

NOTES ON TWO BROCHS RECENTLY DISCOVERED AT BOW, MID-
LOTHIAN, AND TORWOODLEE, SELKIRKSHIRE. BY JAMES CURLE,
JUN., W.S., F.S.A. SCOT. (PLATE II.)

When Dr Anderson compiled, in 1871, his catalogue of Brochs known in Scotland, he could only mention in the district south of the Firth of Forth one isolated example—the Broch of Edin's Hall, in Berwickshire. The object of my paper is to communicate to the Society the discovery of two additional examples which has been recently made by Mr James Wilson, editor of the *Scottish Border Record*, Galashiels, and the members of the Gala Ramblers' Club, with the results of their excavation.

The Broch of Bow.—A few miles south of the village of Stow, on the borders of Midlothian, there rises on the north bank of the Gala a steep ridge known as Bow Hill. The ridge terminates in two rounded peaks, of which the eastern stands at an altitude of about 1020 feet above the sea, and 450 feet above the stream, which flows at its base. On the Ordnance Survey map this peak is marked as the site of a “castle.” It was this

indication that attracted Mr Wilson in 1888 to examine the spot, to ascertain what castle could have crowned so high and so exposed an eminence. He found that there were undoubtedly the foundations of a circular building (fig. 1); a cairn had been built out of its ruins in recent times, and great blocks of stone, which had evidently formed part of the structure, lay piled in confusion on the steep slopes of the hill towards the south and south-west, as though they had been hurled from the summit. The situation is one of great natural strength, of which the men who built

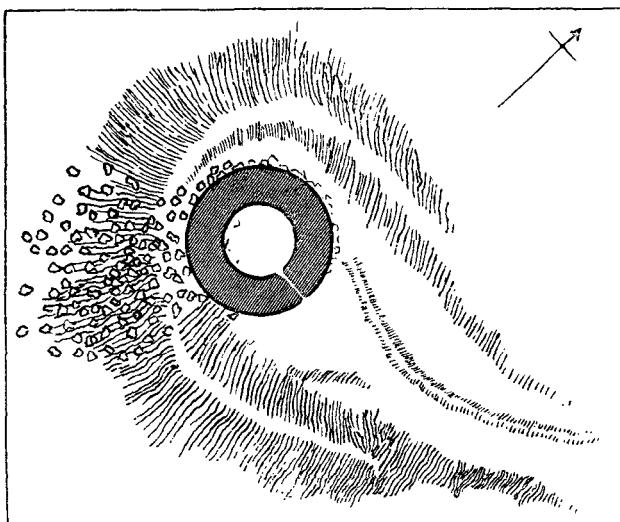


Fig. 1. Ground Plan of Bow Hill and Broch.

upon it have taken the fullest advantage. It is formed by a narrow plateau, which slopes from the summit in an easterly direction. At the point where the plateau is highest and narrowest the building has been placed, on the very edge of the steepest slopes of the hill, which descend very rapidly on the south, south-east, and south-west towards the Gala. Towards the north and north-west, where the ground is higher, the declivity between the peaks being slight, the plateau appears to have been defended by a wall, of which some remains may be observed, run-

ning along its northern edge in an easterly direction. In 1890 some investigations of the structure were made. In the centre was found a circular court 31 feet 9 inches in diameter. The wall surrounding it was at no place above 18 inches in height, but the stones forming its inner surface were found to be *in situ*, though many of them have since been pulled out by treasure-seekers. The greater number of the stones forming the outer surface had been displaced. But enough remained to show that its original thickness had been about 13 feet 6 inches. At a point in the wall towards the east there was discovered what may have been a chamber or an entrance—probably the former—but the destruction of the wall rendered it impossible to determine its character exactly. Here one of the stones of a quern was found. Mr Wilson came to the conclusion that the remains were those of a broch—a conclusion which, though somewhat doubtful at the time from the absence of these structures in the neighbourhood, has been justified by subsequent discoveries.

