

In reply to a question as to how Dr Ross accounted for the large amount of consumption in Ireland as disclosed by one of the slides, the smaller amount in Scotland, and the still smaller amount in England and Wales,

Dr Ross said he was afraid the answer to that question would involve a pretty long dissertation. Generally speaking, it was a question of housing and living. They knew what the housing and living were in the lower parts of Ireland; and what it was in certain parts of Scotland had recently been shown by the medical report on the prevalence of this disease in the Lewis. In England a number of Boards of Guardians had been in the habit of giving out-door relief to consumptive paupers and allowing them to live with their families, where they became centres of infection. Some years ago they changed their policy, and insisted that consumptive paupers should go into the workhouse infirmaries. Coincident with that, there had been a considerable fall in the death rate from this cause in England and Wales. Factory legislation and sanitary improvement had helped very much.

FIELD MEETINGS.

Field Meeting—2nd June, 1906.

(From the Dumfries and Galloway Standard.)

On Saturday the members of Dumfries and Galloway Natural History and Antiquarian Society, to the number of over forty, had a field day in Borgue district, and were the guests of Mr and Mrs Brown at their beautiful coast residence of Knockbrex. They were met at Kirkcudbright railway station by several gentlemen resident in the district, including Mr John M'Kie, R.N.; Mr E. A. Hornell, artist; and Mr John Douglas, Barstibly. Brakes, kindly provided by Mr Brown, were in waiting for their conveyance. Numerous points of interest were pointed out on the route, and the drive through a sylvan district, in sight of the Dee and the Solway, in brilliant summer weather, was greatly enjoyed. A halt was made at Borgue House, where, by the courtesy of Mr W. T. Sproat, the company were enabled to inspect the ruins of Borgue Place, immediately behind the modern mansion-house. The Place is chiefly interesting as an example of architecture which came into vogue after the union of the crowns and the better settlement of the country. The building occupies three parts of a square. The wall on the fourth side, with its strong gate, has long since disappeared. Driving past Borgue village, with its beautiful Parish Church, and Chapelton Row, Earlston House, the residence of the late Sir William Gordon, was pointed out. The view from here is very fine, and the day being an ideal one, everything was looking its best. To the left is the broad expanse of Wigtown Bay, with the Wigtown coast standing out clear and sharp, the coast line between Gatehouse and Ravenshall being also very distinct. Nearer, nestling in the hollow of the shore, is the hamlet of Kirkandrews, and further on are the woods of Knockbrex. Passing Carleton farm-

house, the old manor house of the Earlston estate, on the right, a halt was made at Barmagachan, tenanted by Mr Barber. This is another example of the same style of architecture as at Borgue Place. Near by is Barmagachan Moat, a small but very perfect example of the circular mound.

The journey was then resumed by way of Margrie to Knockbrex, where they were most hospitably received by their host and hostess. Under the fostering care of Mr Brown, Knockbrex is rapidly becoming one of the most beautiful places one could wish to see. The ancient home of the Gordons has been transformed into a handsome modern dwelling-house; but it is on the grounds that the greatest transformation has taken place. The gardens have been in course of extension and development since Mr Brown acquired the estate, and when the shrubs and other plants recently added have become established they will rank among the most beautiful in the South of Scotland. A delightful artificial lake, with various bays and inlets, surrounded by rhododendrons and other flowering shrubs and trees and choice conifers and foliage trees, was much admired. It has been formed with much taste, and the rockwork to the west, recently constructed, is extensive, and has been planted with a number of choice rock plants. There is in front of the house a spacious lawn and a number of beds, each filled with a choice variety of roses. A fine pergola, about 150 feet long, has also been added for climbing roses, and a unique "sunk garden," after the style of the ancient Roman gardens, has been formed in the centre of the lawn. The paths are paved with pebbles like tesselated stone work, and the beds are filled with the finest shrubs and plants suitable for the position, while the walls will be covered with climbers and wall plants. The kitchen garden and glass-houses were also visited and are of an extensive character, and do credit to Mr Bennett, the head gardener.

After having been entertained to a sumptuous tea, the party were conducted over the grounds, visiting the splendid stables, the electric installation, and the laundry, all of which are perfect models of their kind, and all fitted up with the very latest appliances. Mr Brown has also recently formed a harbour, where small vessels may land their cargoes, and near it is a large storehouse.

Returning to the house, Mr M'Kie, addressing Mr Brown,

said that, as it was chiefly through his recommendation that the members of the Society were led to visit that district, he had, therefore, personally to thank Mrs Brown and himself most cordially for their great courtesy and kindness. The members had had an opportunity of seeing the beautiful and natural arrangement of the grounds, but they could have no idea of the taste and skill, to say nothing of the cost, which it had taken to bring these to their present state and condition. It might truly be said of this place, as did the poet when describing the highways then recently opened in the Highlands, who said—

> Had you seen these roads before they were made,
> You would hold up your hands and bless General Wade.

Had they seen this place before Mr Brown took it in hand and as they saw it that day, whatever they might do in the way of blessing, he was sure they would be struck with surprise and admiration. In the early part of last century that wayward genius, John M'Taggart, sang of Borgue as "a parish famous for its Browns and Sproats, the like ot's no on this side John o' Groats!" They had ample proof now before them that since then the race of Browns had in no way degenerated, as we held whoever made a portion of his Majesty's dominions beautiful, as Mr Brown had done these, deserved well of his country. The visitors would presently have an opportunity of seeing the interest he was taking in antiquarian research, through having had the accumulated rubbish removed from the Broch at Roberton, whereby its form and structure could now be seen, and it would be interesting to get the expert opinion of the society as to its probable origin and the purposes for which it might possibly have been used. While tendering thanks, it was with the hope and trust that Mrs Brown, himself, and family might long be spared to enjoy the fruits of his most interesting labour.

Mr Barbour also added a few remarks, and expressed the wish that Mr Brown and his family would long live to see their work come to maturity.

Mr Brown, in reply, said the visit of the society to Knockbrex had been a great source of pleasure to Mrs Brown and himself, and it was a pleasure they had greatly looked forward to. Anyone of an artistic temperament was always welcome to Knockbrex. They valued the kind remarks that had been made,

and appreciated them very much. The people who were not welcome at Knockbrex were the people who went about uprooting flowers, carving their names on rocks and trees, and scribbling on gates; but anyone interested in botany or natural history would always be made very welcome there.

At the business meeting the following new members were admitted:—Mrs Waddell, Victoria Terrace, Dumfries; Mr D. H. Hastie, Dumfries; Mr W. M. Grey, 5 Victoria Terrace, Dumfries.

The party, accompanied by Mr and Mrs Brown, then drove to Corseyard, the residence of Mr P. M'Connell, Mr Brown's factor, where the visitors' book was signed.

A visit was then paid to the "broch"* on the Roberton shore discovered some time ago, and which has been excavated and cleared out under Mr Brown's direction. The main entrance is from the side nearest the road. The "broch" consists of two walls, with a passage about three feet wide between. The ground appears to have been excavated, as the outer wall is built against the rock. When first discovered the walls, outer and inner, were about three feet high. A mark has been made indicating the height when found, and they have been considerably heightened. From the inner court a number of openings lead into the passage. This has evidently been covered, as at the west corner the slabs across are still in position. In the south corner is a part of the original pavement, and here most of the interesting relics, now at Knockbrex House, were found. These consist of a beautiful ear-ring found in the main doorway, teeth, skeleton of a hand, remains of chain metal, blue and white bead, rings. Still lying in the "broch" are to be seen a quern, a stone knife, and a whetstone, all in excellent preservation; besides fragments of deer's antlers. On the south-west is a passage leading through both walls, and still showing the original path to the shore, covered with rough slabs. Another peculiarity is the number of openings leading into the passage. The whole building is circular. The importance of the discovery lies in the fact that no structure of this kind has hitherto been known to exist in the south-west parts of Scotland. A broch is described by Dr Joseph Anderson as a hollow circular tower of dry-built masonry, rarely

* NOTE.—Since this was written further research has shown that this building is not a "broch" but an ancient fort.—ED.

more than 70 or less than 40 feet in total diameter, occasionally at least 50 feet high, and enclosing a circular court or area from 25 to 45 feet in diameter. In his opinion, it is clear that these ancient buildings were used as places of refuge, and in those days they would be practically impregnable. Roberton broch is built on a rocky eminence, but whether it was also defended by ditches and embankments, earthen ramparts, or dry stone walls has not yet been ascertained.

A hurried visit was paid to the ancient hamlet and churchyard of Kirkandrews, which contains two stones erected to the memory of Covenanters done to death near by, and the grave of William Nicholson, the Galloway poet. Mr Brown, with characteristic generosity, is building a handsome chapel at Kirkandrews to take the place of the old meeting-house. A beautiful lych-gate has also been erected.

