

## I.

ANTIQUARIAN NOTES. BY PROFESSOR DUNS, D.D., F.S.A. SCOT.

(A.) Not long ago I heard a Fellow of the Society remark that, "as we have recently had many long communications on big subjects, it might be useful to have a paper on some smaller matters." This, perhaps, may account for the bald and indefinite title of this paper. We have had long, elaborate, and able discussion and illustration of important archæological and historical topics, and I thought it might be well to break the sequence by submitting some notes on a variety of objects which, while regarded severally, may not be of much value, yet borrow some worth and interest from the facts of association. The severe dignity of important archæological facts and inferences is apt to lead us to fight shy of the "nick-nacks" which, at a time not very remote, were the joy of the antiquary. It is often forgotten that among these, or among the recent variants of these, an object may occur of apparently trifling value in itself, but which when associated with others, in themselves equally unimportant, may become of more value than some high-sounding archæological generalisations. The field geologist knows that the fragment of a leaf, or an imperfect scale of a fish, or a mammal's tooth, may not only become a strong stimulus to untiring observation and work, but the promise of important discovery. The illustration may be of some use, though no such claim is made for the very varied antiquarian *items* now on the table. In my notes I have tried as much as possible to keep clear of forms identical with others now in the Museum. Most of the specimens exhibited have some distinctive element of difference—as of shape, environment, age, or locality, variants generally of some importance.

Perhaps I should explain why special prominence is given to the so-called "*Morpholites*," or pseudomorphs, named in the billet. These forms hold a place among minerals analogous to that which "Sports" hold among plants. They are exceptional varieties, abnormal divergences, in structure and shape from those generally associated with them.

They are, moreover, often suggestive of human art, and have features fitted to arrest attention and beget curiosity or wonder—features which lead to false inferences, or which give a foothold to popular superstition, and thus become interesting from several more than the mineralogical points of view.

Several years ago I spent a summer month at Portpatrick, where I first heard of the Rings and Discs of Shale frequently found in the old graves of the Parish Churchyard. The late Rev. Andrew Urquhart, M.A., an accomplished and intelligent observer, gave me an account of them as “coal-like rings and circular pieces of coal, varying in size from a shilling to a crown piece.” He said they were met with in some, not all, of the oldest graves, not near the surface, but at a considerable depth from it. In the statistical account of the parish written by him, he says:—“Circular pieces from 3 to 4 inches in diameter, cut out of a black slate not found in the parish, are frequently dug up in the churchyard, along with rings out of which these pieces seem to have been cut. Both of these are supposed by the people to have been used as money.” The Society recently purchased some of them, and the person from whom they were bought informed me, when he forwarded specimens to myself, that “they were dug out of the grave when being opened; that they are only found in one part of the old churchyard—that part opposite the tower of the old church, which was built about the 16th century—and that the area where they are found is only about 12 square yards.” As I was anxious to know at what position they were met with, I put some queries, in answer to which he says:—“Two of the rings and discs were found at a depth of 4 feet 6 inches, and about  $2\frac{1}{2}$  feet from the head of the grave. In one grave were 17 discs and 4 broken rings; in another, 16 discs and 3 broken rings.” “There is,” he adds, “no tradition that I know of but what old people say, that they were used for money, to place in the coffin, and in the hands of the dead persons, to pay their way to that better land whence no one has yet returned.” This survival of the ancient myth, touching the dreaded Son of Gloom and Night (*Dirus Charan*), was sure to turn up in connection with objects having such environments—the disc and the ring being only variants of the *Obolus*.

One would fain attach a useful meaning to the discs as well as to

the rings—disc money and ring money,—but the fine and varied collection from Povington, Dorset, now on the table, discourage any attempt in this direction. The Society is much indebted to Major Ramsay for his generous donation of these to the Museum. They leave us in no doubt as to their nature. They are simply refuse, resulting from the making of the rings for ornamental purposes. “It is rather doubtful,” says Evans, “whether the discs of Kimmeridge shale, so abundantly found in Dorsetshire, and to which the absurd name of Kimmeridge Coal-money has been given, date back to pre-Roman times. These discs, as is well known, have on the one face a centre-mark showing that they have revolved on the centre of the ‘back poppet’ in the course of being turned; and on the other face a square recess, or occasionally two or three smaller round holes, showing the manner by which they were attached to the chuck or mandrel of the lathe. . . . Instead of their having been made for any purpose, such as for use as money, they are merely the refuse or waste pieces from the lathe.”—*Ancient Stone Implements*, p. 416.