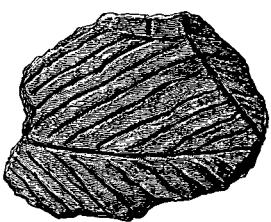
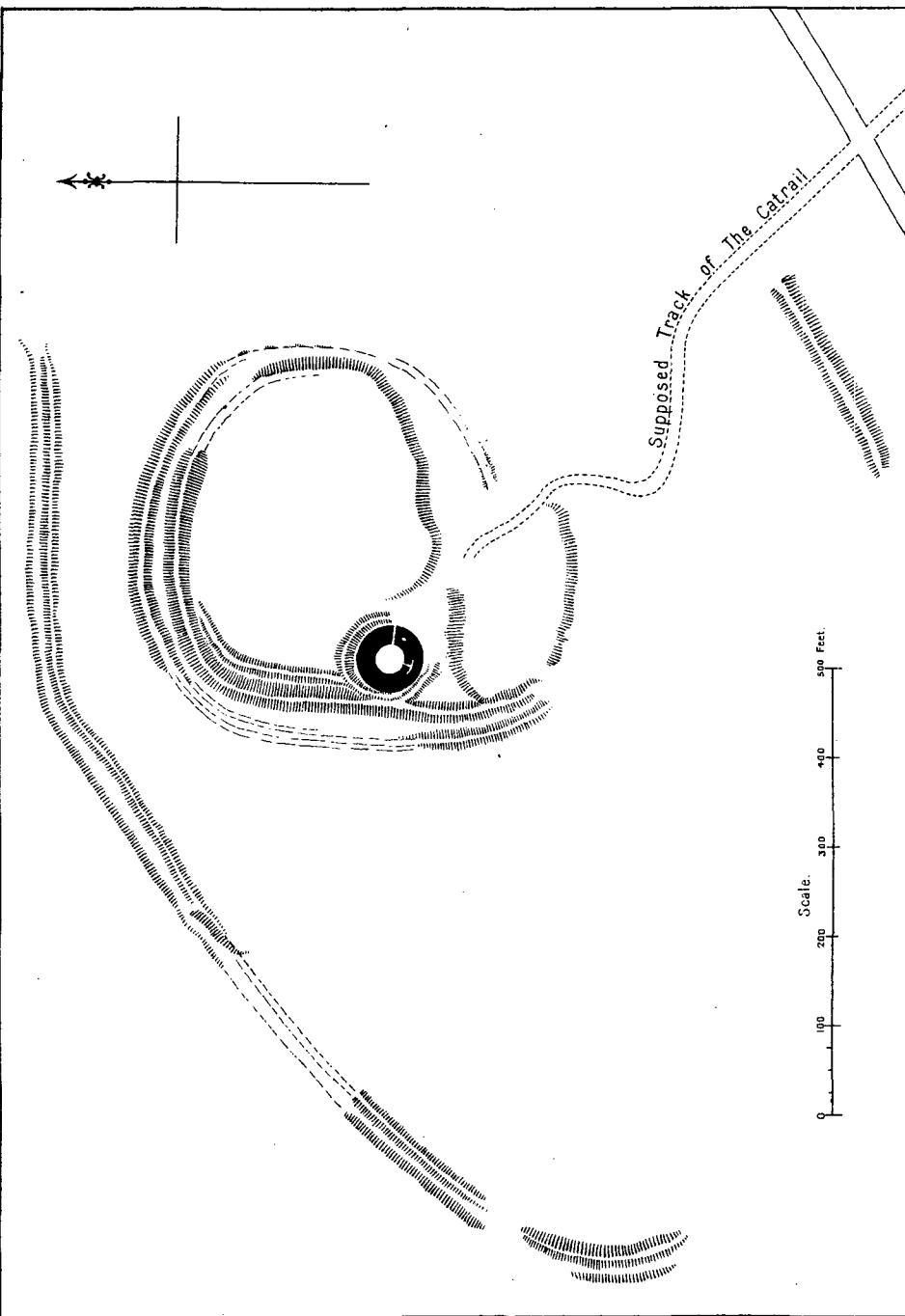


Fig. 2. Fragment of Pottery
from Bow Broch.

The work of clearing out the court was rendered difficult on account of the weather and the exposed situation, and the relics which were discovered, and have come under my notice, are very scanty. In addition to the quern stone already mentioned, there were found a quantity of bones believed to be those of domestic animals, but they were unfortunately not submitted to any competent authority, and several fragments of pottery

of thick earthenware, wheel-made, and probably of Roman origin. Two other varieties of pottery have since been picked up among the *débris* thrown out by the excavators, one probably Roman, and the other Celtic. The last is only a small fragment (fig. 2), but it has all the characteristics of the pottery usually met with in northern brochs. It is of a black colour, rudely made without the aid of a wheel or a proper kiln, and the outer surface has been ornamented with incised lines, forming a sort of herring-bone pattern, of which we have several examples among the specimens from the Broch of Lingrow, preserved in the Society's Museum.



TORWOODLEE BROCH AND OUTWORKS.

The Broch of Torwoodlee.—Two miles from Bow, as the crow flies, there rises to the south of the Gala a ridge almost parallel to that of Bow, the highest point of which, on the Ordnance Survey map, bears the name of Croslee or Mains Hill. The Gala runs along the foot of it for some distance in an easterly direction, and turning south cuts through its eastern extremity, from which it winds down through the town of Galashiels to the Tweed. Part of the ridge, the eastern portion at least, appears to have borne at one time the name of Hargit, or Haregate Hill. At its highest point, where the old Gala water road crossed it, there once stood the village of Hargit Head ; but the village has disappeared, and the name, as applied to the hill, appears to have fallen into disuse and given place to that of Torwoodlee, from the estate of which it forms part. The prefix Tor is in a measure suggestive of the existence at some distant period of a tower or fortified dwelling ; but no tradition appears to have existed that any building of the kind had stood within the ancient fort which stands upon the hill, and which is generally known as the Rings of Torwoodlee. (See the Ground Plan on Plate II.). The only other name applied to the fort of which I have found any mention, is contained in a paper by the late Mr Kemp, of Galashiels, who says that by old inhabitants of the neighbourhood it was known as "Eye Castle." It has usually been pointed out as the northern termination of the Catrail, which has been traced from this point to Peel Fell in Northumberland, and which the Ordnance surveyors have depicted on their map as winding up the southern slope of Torwoodlee Hill and entering the entrenchments. I am unable to find any trace of it now near the fort, though there are probably remains lower down the hill. The fort stands about 800 feet above the sea and 300 feet above the river, on a commanding situation overlooking to the south the valleys of the Gala and Tweed, with the three peaks of the Eildon Hill in the distance.