The party were greatly indebted to the veteran Mr M'Kie, for so kindly acting as guide, and pointing out and explaining the various objects of interest on the route.

Field Meeting—16th June, 1906.

(From the Dumfries and Galloway Standard.)

MOFFAT DISTRICT.

A party, numbering about twenty, paid a visit to places of interest in the vicinity of Moffat. Driving first to Auchencastle, they had, through the courtesy of Mr Younger, the privilege of inspecting the fine collection of pictures, which includes a beautiful portrait of a lady, "Madame Elizabeth of France," by Vegee Le Brun; characteristic works of George Morland, Sidney Cooper, Sir W. Beechey, Horatio M'Culloch, several works of Dutch painters; a striking portrait of Oliver Cromwell as a comparatively young man and in armour, suggestive rather of the Cavalier than the Roundhead. Mr Younger has also in his study a most interesting collection of print portraits of distinguished British statesmen. Among numerous artistic objects to engage attention was a massive piece of old oak carving forming the frame work of the hall chimneypiece, the side supports being statues carved in wood. The beautifully laid out grounds around the castle present at this season a gorgeous mass of colour, pro-

duced by extensive clumps and deep banks of many-tinted rhododendrons and azaleas; and the chestnuts and laburnums also bear a profusion of blossom. Under the guidance of Mr M'Adam, head gardener, the visitors made a round of the conservatories, vineries, and peach-house, where they found much to admire; among other special features, the magnificent collection of calceolarias, each of distinct colour and all of a wonderful size; the fine, rose-like carnations, and splendid double begonias. Driving next by way of Lawesknowe to the old castle of Auchencas, an inspection was made of its ruins. The outer walls, which are about ten feet thick and enclose a square of about 120 feet, remain to a height of several feet, as grass-grown ridges, along their whole length, and stumps remain of three of the angle turrets. The encircling moat also is plainly to be traced for almost its entire extent. But the internal buildings have wholly disappeared. The castle is associated with the name of Randolph, Earl of Moray, the comrade of Bruce, and afterwards Regent of the kingdom; but little mention of it is made in history. It is known that it became the property of the Johnstones of Corehead in 1638, and that it had formerly been the property of the Douglases of Morton. Proceeding next to the beautiful Garpol Glen, which is in the immediate vicinity of the old castle, the party viewed its pretty water falls, noted its geology, particularly the spots where the Silurian shales are exposed and samples of the Moffat graptolites can be obtained; and found much to interest them in its wealth of flora. Emerging at the foot of the glen—where a long tunnel has been made in the rock to carry the stream below the Caledonian Railway—the party walked across the fields to Auchencastle avenue, where they rejoined the brakes. On the way they passed St. Margaret's Home, a practical embodiment of Mr Younger's philanthropy, providing as it does a place of country residence for invalid city children during periods of convalescence. Driving up the valley of the Evan as far as Longbedholm, they thence proceeded by the steep hill road over the ridge into the valley of the Annan, and called by the way at Chapel farm to inspect the remnant of the old chapel of the Knights Templars, from which it derives its name. The remains consist of a portion of the west gable, with three-light pointed window, of which one of the mullions is awanting, and part of the east gable, in which had been the doorway. The latter has

been built into the gable of one of the farm cottages; but through the kindness of Mr Lindsay, the farmer, the visitors were enabled to climb the loft and see there the top of the pointed arch of the chapel wall. Traces of foundations show that there had been extensive buildings adjoining the chapel, and it is said that the Templars possessed land for two miles up the valley, including Gardenholm, where their orchard was. They also had an establishment at Frenchland, on the opposite side of the river and town. In a document of date 1355 the chapel is referred to as "Kyrkbride, in the tenement of Kirkpatrick-Juxta, Moffat, in Annandale," and it is stipulated that the redemption money of a certain property, on which a "wadset" or mortgage had been granted, was to be paid on a green cloth before the high altar of the church so designated. The lands of Chapel were anciently known as the barony of Cuthbertrig.

In the Council Chamber at Moffat, to which the party next proceeded, Dr Pairman exhibited a very interesting collection of articles from New Zealand (in which he was long resident), illustrative of the life and customs of the Maoris, and also a number of other curios; and Mr J. T. Johnstone, who had been the guide for the day, shewed some examples of worm burrows and castings from the shales of the neighbourhood. Tea was provided through the kindness of several members resident in Moffat.

A short business meeting was held, at which the Rev. Mr Andson presided. Mrs Manson, Acrehead, Dumfries, and Mr William Miller, Moffat, were admitted as new members. Thanks were tendered to Mr Younger, Dr Pairman, Mr Johnstone, and to their hosts.

Field Meeting—28th July, 1906.

BONSHAW TOWER.

On the invitation of Colonel Irving a large party connected with the Dumfries and Galloway Natural History and Antiquarian Society visited "the chief" at his ancestral home on Saturday. Some went from Dumfries by train to Annan, and thence drove across the country. Others motored all the way,

Mr Penman kindly placing at their disposal a handsome touring car which he had just built, and which is seated for twelve. Several journeyed from Lockerbie and Moffat. When fully mustered the company numbered 46. Bonshaw Tower stands on the right bank of the Kirtle, which at this point rises as an almost sheer rocky precipice to a height of about a hundred feet; and it is screened by umbrageous wood, much of it of venerable age. Beside it also is a bosky glen, with a succession of small waterfalls, and made accessible by pleasant paths and rustic bridges. The tower itself is a venerable battlemented structure, of the square pattern common on the borders, occupying the site and embodying probably part of the masonry of a baronial residence which is believed to have existed there from the early part of the eleventh century. Attached to it by a long hall, which might be described as a museum of arms and trophies of the chase, is the modern residence, the date of which is attested by the following lettering on a memorial stone: "1770. W. Irving J. Douglas." The names are those of the Irving chieftain of that day and his wife, a daughter of the ducal house of Queensberry. The inscription is placed over the main doorway, but that has been closed up, and tower and mansion have now a common entrance. The terrace overlooking the Kirtle is protected by low ramparts, on which are mounted six old cannon, and at one angle are remains of a smaller detached tower of ancient date. The flag of the Irvings, bearing their badge of three holly leaves, floated from the tower. Another Irving flag and the Scottish standard were displayed from the ramparts; and a piper in full Highland costume paraded the lawn playing a welcome to the visitors. They were most kindly received and hospitably entertained by Colonel and Mrs Irving and their daughters, and spent a most interesting day in inspecting the old tower, of which the original character has been preserved practically intact; in examining the many interesting mementos which have been collected within it; and listening to the Colonel's breezy narrative regarding the annals of the Irving clan, the stirring border scenes in which they figured, and more recent events of a warlike character in which individual members of it have taken part. "Bonshaw" is strongly possessed by pride of race and pride of country, and has a well-grounded aspiration to be the historian as well as the

chief of his clan. Before succeeding to the estate and taking up his residence at Bonshaw he served his Sovereign in the field. His army experience was varied, beginning in the King's Own Regiment, and being subsequently transferred in succession to the military train, the transport service, and the Manchester Regiment. It was when colonel of this regiment that he retired from the army and bade farewell to military service, except such as may be incident to the duties of a member of the King's Bodyguard for Scotland. He took part in the Abyssinian campaign of 1867-8, and was at the storming of Magdala. Some of the most interesting objects in the tower are connected with that incident. They include a gold altar cross of Coptic work, with ornamentation of serpents, doves, and crosses; a sacred cup, and other articles which formed part of the loot of the capital. There are also weapons of numerous and curious forms in use in Abyssinia, Madagascar, South Africa, and India, as well as those of continental armies. It was curious to see an old-fashioned steel spur, with spikes of cruel length, such as was anciently in use on the Scottish and English border, side by side with one of the modern Mexican cowboy. The resemblance in shape is almost exact, but in the cowboy's the spikes are shorter. The walls are adorned with horns of the antelope, the vildebeest, and kindred species, and with antlers of the reindeer and the wapiti deer—the latter specimen having no less than fourteen tines.

Beginning the exploration of the tower, the visitors first passed under "the Crusader's Stone," which is built into the roof of the little square entrance hall. It bears the sacred monogram in ancient Hebrew letters, and tradition says that it was brought from Jerusalem by an Irving who took part in one of the first crusades. Passing into the retainers' kitchen—a barrel-arched apartment of spacious dimensions—they had their attention directed to the immense stone bin, in which salted provisions could be stored in time of siege, and had an opportunity of making brief personal acquaintance with the dungeon. This is a small apartment in the thickness of the wall, capable on a pinch of holding fourteen persons. It is windowless and perfectly dark, but a small opening in the wall carried right up to the battlements admits of the ingress of a very meagre supply of air. Opening off the same little entrance hall is the stone stair of the

wheel type; or, as it was often called, a "turnpike," which goes to the battlements, and off it open the various apartments of the tower. The great hall is now the library. The apartment which forms the second storey was the chief bedchamber. Here, in an angle of the wall, is a little chamber from which a narrow square opening in the wall is carried right to the foundations of the Tower. Tradition has it that this communicated with a secret passage cut through the freestone rock from Bonshaw to the neighbouring tower of Robgill, about a mile distant; and that through this passage, in time of need, food was conveyed to the garrison of Bonshaw, and drawn up by a rope through this channel in the wall. A hole in the rock is to be seen at the Robgill end, which is said to have been the opening to this tunnel. A corresponding but smaller opening is carried up from the roof of the little chamber in the wall at Bonshaw to a still smaller secret apartment above, in which a man might be concealed, and who might be fed through that opening. The third storey has the original heavy roof beams still in position, fastened together by oak pins instead of the modern nails. This is now a billiard-room. On the battlements there is a pathway along all four sides of the tower, and on each side there are double openings, through which molten lead or boiling oil could be poured on assailants.