Thus, then, it appears—(1) That none of the discs are so small as a shilling or so large as to give a diameter of 3 to 4 inches. (2) That having been found only in some graves seems to indicate that the casting, both of rudely formed discs and broken rings, into these graves was intended to indicate that they are the graves of a class of persons who were characterised by some moral or social peculiarities. (3) That the Portpatrick forms differ from the Kimmeridge shale forms by having been made with a knife, and not by a turning lathe. It is doubtful, however, if this warrants the inference that they are older. (4) That the fact that shale rings have been found in English barrows, and in at least one Scottish churchyard, may countenance the assumption that some significance was attached to them in connection with the burial of the dead; and (5) I think it can be shown that the geographical distribution of these objects is wide as the geological range of the minerals of which they are made. As regards Scotland they have been met with in Ayr, Berwick, Dumbarton, Fife, Sutherland, and Wigtown shires, and, for the most part, in localities where the shales are most common—as cannel coal, alum schists, graptolite schists, lignites, &c.

And, as regards England, while in Yorkshire they occur, as at Whitby, in the form of jet, in other districts of Yorkshire they occur as parrot coal. So likewise, in Cheshire, Cumberland, Dorsetshire, and Buckinghamshire as Kimmeridge clay, whose place of typical development is in the Isle of Purbeck.

When I visited Portpatrick the main object I had in view was to examine the so-called greywacké, or Silurian schists, in the hope of finding the graptolitic remains of the period. At one place and another I found thin beds of dark-coloured slate-like minerals, synchronising, as I thought, with the alum slates of the Garpol Linn, near Moffat. Patches of the same were found on the shores of Loch Ryan and on the Wigtown Coast. Mr Urquhart was mistaken when he said that no such minerals occur in the parish. I have put on the table a specimen which, from the holes in it, I conclude had formed part of a necklet or armet. It was found in a grave at Craighiehall in 1805. I received it from Sir James Simpson. On the table also is a brick of compact fine Scottish parrot coal. It is one of ten or twelve such bricks in my possession, which show how wide the area is within which this mineral is met with. One often wonders that our Scottish dealers in ornaments do not make more use of this mineral.

(B.) Under the term *Morpholites* are included a number of peculiar, nondescript, often grotesque forms assumed by uncrystallised and, though more rarely, by crystallised substances—forms which have ever attracted much popular attention, been credited with fanciful healing or protective virtues, and given rise to a good deal of superstitious feeling. They thus have some claim on our notice. Besides, many of them are very interesting from the mineralogical point of view. We are in the habit of attaching much importance to the influence of physical environments on plants and animals, but very little, one might almost say none, on minerals. Yet it is in this direction we are likely to find the explanation of some of the forms we have now before us. The matter might be put thus:—Assuming molecular attraction—like molecules drawing to like—the presence in plastic clay of such sub-

stances as silica, lime, magnesia, manganese, or iron, which have a strong tendency to aggregation, the form of the position in which they have room to associate will give the shape of the concretion. The working of this tendency, one might almost say law, gives curious results. The specimen No. 1<sup>1</sup> is a comparatively thin indurated plate of clay with a flat knife-shaped part in the centre, which, if shaken out, would leave a mark like a mould for a knife. No. 2 is, however, a more interesting and remarkable example of this molecular aggregation. The iron elements have come together, carrying with them the colour of the clay, but forming a hard compact crust round the fine-grained alumina which is seen in the shape of a highly polished stone celt. This specimen was found, as a nodule, in a hard clay bed, by workmen, when digging the foundation of one of the houses in Drumsheugh Gardens. Accidentally broken open, the interior was set down as a true stone axe. The specimen No. 3 came into my hands as a veritable stone hammer, fully formed in all but the hole for the shaft. It is, however, no more than a bit of heavy spar (carbonate of barytes?) whose fracture assumes forms corresponding to this. No. 4 is one of a great many natural objects around which popular superstition is apt to gather. Even as a mineral it is very interesting. It looks as if it had been formed in a mould—the trap in a viscous condition having been run into it. I have had it for more than fifteen years, have often looked at it, hoping, but in vain, to meet with some specimen, natural or artificial, which would shed light on its condition and shape. If it has been broken from a trap rock, it must have lain an immense time separated from the mass, because there is not the slightest mark of fracture about it. At the close of a class lecture on the peculiar, fantastic, and often picturesque features which certain rocks assume under the influence of weathering, a student informed me that he had seen a stone, unlike any of the illustrative forms on the table. At my request it was sent to New College. On asking for particulars a few weeks ago, the following is all he can now say:—“I remember all about the stone to which you refer. I found it at a farm down in the Parish of Inch,

<sup>1</sup> The specimens numbered are in New College.