One day in the early part of last year Mr Wilson, with a party of members of the Ramblers' Club, visited the fort, and walking round the entrenchments, observed the remains of a ditch which appeared to surround about two-thirds of a circular area some eighty feet in diameter. Upon this piece of ground there were no remains of a mound, but it occurred to them that its surrounding ditch must have been constructed

for the protection of some prehistoric dwelling, traces of which might still be found beneath the turf. It did not require much preliminary investigation to ascertain that there existed the remains of a circular building, and following the line of the wall for a short distance they discovered a doorway. It was then decided that, if possible,

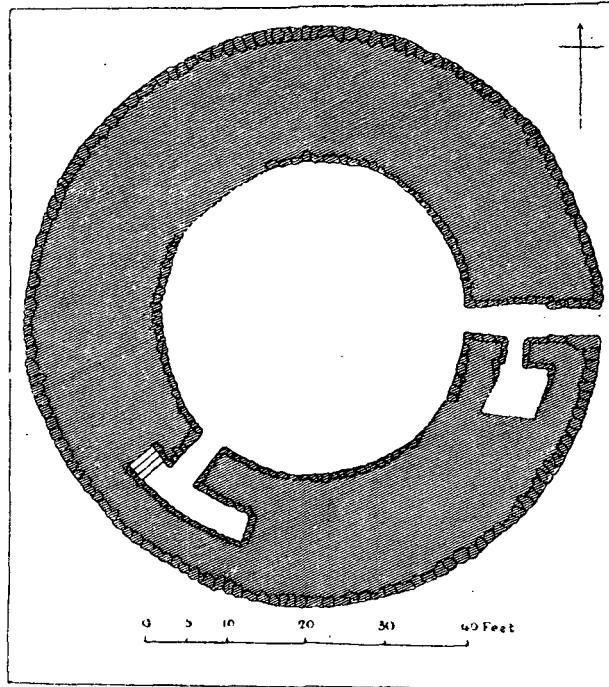


Fig. 3. Ground Plan of the Broch of Torwoodlee.

systematic excavation of the structure should be undertaken. Permission was obtained from Captain Pringle of Torwoodlee, and other gentlemen interested, and a subscription to defray the cost opened in Galashiels. The outer line of the wall was first traced, and was found to be entire, and from two to three feet in height, in its whole circumference. The doorway was cleared out, the inner surface of the

wall traced, and gradually the outlines were revealed of a large broch, having a guard chamber on the south side of the entrance, and a second chamber in the wall towards the south-west, at one end of which there remained the first three steps of the stair. The broch thus discovered is almost circular, its total diameter being about seventy-five feet, while that of the interior court is forty feet. The wall, which is in no place more than about three feet high, is for the most part seventeen feet six inches in thickness, except towards the south-west, where it is increased to about nineteen feet. The entrance is from the east, its width at the outside being three feet nine inches. At a point six feet nine inches from the outer surface of the wall it widens to four feet eight inches, leaving the usual rebate five and a half inches in width, against which the door could be placed. The width of the passage then decreases gradually to three feet nine inches at the point where it enters the court in the interior. The wall, however, on the north side of the passage behind the rebate curves a few inches inward for a distance of about four feet, as if to allow space for the door when open. On the south side of the passage, one foot above the floor level and two feet ten inches behind the rebate, a narrow passage two feet three inches in width and three feet four

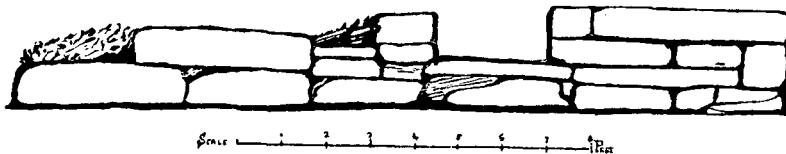


Fig. 4. Sectional Elevation of South Wall of Doorway, showing Entrance to Guard Chamber.

inches long gives access to the guard chamber. It appears to have been six feet four inches in width. Its length cannot, however, be ascertained. The second chamber in the wall is situated to the south-west. It is entered by a passage from the court six feet two inches in length and three feet eight inches in width. Its dimensions are fourteen feet in length by four feet in width. The chamber is curved like the wall which contains it; at its southern end it is almost rectangular, at the western end there remain the first three steps of the stair which would

lead to the upper galleries. These steps appear to have been about one foot in breadth and ten inches in height. On the north side of the broch the wall is more ruinous ; for a distance of about nineteen feet the stones marking its inner line have been displaced, and no trace was found of any chamber. The broch does not appear to have had a well in the interior nor a drain. It is built on a slight incline, and the entrance passage is placed at the lowest point, so that any surface water from the court would be drained through it. The excavations did not reveal any trace of secondary constructions. The wall appears to have been faced externally with large boulders and internally with smaller stones, while the space between has been filled in with loose rubble. The masonry of the entrance passage and stair chamber is very regular, and the latter is rectangular instead of being of irregular form, as is frequently the case in northern examples. The largest stones in the building are those facing the exterior of the entrance passage, and measuring four feet in length.