The tower has its traditional ghost of a hapless daughter of the house, who was thrown from the battlements because of her determination to wed a member of the house of Maxwell, with whom the Irvings had a long and bitter feud; but, of course, it does not walk by day, and it is disappointing to learn that it has not been known to walk at all within living memory.

Colonel Irving showed his visitors some interesting family records; among them the marriage contract of Margaret Johnstone, of the Annandale family, and Christopher Irving, younger of Bonshaw, in 1566. It bore to be signed "at the Lockhouse," which we take to be Lochwood, the ancient seat of the Johnstones, near Moffat. The father of the bride signed himself simply "Johnstone." Edward Irving of Bonshaw is made to say that he signs it "with my hand at the pen, led by a notary, at my command, because I cannot write." The Colonel mentioned that this Irving was a striking proof that learning is not essential to soldiering, for at the age of ninety he charged at the head of

his clan on horseback at Dryfesands, and turned a threatened defeat into victory for the Johnstones and Irvings. Cows and other bestial figured in the dowry of which the marriage contract made mention. Another possession of the family which attracted attention was an old chap-book containing an account of the capture of Donald Cargill, the Cameronian leader, by Christopher Irving of Bonshaw, at Covington Mill, and picturing his unholy glee at thus securing a reward of five thousand merks which had been offered by the Government of the day.

The visitors were entertained to luncheon and tea; and in course of the afternoon a meeting of the society was held in the library, at which the following new members were proposed by Mr Arnott, seconded by Dr Semple, and admitted:—Mr and Mrs W. Matthews, Dunelm, Maxwelltown; Mr and Mrs White, Noblehill Schoolhouse; Mr George Will, Crichton Royal Institution; and Miss Graham, Kilbarchan. Mr Dickie, who presided, tendered the thanks of the society to Colonel Irving for his kind invitation to visit Bonshaw and for the generous hospitality extended to them, and asked him to convey their thanks also to Mrs Irving and the members of their family. It was a privilege, he said, to have the opportunity of examining a typical border tower so well preserved as Bonshaw was, and entwined as it was with the story of old romance and warlike foray; and it was even more interesting to meet in their host a survival of the border chieftain. They had experience of his kindly nature; and might say of him that the gentle heart of a knight of chivalry beat under the rough armour of a border chief. Dr M'Lachlan, Lockerbie, seconded the vote of thanks, and observed that, notwithstanding the rather unfavourable weather, they had spent a most interesting and pleasant day. Colonel Irving assured them it had been a great pleasure to welcome the society to Bonshaw, and confessed that he loved the old tower like a living creature.

Field Meeting—8th September, 1906.

(From the Dumfries and Galloway Standard.)

SPRINGKELL AND ECCLEFECHAN.

The last of the season's field meetings of Dumfriesshire and Galloway Natural History and Antiquarian Society took place on Saturday, when between forty and fifty ladies and gentlemen paid a flying visit to Hoddom Church and Ecclefechan, and spent the afternoon at Springkell, as the guests of Sir Edward and Lady Johnson-Ferguson, viewing the works of art of which their palatial residence is a veritable treasure-house, and enjoying a walk along the sylvan banks of the Kirtle to the scene of the tragedy of love and jealousy celebrated in the fine old ballad of "Fair Helen." The bulk of the party journeyed from Dumfries; and on the way their number received accessions from Annan, Lockerbie, and Moffat. Driving from Annan by way of Hoddom Bridge, they first halted at the parish church of Hoddom and had an opportunity of viewing the interior, in which the old custom of a separate gallery for the chief heritor is still maintained. In the porch is preserved an inscribed slab, which links Christian Britain of the twentieth century with Pagan Rome of the second. It is a tablet dedicated to Jupiter, and was probably brought from the important military station of Birrens (on the farm of Broadlea, near Kirtlebridge), or perhaps from the post which the Roman soldiery occupied on Birrenswark Hill. It was built into the wall of the old church, for which much of the material might be got from the buildings left by the Romans, and since its demolition in 1815 the stone has been preserved in the modern church. Many of the words in the inscription are contracted, the first three being represented only by initials; but the skilled in such matters render it thus: "Sacred to Jupiter, the best and greatest. The First Cohort of Germans, called the Nervana, under the command of L. Fænius Felix, the tribune, erected this." Among the memorials of the dead in the surrounding graveyard is the family tombstone of the Sharpes of Hoddom, the record on which includes the names of the litterateur, Charles Kirkpatrick Sharpe, and his brother, General Matthew Sharpe, the first popularly elected member of Parliament for the Dumfries Burghs. One of the oldest stones is inscribed in large raised letters to the memory

of "Mr Mathew Reid, who laboured in the church of Steipelgoordoune," an old parish now incorporated in Langholm, and who died seven years before the Prince of Orange came to the throne of these islands. A never-failing object of curiosity is the tribute to the perfect woman. A stone raised aloft, so that all may read, proclaims her virtues in these terms:—

1779.

This monument is erected by James Clow of Land in memory of Mary Hunter, his spouse. She was daughter of Robert Hunter, late in Middleshaw, and sister of John Hunter in Braehead of Hoddam. She was a virtuous wife, a loving mother, and one esteemed by all who knew her. And to be short in her praise, she was the wife that Solomon speaks of in the xxxi. chap. of the Book of Prov. from the 10th verse to the end.

Affliction sore some time she bore
With patience, did resign
Her life to God, that sure abode
Where saints and angels reign.

A satirical dominie of the parish, William Irving, who is credited with the authorship of that "pungent pasquil," "Lag's Elegy," presented another side of the shield in the following rhyming commentary:—

"She was the wife!" Oh Solomon, thou fool,
To make a pattern o' this grubbing tool;
She clothe her house in silk and scarlet fine!
Say rather i' the linsey woolsey twine,
Her husband 'mongst the elders at the gate!
Yes—known for nothing but an empty pate,
For guzzling down whole chappins o' sma' beer,
And selling meal and maut a groat too dear.
Such were the honest, silly "Clows"—say clowns,
Which every roll of honest fame disowns,
Who erst, like Moses, brake the ten commands,
That is the sacred relicts of the Lands."

Driving along the beautiful tree-fringed avenue that forms the highway between the church and village, the party called at the churchyard of the ancient parish of Ecclefechan, their chief object, of course, being to view the graves of Thomas Carlyle and his kindred. The place has a more cared-for appearance than it once presented, and a number of old stones, of cumbrous form

and in some instances uncouthly lettered, have been set up against the wall for preservation. One of them bears the date 1669. Above the severely simple inscription on the tombstone of Carlyle and his brother, Dr John, are carved the family crest—two wyverns—and motto, "Humilitate." It was noted that the coat of arms, somewhat varied in style, also appears on the back of the stone erected to the memory of his parents by a family "gratefully reverent of such a father and such a mother;" and on several other Carlyle stones scattered throughout the churchyard. "The Arched House" was also visited, and the numerous articles connected with Carlyle which are appropriately preserved in his birthplace were examined with great interest. Several of the company also made a call on Mr Graham, merchant, and were privileged to see three letters in the autograph of Admiral Lord Nelson, which are family heirlooms. They were addressed to Mr Graham's grand-uncle, Dr Graham, a naval surgeon, who served with the hero of Trafalgar on one of the ships which he commanded. The first was written from Burnham, Norfolk, in 1790, when Nelson was awaiting appointment to a ship. In it he complains of being greatly plagued by prosecutions about "these captures in the West Indies." An action had been raised against him for £5000 on account of one captured vessel; and while he was being defended by the Government, the action was a source of annoyance to him, and he contemplated the possibility that he might be put in prison if the decision should be given against him. He whose famous signal to his fleet has since become a historic trumpet-call to discharge the whole of duty, wrote to Dr Graham under the exasperation of that experience:—"All this shews that one may do his duty too well." Another of the letters was the first which the Admiral wrote with his left hand; and his correspondent used to relate that he practised writing with the left hand before he lost the right arm under a presentiment that such a calamity might overtake him. The third letter acknowledges congratulations on his elevation to the peerage. Dr Graham had proposed to make him the compliment of a brace of birds, and the Admiral asked that they should be sent by waggon to London, a practical commentary on the changes in locomotion which the years have witnessed.