Wigtownshire, over fifteen years ago. The people themselves had no account to give of it, and I wrote to you to that effect at the time. In your note thanking me for it, you said you thought it valuable as a weathered specimen, and I remember I was pleased to find I had not been sending trap-rock to Edinburgh of no use." But in addition to this I find on the original label attached to the stone, the words—"Found in a mound of earth, Wigtownshire;" this mound, he had informed me at the time, was artificial. The length of the stone is 2 feet 2 inches; breadth, 3 inches; thickness below at thickest part,  $2\frac{1}{2}$  inches, gradually thins to a comparatively sharp upper edge; shape vomerine. At the narrowest end it can be grasped by the hand.

No. 5. Beast-like shaped concretion. The curious effect is produced by the spreading of the homogeneous plastic clay from several centres under pressure.

No. 6. Finger and thumb marked stones. In some the impression resembles the mark which would be made by the pressure of the ball of the thumb on a plastic substance. In some specimens there are not only marks suggestive of the action of finger and thumb, but examined with a lens marks very like those of which Galton has recently been making so much, the characteristic striæ of the thumb. One of the specimens was got by me from the conglomerate in the neighbourhood of Oban. When taken out of the coarse sandy matrix in which it was lying, a small dark-coloured stone fitted into the depression. Have we here the explanation of these markings? The question is easily put, but the answer would at once suggest another question, which physical geology would be slow to face. Was that great mass of conglomerate once so soft that the pressure of stone on stone would make it possible to produce such forms as these? We are ready to accept phenomena without troubling ourselves with natural causes of which they are the expression, and when accidents occur to suggest the cause, we wonder we had not thought of it before. Recently, when chipping a bit of flint in the hope of getting a scraper, or a saw, or a keen cutting edge of some sort at one stroke, one of the strokes gave an edge with which a pencil could easily be cut through; another stroke revealed a thing of beauty, which in its turn suggested that when the pretty *Lima parallela* was

embedded in the flint, and when it left its image there, the matrix must have been soft and plastic, otherwise the exquisite markings of this little shell could not have been so finely realised.

I have little to say with reference to Nos. 7 and 8. The one presents on the surface of a bit of whinstone a curious, and one might almost say exact, outline of a crocodile-like animal formed by the infiltration of calcespar into the cracks of the volcanic mineral; and the other, a no less exact figure of a Latin cross, by the same process: the mineral in this case is quartz. Both are from Ayrshire. They had long been regarded as "lucky stones." In their case, as in most cases of charm-stones, education has so far loosened superstition's grip that the grandchildren can see their way to part with them, without more than a very airy dread of the consequences of scepticism touching them. In these now before us, however, I could see that the cross was more easily given up than the crocodile!

No. 10 is a small collection of flint chips picked up near the shore between Gullane and North Berwick. One of them is a core from which several chips had been broken. Their chief interest consists in their rarity in that district. The presence of the well marked core may suggest that more might be found if they were looked for. The only records in our *Proceedings* of stone implements on that coast are: "Gullane—Greenstone Axe," and "Gullane—Scraper"!

(C.) The felstone celt and the flint chips were found together by a crofter at Callinish, Lewis, who gave them to the late Dr Miller, Stornoway, whose daughters, the Misses Miller, Hermitage Gardens, Morningside, handed them to me after one of my Rhind lectures. So far as I am aware, they are the first specimens of this kind which have been met with in Lewis. I have reason to know that the late Captain Thomas made inquiries after such forms, but without success. In a Paper read before the Royal Physical Society, in 1862, on the "Geologic Age of the Pagan Monuments of the Outer Hebrides," he refers to the clearing away of peat, 6 feet in depth, from the Callinish stones, and concludes on good data that the stones had been erected before the peat began to grow. In a letter to myself in 1865, he says:—"When engaged in

making those observations, I came upon the ashes of a fire that had been made of sticks, on the naked rock below all the peat. The peat bank above the ashes was quite the same as the peat around and about." The specimens now on the table were found at some distance from the surface, and may have been like the ashes on the bare rock, and have lain there as long as the ashes. The inference is not much worth; the celt and chips, however, are real. They had, moreover, been in human hands, and, perhaps, that is the best we can say about them.