It is no easy matter now to say, with any exactness, what defensive works surrounded the broch. Cultivation has in part erased the out-works, which have also served as a quarry for materials for the surrounding "dykes." I am told on good authority that some fifty years ago upwards of two thousand cart-loads of stones were taken for this purpose. The broch has been placed at the west side of an almost circular enclosure greater in length than in breadth, surrounded by a double mound of stones, with a ditch some twenty to thirty feet in breadth between them. The small ditch which partly surrounds the broch is bounded on the west by the inner wall of the fort. This ditch does not appear on the south side of the broch. It may have been filled up by the debris, or perhaps did not exist, as the ground slopes somewhat rapidly. To the north of the broch, running parallel with the inner mound of the fort, are the remains of a third mound of smaller dimensions. It can only now be traced for a short distance, and does not reappear on the east side. The exact measurements of the fort can only be a matter of conjecture. In several places the mounds have been erased entirely, especially to the south, where part of the fort is now under cultivation. The diameter of the area measuring from the line of its outer walls appears to have been four

hundred and ninety feet from north to south, and four hundred and thirty feet from east to west. Beyond the fort on the north side, on the brow of the hill, the remains of a deep ditch, with earth mounds on either side, may be traced. For about four hundred yards it runs in a westerly direction, when it appears to bend round towards the south. All farther trace of it has been erased in the adjoining fields by cultivation, but it is possible that at one time it surrounded the fort in elliptical form, and perhaps a mound running parallel with the fort mounds to the south, which owes its preservation to the ground around it having been planted, may have formed part of this outwork.

When the accumulation of debris was cleared out of the broch its central area was found to be covered with a layer of ashes, marking the old floor level. This layer was from one to two inches in depth. Under the superintendence of Mr Wilson these ashes were carefully sifted and all relics of the inhabitants were collected. By the kindness of Captain Pringle, the collection obtained is now presented to the Museum. This collection, which is the first of any importance obtained from a broch in the south of Scotland, differs in several respects from those taken from northern brochs, and as the objects which it contains have an important bearing upon the age of these structures, it is necessary to examine them in some detail. Fragments of pottery form the bulk of the collection, representing a number of vessels of at least eight varieties of earthenware, among which the usual variety of pottery found in brochs is almost entirely absent. Instead of the usual rough vessels shaped by hand, of which a fragment was found at Bow, the vessels from Torwoodlee have been made with the aid of a wheel and a potter's kiln. They were at once pronounced by Dr Anderson and others to be of Roman origin. In order to prove this, I have compared, as far as possible, a specimen of each kind with pottery found on sites which have been occupied by the Romans. The only sites of this description from which we have collections of any importance in the Museum are Inveresk and Newstead—the latter of which is only some six miles distant from Torwoodlee. Most of the varieties I have found in these collections. The remainder I have identified from English collections of Roman remains.

First—Fragments of two, probably three, bowls or shallow vessels of the bright red, glazed ware known as Samian. This ware was found at Inveresk and Newstead, as I believe it has been in every Roman station in Scotland, and in many undoubtedly post-Roman structures. In brochs its occurrence has been noticed on one or two occasions along with pottery of native origin, and we have found it in caves, crannogs, and earth-houses. Its bright colour and glaze would doubtless make it attractive.

Second—A small fragment of a vessel of a red ware similar to the last, but without its bright glaze. Dr Anderson informs me it is known as false Samian. This does not appear in our collection from Inveresk or Newstead, but there can be no doubt of its Roman origin.

Third—Remains of a small jar made of a hard, gritty material, heavy in weight, of a dark grey colour, the edges of the broken pieces being of a brownish red, and the surface is somewhat gritty. Being unable to identify this variety, my friend Mr Morland Simpson submitted it to Dr Collingwood Bruce, who at once pronounced it to be Roman.

Fourth—Fragments of two vessels, probably small jars, of a reddish colour, unglazed, and ornamented with slight horizontal flutings on the outside. I was unable to identify this variety here, but in the Mayer collection, preserved in Liverpool, I found two small Roman jars from Osengell in Kent of the same material, and showing the same ornamentation.

Fifth—Remains of two, probably three, jars of a firm, hard texture, made from a whitish clay, but fired a bluish black. This is similar to a common type of Romano-British pottery, the blue-black colour being produced by baking it in the smoke of vegetable substances. We have specimens of a similar make from Newstead.

Sixth—Fragments probably of three vessels of a soft, buff-coloured clay, unglazed, and light in weight. Similar specimens were found at Inveresk and Newstead.

Seventh—Fragments of two vessels of a thick, white, unglazed ware, having imbedded in their inner surfaces small particles of quartz, with projecting edges. These are remains of mortaria—culinary vessels of common use among the Romans in this country. They were used by rubbing down vegetable substances or bruising them with liquids.

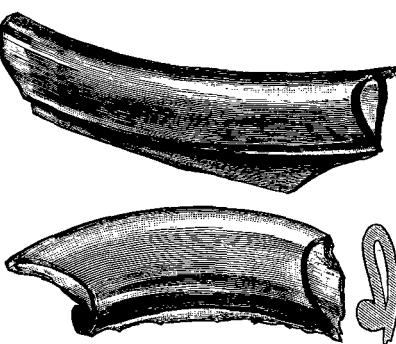
Specimens from Inveresk and Newstead are preserved in the Museum, and in England they are very numerous.

Eighth—Fragments of two large vessels with narrow necks and bulging sides made of thick, light-brown clay, unglazed. These were probably amphoræ, similar to the large vessel from Inveresk preserved in the Museum. The pottery appears to be the same, and we have also remains of this variety from Newstead. These vessels were probably used for containing oil or water. A spherical object made from the same clay flattened on two sides, upon one of which two lines are incised in the form of the letter X, may possibly have formed “the bung” of one of these vessels. Fragments of similar vessels were found at Bow.