From Ecclefechan the drive was continued by way of Kirtlebridge and Eaglesfield to Springkell; but on the way a detour was

made along the avenue of Blackett House in order to view Blackett Tower, which was the seat of the head of the Bells of Middlebie. The rejected suitor of Helen Irving was a Bell, and this is reputed to have been his residence. It has been a small tower of the customary square type, and is now in ruins, although on two sides the walls are entire. Over an entrance way is a shield lettered thus :—

I B I I
1663.

We have here doubtless the record of the marriage of a Bell with another Irving than "Fair Helen." A lintel on the inner side of the arch also serves as a marriage stone, the inscription being in one line :—

17 G B I E 14

At Springkell a very cordial welcome was extended to the visitors. It is a stately mansion-house, of Grecian design, in light-coloured sandstone. The central portion is a massive square block, having the date 1734 carved over the doorway in the southern front, which is flanked by graceful pilasters. On each side of it is a slightly projecting wing of about equal size, these having been added about the year 1818. During the twelve years that the property has been in the possession of Sir Edward and Lady Johnson-Ferguson the house has been entirely reconstructed, so that not a plank of the original wood remains in it, and it has also been somewhat enlarged. A very beautiful terraced garden has also been constructed, which is at present gay with choice blooms. Arboriculture is an art which has been long practised at Springkell, and of which the fruit is seen in the magnificent specimens of trees of various kinds which stud the extensive lawns. Among them are a giant silver fir, a great Spanish chestnut, and many others notable not more for their size than for their symmetrical proportions. Of beeches there is a noble avenue. The turf is of rich velvety quality, and recalls the anecdote of the American visitor at Oxford, who wished to know how it would be possible to obtain such a grassy carpet. "By two hundred years of close cutting every day" was the recipe offered to him.

The art treasures which Sir Edward has inherited and himself collected would adequately furnish a civic gallery. Through-

out almost its whole length the house is intersected by a broad corridor, the walls of which are covered with oil paintings, as are also those of a spacious apartment opening off it. There are examples of the most distinguished British artists, one that arrests popular attention most readily being Landseer's large canvas, "Taking the Buck;" and Dutch, Italian, and French masters are also largely represented. Many of the paintings have a history which invests them also with an extrinsic interest. Many family portraits have a place in the collection, including one of Lady Johnson-Ferguson, painted since she came to Springkell by Sir Luke Fildes, R.A. The drawing-room is devoted to water-colours, of which the collection is at once choice and extensive. Here also is the marble bust of Queen Victoria by Mr Brock, R.A., the last for which her Majesty gave sittings, and the great merit of which has secured for the sculptor the commission for the statue which is to be placed in front of Buckingham Palace. Many other beautiful pieces of statuary adorn the house. One of these is a marble bust of Sir Edward's father, which was presented to the family by the employees of the firm which he founded in Manchester and Bolton. In the morning-room there is a superb collection of Turner prints, embracing the whole of the early issue of reproductions of the work of Ruskin's idol, engraved with exquisite finish. In the library again is an extensive portrait gallery of Sir Joshua Reynolds' prints; and another apartment contains a large collection of prints of Landseer's works. The family have travelled largely and have brought from many lands articles curious and rare, illustrative of modern life and ancient art. India, Egypt, the Soudan, Japan, Persia, Palestine, Italy, Greece have all been laid under contribution, and other countries as well. These curios, as well as the pictures, were displayed and explained to the party as they were piloted through the house by Sir Edward and Lady Johnson-Ferguson and a lady relative.

Springkell estate comprehends the whole of the ancient parish of Kirkconnel, which is now incorporated in Kirkpatrick-Fleming. Kirkconnel was indeed the old name of the estate, as of the parish, and a village as well as a residence of old date existed near the spot where the modern mansion stands. The little "God's acre" of the parish stands on a rising ground on the left bank of the Kirtle, approached by a pretty glade through

the policies, of which it virtually forms part. Two heavy oblong slabs, raised on short supports, and lichen-grey, cover the tombs of Helen Irving and the lover whom she died to save. Not within living memory has any inscription been legible on the former; and from the latter has now practically disappeared what Wordsworth in his ballad calls "its lone hic jacet," although but a few years ago we were able to decipher quite distinctly the lettering, "Hic jacet Adam Fleming." The figure of a sword, extending almost the full length of the stone, is still quite legibly outlined, and another device beside it, which may have been intended for a cross, is more faintly seen. The story is a familiar one. Of two suitors the lady preferred Fleming (probably one of the Flemings of Redhall). Bell, inflamed by jealousy and disappointment, concealed himself on the opposite bank while the lovers strolled by the side of the Kirtle; then emerged from behind a tree and aimed a shot at his successful rival. Observing his murderous intent, the lady stepped before her lover, and received in her own bosom the bullet which was aimed at his. Swift vengeance was wrecked on her slayer by Fleming, who then fled the country and sought the balm of forgetfulness in foreign wars, but brought back to his mistress's grave a broken heart to be laid beside her. The romantic incident, which is traditionally assigned to the time of Mary Queen of Scots, has been the theme of many minstrels. We reproduce below the old form of the popular ballad, the authorship of which is ascribed to W. S. Irving, a native of Hoddom, who came to a tragic end by his own hand in Edinburgh. Sir Walter Scott, in his "Minstrelsy of the Scottish Border," mentions a doubt whether Helen was not of the same family as her "undoer," but there seems no reason to set aside the tradition that she was an Irving, of the family which possessed the estate of Kirkconnel until shortly after the year 1600, when it passed into the hands of the Maxwells. Several Irvings of Kirkconnel are commemorated in a burial plot adjoining her grave, which closely neighbours the roofless walls of the tiny church. Outside the burial ground is set up a large cross of coarse-grained sandstone, hewn out of a single block. This is understood to mark either the spot on which the tragedy was enacted, or to which Fleming carried the heroine when he saw her wounded. One of the arms of the cross has been partly broken. On each arm there is a sunken space,

which suggests that a brass plate had been inserted; but if so, the plate has disappeared, and the cross bears no chiselled record of its purpose.

Among several curious stones in the burial ground is one with a grotesque piece of sculpture, shewing a lady, like Annie Laurie, "jimp aboot the middle," and with the lacing of her dress prominently displayed. The gossips have it that it is the effigy of a victim of tight lacing; but it does not shew intrinsic evidence of being anything but a crude attempt at an ordinary piece of sculpture. Below there is a smaller figure suggestive of a knight on mail-clad horse.

The visitors were entertained to tea; and before rising from the table Mr Barbour, architect, a vice-president of the society, tendered their very cordial thanks to Sir Edward and Lady Johnson-Ferguson for the delightful day they had spent at Springkell. Sir Edward assured the visitors it had been a great pleasure to them to welcome the Antiquarian and Natural History Society. They undoubtedly had very many beautiful things there, the result of the acquisition of a number of generations, and he thought half the pleasure of possessing them was to allow their friends to see them.

Mr W. J. Payne, solicitor, Annan, was admitted a new member.

FAIR HELEN OF KIRKCONNEL-LEE.

"I wish I were where Helen lies!
Night and day on me she cries;
O that I were where Helen lies,
On Fair Kirkconnel-lee.

"Curst be the heart that thought the thought,
And curst the hand that fired the shot,
When in my arms burd Helen dropt,
And died to succour me!

"O think ye na my heart was sair
When my love dropt doun and spak nae mair!
There did she swoon wi' meikle care,
On fair Kirkconnel-lee.

"As I went doun the water side,
None but my foe to be my guide,
None but my foe to be my guide,
On fair Kirkconnel-lee.

"I lighted doun, my sword did draw,
I hacked him in pieces sma',
I hacked him in pieces sma',
For her sake that died for me.

"O Helen fair beyond compare!
I'll weave a garland of thy hair,
Shall bind my heart for evermair,
Until the day I dee!

"O that I were where Helen lies!
Night and day on me she cries;
Out of my bed she bids me rise,
Says, 'Haste, and come to me!'

"O Helen fair! O Helen chaste!
Were I with thee I would be blest,
Where thou lies low, and takes thy rest
On Fair Kirkconnel-lee.

"I wish my grave were growing green,
A winding sheet drawn o'er my e'en,
And I in Helen's arms lying
On Fair Kirkconnel-lee.

"I wish I were where Helen lies!
Night and day on me she cries;
And I am weary of the skies,
For her sake that died for me."

Abstract of Accounts for Year

CHARGE.