(D.) A good many years ago I met an accomplished German clergyman in Bohemia. On finding that I was interested in archæological matters, he told me of the occurrence in a German district over which he was pastor of numerous articles in bronze and earthenware not far from his dwelling, at Költchen, East Prussia, and promised to send me some specimens. A few months after his return home, Pastor Basche, now of Berlin, forwarded the fragments of bronze and pottery on the table. They had been picked out of a sand heap by his son and several other boys. I had not looked at them carefully till about a fortnight ago, when I thought of these notes. The bronze fragments seem part of one ornament, very likely a necklace, and are marked by good, well defined art. The fragments of pottery are interesting as indicating the presence in one heap of very different patterns, and widely different art feeling. The patterns are at least three in number, most of them are plain and unadorned and of a glazed brown appearance, and some of the same colour show effective ornamentation realised by the association of small round marks with differently sloping lines. The best are of a well defined black colour, highly ornamented—one fragment bearing a mark like a fir twig. At the top of this is a distinct round mark in the centre of the needle leaves. Among the articles are two cups—one without any ornament, and evidently belonging to the time and pattern of the unornamented fragments. It is of rude shape and substance; the other is more artistic and evidently to be associated with the brown ornamented fragments.

(E.) The thick, manilla-shaped lump of pure copper is a piece of

ancient African money. I received it from the Rev. Dr Robb, late of Old Calabar, now of Jamaica. If unrolled, it would be very nearly 4 feet in length. Its circumference at its thinnest part is 5 inches, at its thickest 7 inches, and its flattened terminal discs  $2\frac{3}{4}$  inches in diameter, each disc having a slight circular hollow at the centre  $\frac{3}{4}$  of an inch in diameter. A series of ridges run from disc to disc, the two central ridges along the convex exterior having, as they approach the disc, and beginning at about 3 inches from it, a pretty ornamentation of sloping dotted lines. The piece was found at a considerable distance from the surface. Its value was reckoned according to the number of slaves that could be purchased by it. With this before us, we might perhaps be warranted to credit Africa with the original device of this shape, and may understand why they so readily welcomed the "Brumagim" manilla as a current coin; but what a difference between the ancient and the recent!—the old is best.

(F.) Several things invest the Chinese Screen now shown to the Society with interest. It was got at the capture of Ningpo in 1845. It has a place in Chinese folk-lore, and is highly prized by Chinese people of culture as an article of furniture. The fossil which forms its characteristic feature helps the palæontologist to determine the geological place of immense masses of rock in China. Previous to 1856 it had attracted the attention of travellers, but it was only then that it came under the notice of the geologist, and in June of that year S. P. Woodward described several large mollusca from China. They had been found at a place 200 miles from Shanghai, one of which was the form whose presence in the screen gives it its distinguishing name—"Pagoda Stone Screen." The fossil belongs to a leading family of the highest class of molluscs, the cephalopods, which includes the octopus, common cuttle-fish, nautilus, &c. The Chinese screen fossil is one of the family *Orthoceratidæ*, genus *Orthoceras*, forms characterised by a long tapering straight external shell, with a chamber at the opening. The longitudinal section in the screen shows the septa, or divisions of the shell, and the tube-like structure, which in this species is in the centre, is the siphuncle or siphon, which passes through all the chambers from the

largest in front to the smallest at the apex, and preserve the life connection through them all. Three transverse sections have been taken from the lower part of the shell and inserted in the screen; the one at the top shows on the reverse the siphuncle very distinctly. Crediting an inch of thickness to the three, the length of the whole would be 11 inches. In New College are specimens which range from 2 inches to 2 feet 2 inches, with a diameter at the thickest part of 2 inches. I referred to Chinese folk-lore. The belief of the owners of these screens, and others, is that the sites of many pagodas are over the stone in which their fossils occur, and that their shape suggested the form of their places of worship. The screens are rare. Mr Kingsmill, of the Royal Asiatic Society, refers to the Orthoceratites in the Kiangsi strata, but says:—"I have not been able to procure a specimen, as they are much prized by the Chinese under the name of Pagoda Stones, and sold at fancy prices." The best notice of these which I have met with is in a paper by John Grieve, M.D., F.L.S., read before the Natural History Society of Glasgow in 1886.

(G.) I have placed on the table three Snuff Mulls. One of them is of polished parrot coal; another, a ram's horn, with rude chain, spoon, and small sponge attached; the other is of yew, ornamented with a silver band round the lip. The latter two are significant, as, in respect of art, indicating the wide distinction between the shepherd and the owner of the hills on which the sheep feed. There are also two specimens of the Knitting "Sheaf"—the article, generally made of straw, into which the end of the left hand wire is pushed by the knitter to steady it. The Apple Corer of the olden time is laid alongside of the Corer in present use. The bone specimen is known to have been used in the same household for more than a hundred years. The foregoing specimens are all at present in New College Museum, Edinburgh.