In addition to the above there are two small fragments of coarsely made pottery which may possibly be of native manufacture.

The fragments of glass were numerous, representing five or probably six vessels. Two of these appear to have been bowls or shallow vessels of a bright amber colour. The glass is thin and transparent, showing almost no sign of decay. We have portions of the rims of both (figs. 5 and 6); these are not solid, but are formed by the edge of the glass being bent back until it meets the outer surface of the vessel, thus forming a hollow rim. I have not been able to identify these vessels with any specimens found in Scotland.

The mode of forming the rim I have noticed in several Roman vessels, and I think no other origin can be assigned to them. Of green glass we have the remains of one vessel, of which a portion of the rim with double flutings remains. It probably resembled in shape the amber-coloured vessels. Of blue glass we have the remains of two or three large bottles, of which a number of pieces, including portions of two handles and a neck, remain. These vessels were probably four-sided in form, terminating in a



Figs. 5 and 6. Portions of the hollow rims of two Glass Vessels.

round neck (fig. 7). One large handle was employed to join the neck and shoulder of the bottle ; its form was rectangular or nearly so, and it was ornamented by vertical flutings (fig. 8). There is preserved in the Mayer collection in Liverpool a perfect specimen of one of these bottles. Its base is about seven inches square and its height twelve and a half inches, the breadth of its handle varies from three to three and a half inches. One of the handles from Torwoodlee appears to have been smaller, the other larger. These bottles appear to be Roman. In addition to the specimen in the Mayer collection I may mention that the handle of another of these bottles is preserved in the Museum. It was found in 1751 near the remains of a Roman bridge on the banks of the river Almond near its influx into the Tay. Similar glass was found with Roman remains at Falkirk.

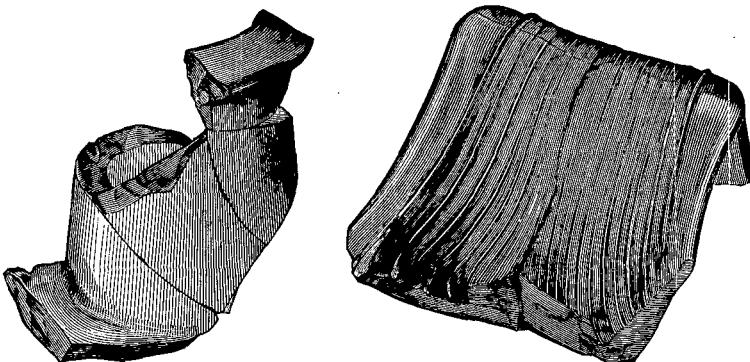


Fig. 7. Portion of round neck of
Glass Bottle. $\frac{3}{8}$

Fig. 8. Handle of Bottle of
Blue Glass. $\frac{3}{8}$

One other relic of Roman origin was found—a small coin much corroded, which on examination proved to be a third brass of the Emperor Vespasian who reigned between the years 69 and 79 A.D.

The remaining relics are few in number ; three of them, however, are of importance. The first of these is a small portion of an armlet (fig. 9), flat on one side, rounded on the other, like the jet armlets of the Bronze Age, made of translucent glass of a bluish-green colour, and

ornamented with wavy lines of opaque yellow enamel. Such glass armlets are by no means common ; there is preserved in the Museum one perfect specimen, and a number of fragments which represent portions of other nine. These are the only specimens hitherto found in Scotland of which we have any knowledge, and it may not be out of place here to note their distribution. The earliest find we possess was made in 1789 on the farm of Boghead of Kintore in Aberdeenshire, where an armlet of opaque white vitreous paste was found in a cairn of stones together with portions of a jet necklace. An armlet of the same material and colour was found at Flanders Moss in Stirlingshire. In the excavation of Borness Cave, Kirkcudbrightshire, four portions were found, two of translucent glass of a light bluish-green colour, ornamented with three parallel lines of narrow stripes of a dark blue. The two remaining pieces are opaque, one of a yellow colour, the other white.

From the Crannog of Dowalton Loch, in Galloway, we have four fragments, all of them of opaque vitreous paste. Two are white, one yellow, and one white with wavy lines of blue.

From the Crannog of Inch Cryndil, in the same district, we have a fragment of translucent glass of a light bluish-green, with three parallel bands of ornamentation formed by alternate stripes of white and dark blue.

Lastly, in the Broch of Edin's Hall, in Berwickshire, we have a portion of an armlet of opaque white vitreous paste.

On the English side of the Border armlets of glass appear to be still more uncommon. I am only aware of their occurrence twice, though it is probable there are others known ; both of the specimens found were obtained in excavating hut-circles high up in the Cheviots. They are described by the late Mr George Tate, in papers contributed to the *Proceedings of the Berwickshire Naturalists' Club*, for the years 1861 and 1862. The first of these, which is a fragment of an armlet of translucent glass, was found in an ancient hill-fort or town at Greaves Ash, near Linhope. The second was found in a hut-circle upon Swint Law. It is described as a portion of an armlet of pale green glass,



Fig. 9. Fragment of Armlet of Enamelled Glass. $\frac{1}{4}$

overlaid on the upper surface by a bright blue glass, into which are worked wavy lines of white enamel, the centre of each wave being ornamented by a patch of yellow enamel and a line of white going round the side of the ring. In Central Europe glass armlets have been met with, though they are apparently not of very common occurrence. Dr Munro, in his *Lake Dwellings of Europe*, mentions that specimens were found at La Tène and among the late Celtic Antiquities discovered at Berg Hradischt in Bohemia. He has also kindly pointed out to me a reprint from the "Anzeiger für schweizerische Alterthumskunde" for 1890, containing some notices of their occurrence in pre-Roman graves in Canton Zurich, where they were found in association with fibulae of the La Tène type. On the other hand, they do not appear to be found among the ornaments of the Merovingian period, or in the Saxon graves in England. It seems probable that they should be classed with the objects of that period of production to which the name Late Celtic has been given.