1.	Balance from Session 1905-6	£21	6 10
2.	Arrears of Subscription recovered	3	0 0
3.	Annual Subscriptions from 178 Members	43	7 6
4.	Sum repaid by Mr George Irving for Blocks and Drawings used in printing his paper	1	17 0
5.	Arrears of Subscription	1	15 0
		£70	12 2
	To Balance due by Treasurer	£12	19 2

DUMFRIES, 11th October, 1906.—We have examined the Books and quarian Society for the year ending 30th September last, and certify that the operations.

ending 30th September, 1906.

DISCHARGE.

1. Rents and Insurances			£8 14 6
2. Advertising Meetings			1 5 6
3. Printing and Stationery :—			
1. Annual Subscription for Annals of Scottish History	£0 7 6		
2. R. Grieve & Son	1 10 6		
3. *Dumfries Standard* for Printing Transactions	24 15 0		
4 J. Maxwell & Son	14 2 1		
			40 15 1
4. Miscellaneous :—			
1. Hire of Cabs (Bruce Sexcentenary)	£0 7 0		
2. A. Turner	1 0 9		
3. J. R. M'Lean	0 4 6		
4. Bank Commission, &c.	0 1 2		
			1 13 5
5. Posts, &c. :—			
1. Posts of Transactions	£1 15 0		
2. Secretary and Treasurer	3 9 6		
			5 4 6
6. Balance :—			
In Savings Bank	£17 0 0		
In Deposit Receipt	2 11 5		
	£19 11 5		
Balance due Clydesdale Bank	6 12 3		
			12 19 2
			£70 12 2

Accounts of the Dumfriesshire and Galloway Natural History and Antiforegoing Abstract exhibits a true and correct account of the Treasurer's

(Signed) JOHN SYMONS, Auditor.

BERTRAM M'GOWAN, Auditor.

EXHIBITS.

October 6th.

Miss M'Kie, Moat House, Dumfries—Large sunflower, 10 feet high.

The Secretary—Flowering branch of Bambusa Henonis, Colchicum autumnale fl. pl., Crocuses iridiflorus and zonatus.

November 3rd.

Mr George Irving, Corbridge-on-Tyne—(1) A declaration of loyalty by inhabitants of Morton; (2) scheme of valuation of division of Hightae community; (3) burgess ticket of burgh of Dumfries to George Sharp of Hoddom, dated 1767; (4) burgess ticket of city of Glasgow to George Sharp of Hoddom, about same date; (5) burgess ticket of burgh of Linlithgow to James Kirkpatrick, son of Sir Thomas, second Baronet of Closeburn, with seal attached; (6) plan of Birdoswald camp, recently visited by the society.

Mr J. Laidlaw, Lockerbie—Old sermons published in Dumfries in the eighteenth century.

Mr A. Turner, Chemist, Dumfries—A relic of David Livingstone, taken from his medicine chest.

Mr J. S. Thomson, Jeweller, Dumfries—(1) Seismographic record showing the movement of the earth at Paisley on the occasion of the recent Indian earthquake; (2) piece of Banket gold reef from West Africa.

Mr Harry Edgar, Fergusiea—(1) Tenor granting John Carruthers of Denbie power to uplift the stipend of the parish of Tundergarth; (2) burgess ticket of Dumfries, dated June, 1808, in favour of Richard Hetherington, of the Annandale and Eskdale Local Militia; (3) lieutenant's commission in East India Company's service, signed by Earl Cornwallis, of date 6th April, 1785; (4) act of freedom of burgh of Dumfries in favour of John Carruthers of Denbie, dated 4th

June, 1808; (5) burgess ticket of New-Galloway in favour of Viscount Kenmure, dated 17th September, 1820.

Mr M. H. M'Kerrow, Solicitor, Dumfries—Skin of a baby crocodile shot by his brother on the Paraquay river, South America; also a lizard's skin, two python skins, a toucan, and the nest of the tailor bird.

Mr S. Arnott, the secretary—Two rare species of meadow saffron and an Albanian autumn snowdrop flowered in the open at Sunnymead, Maxwelltown, on 12th October.

Professor Scott-Elliot—Photographs of cup and ring markings found in Wigtownshire.

Mr Service—Several exhibits referred to in report of proceedings, and larvae of Death's Head Moth found in the end of October on farm of Townhead, Closeburn.

December 18th, 1905.

Series of paintings of Swiss plants and British orchids not found in this locality, shown by and the work of Mrs Thompson, Castle Street.

Rev. H. A. Whitelaw—A number of ancient Eastern lamps, one of pre-Christian date found at Joppa, while the others were mostly Roman-Christian; a number of coins of Bible times and others of the period of Charlemagne, and Robert of Anjou; and a curious dice box.

Mr R. Murray—Eastern lamp.

Mr Reid, Chemist—A number of stereoscopic views illustrative of local scenes, as well as of the siege of Paris and of Alpine regions.

Mr H. Edgar and Mr Robert Service, jun.—Old burgess tickets of Annan and Dumfries; the former documents of the old East India Company.

The President—Fossils of fish found in the chalk near Brighton; also seeds of the common yew, found in the gizzard of a hen pheasant.

Mr J. T. Johnstone, Moffat—A number of specimens of deposits found at Moffat sewage works.

Mrs Jeffrey, St. Mary's Isle Gardens—A list of wild flowers found on St. Mary's Isle as a contribution to the botany of the Isle.

Mr James Lennox—A number of lantern slides of local Abbeys, Castles, and Towers.

DECEMBER 15TH, 1906.

Mr J. Bryce Duncan, Newlands—Chrysanthemum sport showing three colours.

Mr James Watt—Photographs, curios, and maps, to illustrate his lecture, which see.

Mr John Miller, of the Haussaland Horse—A large number of curios.

The President—A number of E. African photographs.

Mr R. Service—Male and female specimens of a new vole recently discovered in the Orkney Isles by Mr Millais; a brass medal, found in Lochrutton, and struck to commemorate coronation of William IV. and Adelaide; a very fine greenstone celt found in lower Dumfriesshire in 1905—size, $5\frac{1}{2}$ by $3\frac{1}{4}$ by $\frac{7}{8}$ by $1\frac{3}{4}$ inches.

JANUARY 26TH.

Dr Martin—Short cross sterling or penny of Henry II. found in digging a grave in Holywood Churchyard.

Mr C. Cumming, Dumfries—Two similar coins found there also, one in 1902 and the other in 1904.

Miss M. Carlyle Aitken—Brass coin found in a fig.

Mr Frank Millar, Annan—Photo of Gretna Green marriage certificate.

Mr Harry F. Edgar—Upwards of 1000 casts of cameos, medals, coins, etc.

Mr James Reid—A number of very fine stereoscopic photograph views.

FEBRUARY 2ND.

Town Council of Lochmaben—A number of interesting relics belonging to the Burgh of Lochmaben.

FEBRUARY 16TH.

The Secretary—"The Scots Gardener," 2nd edition, 1721, and "Flora, Ceres, and Pomona," by John Rea, 1665.

LOCKERBIE MEETING.

FEBRUARY 24TH.

Valuable exhibits were shown by Colonel Rogerson of Gillesbie, Colonel Irving of Bonshaw, Miss Wallace, Lochvale, Loch-

maben; Mr John Maxwell, H.M. Travelling Commissioner, Gold Coast; and the Secretary.

March 16th.

Mr James Lennox—Limestone celt found in Cummertrees; stone whorl found at Rockhall, Torthorwald; a shilling and two sixpences of Queen Elizabeth found respectively in Cummertrees, Mouswald, and Torthorwald, dated 1575 and 1566.

Mr R. Service—Dried flower of Physianthus albens, to which was caught, by its long tongue, one of the Sphinx Moths, from the Transvaal.

Mr W. M'Cutcheon—Cocoa nut emptied by tits.

Misses Henderson, 92 Queen's Place—Pair old shoe buckles, old knife and fork; walking stick, which belonged to Provost John Crosbie, Provost of Dumfries in 1712 and following years; and the following Jacobite relics:—Teapot used at "Prince Charlie's" table when in Dumfries in 1745, and claret jug from which the Prince drank.

April 20th.

Mrs Thompson, Inveresk, Dumfries—Water-colour paintings of wild flowers.

Mr Dermid M. Ross, Duntrune—Roman and other coins.

May 4th.

Mr R. Service—Stone mallet, sent by Mr Douglas, Barstibly, and found on his farm; piece of vitreous silica got at extreme point of living rock.

Mr W. Dickie—Cast adder's skin found on Skeoch Hill.

Mr J. Rutherford, Jardington—Equatorial star-finder, designed by himself.

DONATIONS AND EXCHANGES.

Mr John M'Kie, R.N., Kirkcudbright—A set of photographs relating to Billy Marshall, the Galloway Gypsy.

Mr H. Penfold—"Guide to Brampton," written by himself.

Mr J. S. Thomson—Photograph of record of earthquakes in India in March, 1905, as recorded in Paisley Observatory.

Mr George Irving, Corbridge-on-Tyne—Plans of Birdoswald Camp and Hoddom Bridge.