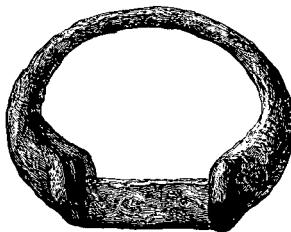


Fig. 10. Bronze Harness Mounting. $\frac{2}{3}$

To the Late Celtic period belong the two objects from Torwoodlee next to be described—a bronze harness mounting and a round button-like object of the same metal, ornamented with red enamel. The first of these is a ring (fig. 10) two inches wide with expanded ends joined together by a flat bar; the bronze is considerably decayed. It belongs to a well-defined class of mountings, of which we have several

examples, one characteristic of these being the trumpet-shaped expansion of the ends of the ring. Sometimes these expanded ends are brought close together, as is the case in the pair found at Hillockhead, Towie, Aberdeenshire, now preserved in the Museum; and sometimes the expanded ends are joined by a flat bar, as in the Torwoodlee specimen. Occasionally they have been found ornamented with enamel. Of this kind a beautiful specimen was found, with other mountings, at Westhall in Suffolk, while a specimen more nearly akin to the present find was discovered with twenty-three of a like description at Polden Hill in Somerset. A number of ornate specimens are figured by Mr Franks in

Horae Ferales, plate xx. It is curious to note that with or near the horse trappings found at Westhall was found a bronze lamp of good Roman workmanship, and Mr Franks also mentions that a ring of this description was found on the site of the Roman station, Bremenium, in Northumberland.

It is difficult to say for what purpose the enamelled piece of bronze (fig. 11) was made. It is circular, measuring one inch in diameter. One side is concave with a small projecting tang in the middle, the hollow space around having been filled in with red champlevé enamel, of which a considerable part remains. The other side is slightly convex, and the metal being much corroded, no remains of any attachment can be traced. It is possible that it may have been a stud, or harness mounting. It is one of the few early enamelled objects found in Scotland, and I think the first found in a broch. In *Horae Ferales* Mr Franks has gathered together and illustrated a large number of late Celtic antiquities, and he mentions that in Britain one of the characteristics of the metal work of this period is the employment of enamel in decoration, especially in horse trappings. The beautiful shield found in the Thames, which he illustrates, was ornamented with twenty-seven "circular ornaments of opaque red glass kept in their places by slight cruciform ornaments of bronze with a small rivet in the centre of each." A sword discovered at Embleton, near Cockermouth, was decorated with enamel of different colours, as was probably the case with the sheath found at Morton Hall, now preserved in the Museum. Of enamelled horse trappings there are a number of English examples, and at least one Scotch specimen, which has been described by Sir Herbert Maxwell and figured in the *Proceedings* of the Society, vol. viii., new series, p. 396. I need not repeat the arguments given by Mr Franks for the British origin of this decorative enamelling, nor is it necessary to requote the well-known passage of Philostratus attributing this art to "the barbarians in the ocean." The group of antiquities in Britain, known as the late Celtic, to which this enamelled disc and the bronze harness mounting belong, is generally admitted to be not of Roman but of native origin.

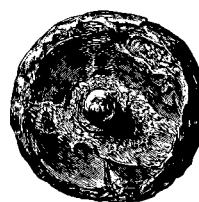


Fig. 11. Enamelled Bronze Disc. 3.

The only other remains found at Torwoodlee were some objects of iron corroded beyond recognition, two water-worn stones used for whetstones, and a third, which appeared to have been polished by use as a rubbing-stone. Some bones which were found have been pronounced by Dr Anderson as those of swine and oxen.

The discoveries which I have thus detailed reveal to us a broch associated with remains of an entirely different kind from those we have been accustomed to find in such structures. The remains divide themselves into two groups, Roman and Celtic, of which the former is by far the largest. The Roman remains indicate considerable civilisation on the part of the inhabitants. Their vessels exhibit variety of form and material. We possess portions of over twenty of these. These were cups or bowls of delicate glass and bright Samian ware, a variety of bowls or jars for containing food, large bottles of glass, culinary vessels, and great amphoræ for stores. To obtain these their connection with Roman civilisation must have been close. We cannot point to any other of the structures usually considered as post-Roman, in which so large a proportion of Roman remains has been found. The situation of this broch was within six miles of a site undoubtedly occupied by the Romans, that of Newstead, and probably at no great distance from the line of Watling Street. It is probable, then, that from this Roman station came the remains now discovered, and at a period during which the Roman civilisation still existed there. How late this Newstead settlement flourished we have no means of knowing. It appears to have been occupied for some considerable time, judging from the coins found upon it, but no systematic excavations, as far as I am aware, have ever been undertaken, and our chief knowledge of it is derived from remains brought to light when the railway cut through part of it in 1846. The late Dr J. A. Smith, who contributed more than one paper on the subject to the *Proceedings* of the Society, compiled in one of them a detailed list of coins found at Newstead. The coins of the latest date which he mentions are those of Constantine the Great, from which we may infer that the occupation was probably continued at least to the end of the fourth century. In 410 the Roman legions were withdrawn, and from that date the Roman civilisation began to wane. We cannot obtain