Mr James Barbour—Engravings of the Insignia of the Burgh of Dumfries, drawing of the old house of the Corsan family, St. Michael Street, Dumfries; drawing of the arms of the Corsans; impression from plate of old form of burgess ticket for the burgh of Dumfries; drawing of old kiln for grain; photograph of Lochrutton Crannog, taken during the society's excavations; plan of Old Bridge, Dumfries, showing its original length; photograph of Yuma Indians; and photograph of a shield with the war cry of the burgh of Dumfries—"'A Loreburn."

Mr Frank Millar, Annan—Photograph of form used at Alison's Bank, Gretna, for irregular or "Gretna Green marriages" before John Murray.

A number of exchanges have also been received from various societies with which this society is in correspondence.

NOTICES.

Ordinary Meetings of the Society are generally held on the 1st and 3rd Fridays of each month of the winter session, which begins in October. Papers on Natural History Antiquarian, and Scientific subjects, with occasional lectures, are given at these meetings.

Exhibits cognate to the work of the Society are also shown at these Meetings, and the co-operation of members in increasing the number of exhibits is solicited.

Field Meetings are held during the Summer Months as may be arranged.

The Society's "Transactions" are published annually, and are distributed among the members free of charge. Non-members can purchase copies from the Treasurer, Mr M. H. M'Kerrow, 30 St. David Street, Dumfries, from whom any back numbers in stock can be purchased.

The Society's Library, which includes a number of Natural History, Archæological, and Scientific Works, and a series of the "Transactions" of many of the leading learned societies, with which this society is in correspondence, is available for reference in the Ewart Public Library, Dumfries. Members of the Society have the privilege of borrowing these books on application to the Librarian at the Library.

The Society's Museum and Herbarium, which contains an almost complete collection of specimens of the local flora, are available for reference in the Library.

"The Reliquary," "The Scottish Historical Review," and "The Annals of Scottish Natural History" are circulated quar-

terly among the members who desire them, the postage only being payable by the members of each circle. Particulars can be had from the Secretary.

A Photographic Committee has been formed for the purpose of securing a Photographic Record of Dumfries and Galloway. Photographs will be welcomed, and can be sent to the Secretary of the Committee, Mr W. A. Mackinnel, The Sheiling, Dumfries.

The Society will be glad of the adhesion of ladies and gentlemen interested in the various departments of its operations, and the Secretary will be glad to hear from any who may desire to become members, with a view to their nomination. The annual subscription is 5s; where there are more than one member from a family each one after the first pays 2s 6d.

RULES.

Rules of the Dumfriesshire and Galloway Natural History and Antiquarian Society, as submitted for approval and adoption by the Council, and adopted at the Annual General Meeting held on October 12th, 1906.

I. The Society shall be called the "Dumfriesshire and Galloway Natural History and Antiquarian Society."

II. The aims of the Society shall be to secure a more frequent interchange of thought and opinion among those who devote themselves to the study of Natural History, Archæology, and kindred subjects; and to elicit and diffuse a taste for these studies.

III. The Society shall consist of Ordinary, Honorary, and Corresponding Members. The Ordinary Members shall be persons proposed and elected at any meeting of the society by a vote of the majority present. The Honorary and Corresponding Members shall be persons distinguished for attainments connected with the objects of the Society, and elected on the recommendation of the Council.

IV. Ordinary Members shall contribute annually five shillings in advance, or such other sum as may be agreed upon at the annual general meeting. When more than one person from the same family join the Society all after the first shall pay half fee. By making a single payment of £5 any one duly elected may become a member for life.

V. The Office-Bearers of the Society shall consist of a President, Four Vice-Presidents, Secretary, Treasurer, Librarian, Curator of Museum, and Curator of Herbarium, who, together with not more than Three Honorary Vice-Presidents, and Ten other Members, shall constitute the Council, holding office for one

year only, but being eligible for re-election, subject to the following conditions:—One Vice-President and Two Ordinary Members of Council shall retire annually according to seniority in their respective offices, and shall not be eligible for re-election to the same office for one year. Three shall for a quorum.

VI. Meetings of the Society shall be held as may be arranged by the Council.

VII. The Annual General Meeting shall be held in October, at which the Office-Bearers and other Members of the Council, together with Two Auditors, shall be elected, Reports (General and Financial) submitted, and other business transacted. The Council shall have power to make arrangements for discharging the duties of any vacant office.

VIII. A Member may introduce a Friend to any Meeting of the Society.

IX. The Secretary shall keep the Minutes of the Society's proceedings, shall conduct the Ordinary Correspondence of the Society, and submit a Report at the Annual General Meeting, which report shall, *inter alia*, contain a statement of the attendance of Members at the Council Meetings. He shall call all Ordinary Meetings, subject to the instructions of the Council, and, on receiving the instructions of the Council or President, or a Requisition signed by Six Members, shall call a Special Meeting of the Society. On receiving the instructions of the President or a Requisition signed by Three Members of the Council, he shall forthwith call a Meeting of that body.

X. The Treasurer shall keep a List of the Members, collect the Subscriptions, take charge of the Funds, and make payments therefrom under the direction of the Council, to whom he shall present an Annual Account, to be made up to 30th September in each year, and to be audited for submission to the Annual General Meeting.

XI. Members whose subscriptions are in arrear for two years and have received notice from the Treasurer shall cease to be members.

XII. The Society, unless otherwise arranged, shall have the power to publish in whole or in part any paper read before it in its "Transactions" or otherwise. The "Transactions" of the Society shall be published from time to time, as may be convenient, and shall be distributed to all Members contributing five shillings per annum and all Life-Members. Contributors of Papers shall, after giving timeous notice to the Secretary before publication, be entitled to receive ten copies of their papers, as and when published.

XIII. Alterations of any Rule, or the addition of New Rules, shall only be made with the consent of a majority of those present at the Annual General Meeting, and notice of proposed alterations must be given to the Secretary a month previous to the meeting.

LIST OF MEMBERS OF THE SOCIETY

DURING 1906.

Those who joined the Society at its reorganisation on 3rd November, 1876, are indicated by an asterisk.

LIFE MEMBERS.

Duke of Buccleuch and Queensberry, K.G., K.T. .....10th Jan., 1895.
Earl of Mansfield, Scone Palace, Perth .....10th Oct., 1897.
F. R. Coles, 1 Oxford Terrace, Edinburgh.....11th Nov., 1881.
Wm. D. Robinson Douglas, F.L.S., Orchardton .....11th Nov., 1881.
Thomas Fraser, Maxwell Knowe, Dalbeattie ...2nd March, 1888.
Alex. Young Herries, Spottes, Dalbeattie.
J. J. Hope-Johnstone, Raehills, Lockerbie .....3rd May, 1884.
Wm. J. Herries Maxwell, Munches .....1st Oct., 1886.
Miss M'Kie, Moat House, Dumfries .....14th Dec., 1894.
Samuel Smith, P.C., 20 Chapel Street, Liverpool .....17th Jan., 1896.
Sir Mark J. M'Taggart Stewart, Bart., Southwick .....7th June, 1884.
Captain Wm. Stewart, Shambellie .....8th Nov., 1894.

HONORARY MEMBERS.

Baker, J. G., F.R.S., Royal Herbarium, Kew ...2nd May, 1890.
Brown, J. Harvie, F.L.S., Larbert.
Carruthers, Wm., F.R.S., British Museum.
Chinnock, E. J., LL.D., 41 Brackley Road, Chiswick, W. .....5th Nov., 1880.

Davidson, Dr Anstruther, Los Angelis .....6th March, 1891.
M'Andrew, James, 69 Spotteswoode Street, Edinburgh.
M'Millan, Alex., Castle-Douglas.
Murray, A. D., Newcastle .....10th Nov., 1893.
Sharp, Dr David, F.R.S., Cambridge.
Shirley, G. W., Dumfries .....28th Oct., 1904.
Taylor, Robert Hibbert, M.D., Liverpool .....2nd June, 1888.
Wilson, Jos., Liverpool .....29th June, 1888.

ORDINARY MEMBERS.

Agnew, Sir A. N., Bart., of Lochnaw, Stranraer ...9th Jan., 1891.
Aitken, Miss M. Carlyle, 21 Dunbar Terrace, Dumfries .....1st June, 1883.
Andson, Rev. W., Newall Terrace, Dumfries .....3rd Oct., 1886.
Armstrong, T. G., Timber Merchant, 24 Rae Street, Dumfries ..... 9th Sept., 1905.
Armstrong, F., Burgh Surveyor, Dumfries .....6th Oct., 1905.
Arnott, S., Sunnymead, Maxwelltown .....1893.
Arnott, Mrs S., Sunnymead, Maxwelltown .....5th Jan., 1906.
Atkinson, Mrs, The Ladies' Club, Castle Street, Dumfries .....28th Oct., 1904.

Barbour, James, St. Christopher's, Dumfries.....3rd Dec., 1880.
Barbour, Robert, Belmont, Maxwelltown .....4th March, 1887.
Barbour, Robert, Solicitor, Maxwelltown.....11th May, 1889.
Barker, John, Redlands, Dumfries .....23rd Sept., 1905.
Beattie, Thos., Davington, Langholm .....30th May, 1896.
Bell, Richard, of Castle O'er, Langholm .....30th May, 1896.
Bell, Miss, 26 Castle Street, Dumfries .....25th Nov., 1894.
Bell, T. Hope, Morrington, Dunscore .....22nd Oct., 1897.
Blacklock, J. E., Solicitor, Dumfries .....8th May, 1896.
Borland, John, Auchencairn, Closeburn .....7th Sept., 1895.
Bowie, J. M., The Hain, Dalbeattie Road, Maxwelltown .....15th Dec., 1905.
Browne, Sir James Crichton, 61 Carlisle Place, Mansions, Victoria Street, London, S.W...3rd Sept., 1892.
Brown, Stephen, Boreland, Lockerbie .....10th June, 1899.

Brown, T. M., Closeburn, Thornhill .....6th Aug., 1891.
Bryson, Alex., Irish Street, Dumfries .....6th Feb., 1891.

Cairns, Rev. J., Ivy Lodge, Albany, Dumfries...6th Feb., 1891.
Campbell, Rev. J. M., St. Michael's Manse, Dumfries .....15th Dec., 1905.
Carmont, James, Banker, Dumfries .....6th Feb., 1891.
Clarke, Dr, Charlotte Street, Dumfries .....6th June, 1889.
Charlton, John, Huntingdon, Dumfries .....15th Dec., 1905.
Chrystie, R., Dentist, Irving Street, Dumfries.....3rd Nov., 1905.
Chrystie, Miss, Irving Street .....5th Jan., 1906.
Coats, W. A., of Dalskairth .....18th Sept., 1896.
Copland, Miss, The Old House, Newabbey .....5th July, 1890.
Cormack, J. F., Solicitor, Lockerbie .....4th June, 1893.
Corrie, John, Burnbank, Moniaive .....6th Aug., 1887.
Cowan, John, Glenview, Maxwelltown .....15th Dec., 1905.

*Davidson, James, Summerville, Maxwelltown ...3rd Nov., 1876.
Davidson, J., Hillhead, Bankend Road, Dumfries .....10th May, 1895.
Dewar, R. S., 35 George Street, Dumfries .....3rd Nov., 1905.
Dickie, Wm., Merlwood, Maxwelltown .....6th Oct., 1882.
*Dinwiddie, W. A., Bridgebank, Buccleuch Street, Dumfries.....3rd Nov., 1876.
Dinwiddie, R., Overton, Moffat Road, Dumfries..9th Aug., 1905.
Dods, J. W., St. Mary's Place, Dumfries .....2nd March, 1883.
Drummond, Bernard, Plumber, Dumfries .....7th Dec., 1888.
Drummond, J. G., Sandon, Moffat Road, Dumfries .....17th Nov., 1905.
Dudgeon, C. R., Cargen .....10th Feb., 1905.
Duncan, Jno. Bryce, of Newlands, Dumfries ...11th Feb., 1898.
Dunlop, Rev. S., Irongray Manse, Dumfries ...10th June, 1905.

Edgar, H., Ferguslea, Maxwelltown .....20th Jan., 1905.
Edie, Rev. W., Greyfriars' Manse, Dumfries.....15th Dec., 1905.

Farish, W. R., Amisfield House, Amisfield, R.S.O. .....17th Nov., 1905.
Fergusson, Rev. G. F., St. Mary's Place, Dumfries .....15th Dec., 1905.

Gilchrist, Mrs, Linwood, Dumfries .....2nd June, 1883.
Gillespie, Wm., Solicitor, Castle-Douglas .....14th May, 1892.
Gladstone, H. Steuart, Lannhall, Thornhill .....15th July, 1905.
Glover, John, W.S., 1 Hill Street, Edinburgh ...23rd Nov., 1906.
Glover, J. J., Hazelwood, Maxwelltown .....22nd Oct., 1897.
Gordon, Robert, Brockham Park, Betchworth, Surrey .....10th May, 1895.
Grahame, Mrs, Springburn Cottage, Kilbarchan, Renfrewshire .....28th July, 1906.
Gray, W. M., 5 Victoria Terrace, Dumfries.
Grierson, John, Town Clerk, Dumfries .....6th Oct., 1882.

Halliday, T. A., Leafield Road, Dumfries .....26th Jan., 1906.
Halliday, Mrs, Leafield Road, Dumfries .....26th Jan., 1906.
Halliday, James Scott, Lockerbie .....24th Feb., 1906.
Halliday, Provost, Esthwaite, Lochmaben .....24th Feb., 1906.
Halliday, D., Provost, Lockerbie .....24th Feb., 1906.
Hannay, Miss, Langlands, Dumfries .....6th April, 1888.
Hannay, Miss J., Langlands, Dumfries .....6th April, 1888.
Hare, H. Leighton, Lochvale, Dumfries .....10th June, 1905.
Hardy, Miss, Moat House, Dumfries .....1st Oct., 1897.
Hastie, D. H., Victoria Terrace, Dumfries .....24th Feb., 1906.
Henderson, James, Solicitor, Dumfries .....9th Aug., 1905.
Henderson, John, Solicitor, Dumfries .....5th July, 1890.
Henderson, Thos., Solicitor, Lockerbie.....17th Oct., 1902.
Herries, Right. Hon. Lord, Everingham Park, Yorkshire .....10th Jan., 1895.
Hill, Edward J., Ladyfield, Dumfries .....25th Nov., 1904.
Houston, James, Marchfield, Dumfries .....9th Aug., 1905.
Hunter, Dr Joseph, Castle Street, Dumfries .....24th June, 1905.
Hunter, Rev. Joseph, 125 Mayfield Road, Edinburgh .....22nd Oct., 1897.

Irving, George, West Fell, Corbridge-on-Tyne...17th Jan., 1896.
Irving, Colonel, of Bonshaw, Annan .....18th Jan., 1901.
Irving, John, Balmacneil, Ballinluig, Perthshire 16th Oct., 1903.
Irving, John A., West Fell, Corbridge-on-Tyne ...7th Dec., 1906.

Jackson, Colonel, 6 Fruid's Park, Annan .....9th Aug., 1905.

Johnson-Ferguson, Sir J. E., Bart., of Springkell, Ecclefechan .....30th May, 1896.
Johnson-Ferguson, A., Wiston Lodge, Lamington .....9th Sept., 1905.
Johnstone, John T., Victoria House, Moffat .....4th April, 1890.
Johnstone, Mrs, Victoria Terrace, Dumfries .....17th Feb., 1896.
Johnstone, W. S., Victoria Terrace, Dumfries ...11th Feb., 1898.

Kidd, Rev. Thos., U.F. Manse, Moniaive .....29th June, 1895.
Kirkpatrick, Rev. R. S., The Manse, Govan ...17th Feb., 1896.

Laidlaw, John, Plasterer, Lockerbie .....18th Oct., 1901.
Law, Rev. James, South U.F. Manse, Dumfries...2nd June, 1905.
*Lennox, Jas., F.S.A. Scot., Edenbank, Maxwelltown .....3rd Nov., 1876.
Loreburn, The Right Hon. Lord, 6 Eton Square, London, S.W. .....9th Jan., 1891.

Malcolm, A., Redbank, Dumfries .....2nd Oct., 1894.
Malcolm, Colonel, Burnfoot, Langholm .....13th Dec., 1895.
Mann, R. G., Cairnsmore, Marchmount Park, Dumfries .....24th Oct., 1900.
Manson, D., Acrehead, Dumfries .....16th June, 1906.
Manson, Mrs, Acrehead, Dumfries .....16th June, 1906.
Matthews, Wm., Dunelm, Dalbeattie Road, Dumfries .....28th July, 1906.
Matthews, Mrs, Dunelm, Dalbeattie Road, Dumfries .....28th July, 1906.
Martin, Dr J. W., Newbridge, Dumfries .....16th Oct., 1896.
Maxwell, Sir H., Bart., of Monreith, Wigtownshire .....7th Oct., 1892.
Maxwell, W. J., Terregles Banks, Dumfries .....6th Oct., 1879.
Maxwell, Wellwood, of Kirkennan, Dalbeattie...5th Nov., 1886.
Maxwell, John, Tarquah, Maxwelltown .....20th Jan., 1905.
Milligan, J. P., Aldouran, Castle-Douglas Road, Maxwelltown .....17th Oct., 1905.
Milligan, Mrs, Aldouran, Castle-Douglas Road, Maxwelltown .....17th Oct., 1905.
Millar, F., Bank of Scotland, Annan .....3rd Sept., 1886.
Millar, John, Elmwood, Moffat .....24th Feb., 1906.