much, if any, assistance in defining the date of the broch's occupation from the single coin found in it. It is, as I have already mentioned, a third brass of Vespasian. It belongs to the first century of our era, but no doubt it would remain in currency for a long period. It may be remarked, however, that it is precisely a coin such as this, of small intrinsic value, which would be the first to become valueless, as the Roman civilisation died out, or as it was carried beyond the pale. In Sweden, where the coins of the empire are found in large numbers, they are always denarii of silver or gold pieces, and coins of brass are very rarely met with. Therefore, if the broch dwellers possessed it as a medium of exchange, they must have done so at a period which was at the latest not very far distant from the Roman occupation. Turning to the Celtic remains, we do not derive from them any evidence of a later occupation. Mr Franks, in *Hora Ferales*, dealing with the late Celtic antiquities of Britain, comes to the following conclusion:—"They are probably not more ancient than the introduction of coinage into Britain, from 200 to 100 years before Christ, and not much later than the close of the first century after Christ, when the Roman dominion in the country was firmly established. This date would account for the occasional discovery of such remains in close proximity to Roman antiquities." Without claiming for the objects found at Torwoodlee so remote an antiquity, it is sufficient to conclude that they do not afford evidence of any later occupation than that indicated by the Roman remains. In this connection it is interesting to note the almost entire absence of Celtic pottery. It existed at Bow, and almost certainly at Torwoodlee. Had it been superseded by the Roman vessels, or must we suppose that the remains of it have simply disappeared? The narrow depth of the relic bed appears to imply that the occupation of the broch was not of very long duration.

It has usually been argued, from the presence of Roman remains in the caves, earth-houses, and lake-dwellings of our Pagan times, that these places were the refuges of the Romanised population during the period which followed the withdrawal of the Roman legions. If we apply this theory in the present case, the question naturally arises—Is the peculiar structure which we know as a broch a barbarian copy of some

Roman building ? As far as this question has been answered for us, the opinion of those best qualified to judge appears to be that it is not. Dr Anderson has pronounced it Celtic, and we know that one authority learned in architecture attributed its origin to the Scandinavians. The present discovery proves that at a period at which the Roman civilisation still existed in the country the broch structure was fully developed. The Torwoodlee example possesses all the characteristics of a northern broch. It appears to be as well if not better built than the average example. Among the brochs known in Scotland it is only exceeded in size by Edin's Hall, which has an external diameter of 90 feet ; while, if we take the average size of the thirty-nine brochs of which Dr Anderson gives the measurements in the table contained in his " Notes on the Structure of the Brochs," contributed to the *Proceedings* of the Society, vol. xii., 1st series, we find that its external diameter exceeds the average by 18 feet. Such a structure not being copied from a Roman building, it is natural to suppose that the fully-developed type was not arrived at at once, but that it was preceded by earlier and simpler forms. These, however, we have not as yet found. A reason for this may be suggested in the fact that it is precisely that class of remains in which we may hope to find them, the hill forts of the south of Scotland, that have been left to the present time uninvestigated. The remains at Torwoodlee, before the discovery of the broch, were simply those of a large hill fort, of which there are many on the Borders. Round many an eminence like that of Bow may still be seen the traces of ancient entrenchments. Dr Christison has begun the investigation, and his plans give promise that more information may be gained by excavating. Until this has been undertaken systematically, and the results studied, I do not think that we are in a position to assign limits to the broch period, or a date to the occupation of the broch of Torwoodlee.

MONDAY, 8th February 1892.

PROFESSOR DUNS, D.D., in the Chair.

A Ballot having been taken, the following Gentleman was duly elected a Corresponding Member of the Society :—

FREDERICK R. COLES, Tongland, Kirkcudbright.

And the following Gentlemen were duly elected Fellows :—

GEORGE WILLIAM CONSTABLE, Glencraig, Lochgelly.

W. SHILLINGLAW CROCKETT, Earlston, Berwickshire.

STOCKS HAMMOND, B.A., Selwood, Heaton Grove, Bradford.

JAMES LANG, 9 Crown Gardens, Dowanhill, Glasgow.

JAMES CLERK WILSON, 66 Gilmore Place.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By Rev. JAMES MORRISON, F.C. Manse, Urquhart, Elginshire,
Corr. Mem., S.A. Scot.

Leaf-shaped Spearhead of greyish flint, 3 inches in length by $\frac{3}{4}$ inch in greatest breadth ; Flint Saw ; a Bent Flake of triangular section, $1\frac{7}{8}$ inch in length ; a Scraper and two Trimmed Flakes from Urquhart.

(2) By Dr W. G. DICKSON, F.S.A. Scot.

The bronze casing of a quadrangular Bell of Iron, of Celtic form, $5\frac{1}{4}$ inches in height, and $3\frac{1}{2}$ inches in width at the top, the lower part wanting on one side, found in a moss at Monybuie, Balmaclellan, Kirkcudbrightshire. It seems as if the whole substance of the iron had been dissolved or oxidised out of the coating of bronze, which is almost as

thin as paper, but retains perfectly the original form of one side of the bell.

(3) By W. G. T. WATT, Skaill House, Corr. Mem., S.A. Scot.

Portion of a Bronze Mounting, $1\frac{3}{4}$ by 1 inch, with a Celtic pattern inlaid in gold, found at Stromness, Orkney.



Bronze Mounting inlaid with Gold
found at Stromness.

for the extension of the burying-ground. The terminal portion of a Celtic brooch noticed in Mr Cursiter's paper in the *Proceedings*, vol. ix. p. 347, was found near the same place.

(4) By Mrs DALRYMPLE HAY of Dunlop, through R. W. COCHRAN-PATRICK, LL.D., Vice-President.

Iron Yett of the Tower of Dunlop, parish of Dunlop, Ayrshire, 5 feet 11 inches in height by 3 feet 10 inches in breadth. It is noticed in Dr Christison's description of the iron-grated doors of Scottish castles in the *Proceedings*, vol. xvii. p. 114.

(5) By Rev. JOHN E. FRASER, Dores, Inverness-shire.

Whorl of steatitic stone, $1\frac{1}{2}$ inch in diameter, from Dores, Inverness-shire.

(6) By SPENCER GEORGE PERCEVAL.

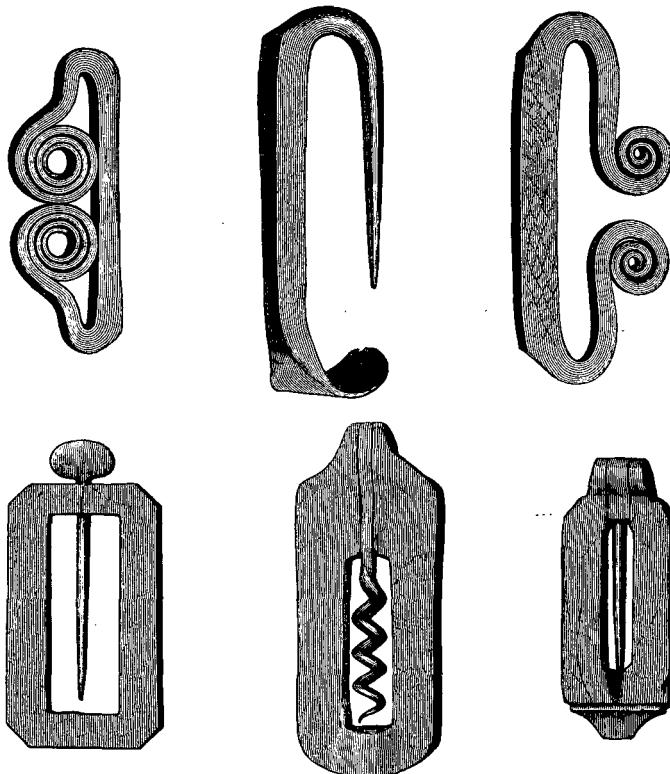
A Whorl of Claystone found near St Andrews, Fife.
The General Contents of the British Museum Described. 8vo.

(7) By ROBERT CARFRAE, F.S.A. Scot.

Saxon Fibula of Silver, having a semicircular head with seven projections, from the Londesborough Collection.

(8) By Rev. Dr GRIGOR, Pitsligo.

Fourteen Steels or Fleerishes, for striking fire with flint, a Pocket-



Steels or Fleerishes from Pitsligo.

Tinderbox, and four Strike-Lights of Flint, all from the parish of Pitsligo. The Steels or Fleerishes, as they are called, are usually made of old files,

and are often very pretty specimens of the adaptive ingenuity and taste of the country smiths. Of the fourteen examples from Pitsligo no two are alike, and from the six here figured some idea may be obtained of their shapes and varieties.

- (9) By J. G. Low, the Author, through Rev. THOMAS BURNS, F.S.A. Scot.

Memorials of the Parish Church of Montrose. By J. G. Low. 8vo. Montrose, 1891.

- (10) By ALEXANDER MAXWELL, F.S.A. Scot., the Author.

Old Dundee—Ecclesiastical, Burghal, and Social, prior to the Reformation. 4to, 1891.

- (11) By Sir DANIEL WILSON, Hon. Mem. S.A. Scot., the Author.

Memorials of Edinburgh in the Olden Time. New Edition. 2 vols. 4to, 1891.

- (12) By EDMUND GOLDSMID, F.S.A. Scot., the Editor.

The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation. Collected by Richard Hakluyt, Preacher, and Edited by Edmund Goldsmid. 16 vols. 4to. Edinburgh, 1890.

- (13) By Sir HENRY DRYDEN, Bart., Hon. Mem., S.A. Scot.

Illustrations of Incised Slabs on the Continent of Europe. By W. F. Creeny. Folio, 1891.

There were also exhibited :—

- (1) By The Right Hon. Viscount ARBUTHNOTT, through WILLIAM MACGILLIVRAY, W.S., F.S.A. Scot.

The Arbuthnott Missal—*Liber Sancti Ternani Ecclesiae de Arbuthnott.*

The Psalter of the Chapel of Our Lady adjoining the Chancel of that Church.

The Office of the Blessed Virgin which was used in the Chapel.

(2) By R. RITCHIE, Cloverhill, Biggar, through HUGH W. YOUNG,
F.S.A. Scot.

Large pair of Antlers of Red Deer, found in a marl pit at Lochurd,
Peeblesshire, seventy or eighty years ago.

The following Communications were read :—