Millar, William, Elmwood, Moffat .....16th June, 1906.
Moffat, James, Bank of Scotland, Annan.
Mond, Miss, Aberdour House, Dumfries .....9th Sept., 1905.
Murdoch, W. J., Cluden Bank, Holywood.....21st Dec., 1906.
Murphy, Rev. J., Park Road, Maxwelltown .....5th Jan., 1906.
Murphie, Miss Annie, Cresswell House, Dumfries .....23rd Nov., 1906.
Murray, R., George Street, Dumfries .....5th July, 1884.
Murray, Mrs, George Street, Dumfries .....6th April, 1883.
Murray, Wm., Murraythwaite, Ecclefechan .....8th Feb., 1895.
Murray, Mrs, Murraythwaite, Ecclefechan .....29th July, 1905.

M'Call, James, of Caitloch, Moniaive .....29th June, 1895.
M'Cargo, James, Kirkpatrick-Durham .....24th April, 1896.
M'Connel, Miss, Milnhead, Kirkmahoe .....19th Feb., 1904.
M'Connel, Miss L. H., Milnhead, Kirkmahoe ...25th Nov., 1904.
M'Cormick, Andrew, Solicitor, Newton-Stewart...3rd Nov., 1905.
M'Craken, Miss, Fernbank, Lovers' Walk .....9th Nov., 1906.
M'Cutcheon, Wm., B.Sc., Inverie, Park Road, Maxwelltown .....18th Oct., 1901.
Macdonald, J. C. R., W.S., Dumfries .....6th Nov., 1885.
M'Gowan, B., Solicitor, Dumfries .....26th Oct., 1900.
M'Jerrow, David, Town Clerk, Lockerbie .....22d Feb., 1906.
Mackenzie, Colonel, of Auchenskeoch .....25th Aug., 1895.
M'Kerrow, M. H., Solicitor, Dumfries .....19th Jan., 1900.
M'Kerrow, Matt. S., Boreland of Southwick .....9th Jan., 1890.
M'Kie, Thos., Moat House, Dumfries .....2nd Aug., 1890.
M'Kie, John, R.N., Anchorlea, Kirkcudbright ...4th April, 1881.
MacKinnel, W. A., The Sheiling, Castle-Douglas Road, Dumfries .....22nd Feb., 1906.
MacKinnel, Mrs, The Sheiling, Castle-Douglas Road, Dumfries .....22nd Feb., 1906.
M'Kinnon, Rev. Albert, Lochmaben .....9th Nov., 1906.
M'Kinnon, Mrs, Lochmaben .....9th Nov., 1906.
M'Lachlan, Mrs, Dryfemount, Lockerbie .....26th March, 1906.
M'Lachlan, Jas., M.D., Lockerbie .....25th Oct., 1895.

Neilson, George, LL.D., Wellfield, Partickhill Road, Glasgow .....13th Dec., 1895.
Neilson, J., of Mollance, Castle-Douglas .....13th March, 1896.

*Nicholson, J. H., Airlie, Maxwelltown .....9th Aug., 1904.

Ovens, Walter, of Torr, Auchencairn .....13th March, 1896.

Pairman, Dr, Moffat .....24th Feb., 1906.
Palmer, Charles, Woodbank Hotel, Dumfries ...29th July, 1905.
Payne, J. W., 8 Bank Street, Annan .....8th Sept., 1906.
Penman, A. C., Airlie, Moffat Road .....18th June, 1901.
Penman, Mrs, Airlie, Moffat Road .....17th Oct., 1905.
Phyn, C. S., Procurator-Fiscal, Dumfries .....6th Nov., 1885.
Pickering, R. Y., of Conheath, Dumfries .....26th Oct., 1900.
Primrose, John, Solicitor, Dumfries.....5th Dec., 1889.
Proudfoot, John, Ivy House, Moffat .....9th Jan., 1890.

Rae, E. B., Town Clerk, Lochmaben .....22nd Feb., 1906.
Rae, Rev. R. Neill, The Manse, Lochmaben ...21st Dec., 1906.
Reid, F., St. Catherines, Dumfries .....6th Jan., 1882.
Reid, James, Chemist, Dumfries.
Robertson, Dr J. M., Penpont .....3rd Feb., 1886.
Robson, John, Westbourne, Maxwelltown .....25th May, 1895.
Rogers, Miss, The Oaks, Rotchell Park .....21st Dec., 1906.
Ross, Dr J. Maxwell, Duntrune, Castle-
Douglas Road .....11th July, 1891.
*Rutherford, J., Jardington, Dumfries .....Nov., 1876.

Saunders, Wm., Rosebank, Lockerbie.
Scott-Elliot, Professor G. F., F.L.S.,
F.R.G.S., of Newton, Dumfries .....4th March, 1887.
Scott, Alexander, Solicitor, Annan .....7th Nov., 1890.
Scott, Rev. J. Hay, F.S.A. Scot., Sanquhar .....6th Aug., 1887.
Scott, R. A., Fairfield, Dumfries .....1st Oct., 1890.
Scott, W. S., Redcastle, Dalbeattie .....14th Jan., 1898.
Scott-Elliot, Mrs, Newton, Dumfries .....26th Oct., 1906.
Scott, Hart W., The Hovel, Maxwelltown .....9th Nov., 1906.
Semple, Dr, Airlie, Moffat Road, Dumfries .....12th June, 1901.
*Service, Robert, Seedsman, Maxwelltown .....1876.
Service, Robert, Jun., Janefield, Maxwell-
town .....24th March, 1905.
Smith, R. G. Eddington-, Buccleuch Street,
Dumfries .....9th Nov., 1906.

Smith, Miss, Llangarth, Maxwelltown .....6th Oct., 1905.
Stark, J. G. Hamilton, Troqueer Holm .....2nd March, 1877.
Stephen, Rev. W. L., St. Mary's Manse, Moffat, 28th June, 1904.
Stewart, William, Shambellie, Newabbey .....21st Dec., 1906.
*Stobie, P., Cabinetmaker, Dumfries .....3rd Nov., 1876.
Street, Rev. W. J., U.F. Manse, Maxwelltown ...17th Nov., 1905.
Symons, John, Royal Bank, Dumfries .....2nd Feb., 1883.
Symons, John, Solicitor, Dumfries .....6th Nov., 1885.

*Thomson, J. S., Jeweller, Dumfries .....3rd Nov., 1876.
Thomson, Wm., Solicitor, Dumfries .....1st Oct., 1898.
Thomson, Miss, c/o Miss Dunbar, Langlands, Dumfries.
Thompson, Mrs H. A., 26 Castle Street, Dumfries .....25th Nov., 1904.
Tocher, John, Chemist, Dumfries .....19th Jan., 1900.
Turner, Alex., Chemist, Dumfries .....17th Oct., 1905.

Veitch, W. H., Factor, Hoddom .....26th Oct., 1900.

Waddell, J. B., Victoria Terrace, Dumfries .....11th June, 1901.
Waddell, Mrs, Victoria Terrace, Dumfries .....11th June, 1901.
Wallace, M. G., Terreglestown, Dumfries .....11th March, 1898.
Wallace, Miss, Lochvale House, Lochmaben .....7th Oct., 1892.
Watt, James, Crawford Villa, Johnstone Park, Dumfries .....7th March, 1879.
Watt, Miss, Crawford Villa, Johnstone Park, Dumfries .....6th Oct., 1905.
Watson, Thos., Castlebank, Dumfries .....9th Jan., 1880.
Weatherstone, Andrew, Bank of Scotland House, Dumfries.....1st Dec., 1905.
White, John, Oaklands, Noblehill .....28th July, 1906.
White, Mrs Oaklands, Noblehill .....28th July, 1906.
Whitelaw, J. W., Solicitor, Dumfries .....6th Nov., 1885.
Whitelaw, Rev. H. A., U.F. Manse, Albany, Dumfries .....20th May, 1904.
Wightman, Abel, Lockerbie .....24th Feb., 1906.
Will, Geo., C.R.I., Farm Manager .....28th July, 1906.
Wilson, John, Solicitor, Dumfries .....29th July, 1905.

Wilson, Mrs, Castledykes Cottage, Dumfries.....24th May, 1905.
Wilson, Miss, Castledykes Cottage, Dumfries ...24th Feb., 1906.
Wilson, J. R., Solicitor, Sanquhar .....2nd Oct., 1885.
Witham, Colonel J. K. Maxwell, C.M.G., of
Kirkconnel, Dumfries .....7th March, 1890.
Witham, Miss Maud, Kirkconnel, Dumfries .....6th Feb., 1890.

Yerburgh, R. A., of Barwhillanty, Parton,
R.S.O., per F. A. Maryiate, 25
Kensington Gore, London, S.W. .....17th Feb., 1896.