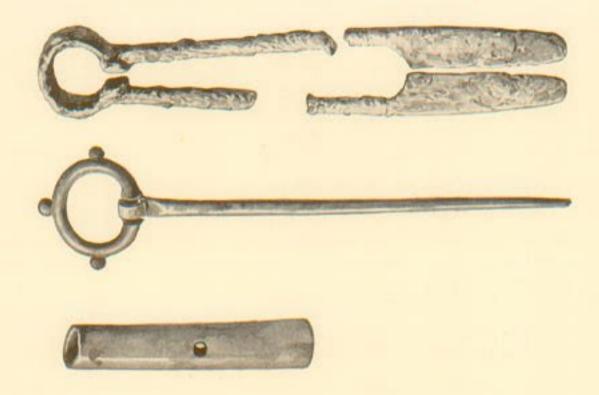
II.

ON RECENT SCANDINAVIAN GRAVE-FINDS FROM THE ISLAND OF ORONSAY, AND FROM REAY, CAITHNESS, WITH NOTES ON THE DEVELOPMENT AND CHRONOLOGY OF THE OVAL BROOCH OF THE VIKING TIME. BY JAMES CURLE, F.S.A. Scot.

Forty years have passed since Dr Joseph Anderson reviewed, in a paper published in our *Proceedings*, the relics of the Viking period of the Northmen then known to have been found in Scotland. Since then Dr Anderson has contributed more than one notice of discoveries of remains dating from the Viking time, notably the finds made at Ballinaby, Islay, in 1878, and our archæological material has sensibly increased. The past year has brought to the Museum a very valuable addition to the collection of relics of this period, in two gravefinds—the first of these from Carn nan Bharrich, Isle of Oronsay, the second from Reay, Caithness.

The circumstances attending the discovery of the Oronsay grave have been fully dealt with in the preceding paper by Mr Symington Grieve, and need not be repeated here.

The grave was obviously that of a woman. It contained a pair of iron shears, 11 inches in length (fig. 1); a bronze pin with a moveable ring head, on which there are three small projecting bosses, the whole $5\frac{1}{8}$ inches long (fig. 2); a small hollow cylindrical object of bone, $2\frac{3}{8}$ inches long (fig. 3)—a small hole perforating it at a point equidistant from the ends, may suggest a whistle, but it is not improbable that it belongs to the class of things known as dress-fasteners; and lastly, a pair of single-scaled oval brooches of bronze, or more probably brass (fig. 4)—ornaments which at once tell us that the burial belonged to the Viking time.





Figs. 1, 2, 3, 4. From a Viking Grave in Oronsay.

The brooches measure $2\frac{3}{8}$ inches in length by $2\frac{1}{8}$ inches in breadth. Each brooch is formed by a single casting. The pins, which were of iron, are now so corroded that it is impossible to see how they were fastened to the brooch, but probably they were hinged to double plates forming part of the casting. The rusted mass which surrounds them bears very clearly the impress of the cloth to which they were originally affixed, and on each pin can be traced the outline of a knotted cord, indicating that, when in use, the brooches had been connected together. The brooches themselves are quite similar in design. They have the usual domed outline; along the longest axis of the brooch runs a raised band tapering at either end, and ornamented in the centre with a form of svastica. On either side of this central band three projecting bosses of more or less circular form rise from the surface. The bosses are surrounded at their base by treble raised lines, reproducing the effect of wire or metal cord, and all three are connected together by a broader band of the same wire decoration running parallel to the central band. It is obvious that the brooch has been copied from an earlier type in which the bosses were composed of separate pieces of metal or some other substance affixed to the surface, and surrounded by cords of silver wire. The spaces between the bosses and those at each end of the brooch are filled with animal forms in relief. The margin of the brooch is surrounded by a band of well-defined rope moulding. The animal forms which fill the lower spaces in the field are those of quadrupeds, each having a head with pointed ears, a long snout, and a body contorted and writhing as in violent motion. At either end of the brooch a pair of these beasts is placed affrontée. Each animal in the design grasps with his claws either a portion of his own body or that of his neighbour. Such animal forms are very characteristic in Northern ornament of a certain period, and represent one of those ornamental motives which Scandinavian metal-workers evolved from provincial Roman art. Their source has been traced to the representations of animals, more especially of lions, to be found in the manuscripts and decorative art of the Carlovingian period.

The second grave-find came to light in September last at Reay, Caithness. The burial was discovered through the wind blowing aside the loose sand upon the links, and thus exposing a human skull, of which the back portion lay uppermost. The depth at which it was found was some four feet below the present surface level. No signs of a cist were discovered, and the bones, which were few in number, were simply those of an unburnt body which appeared to have been laid in the sand possibly in a doubled-up position.

Upon the body at the time of burial had been laid a pair of oval brooches, which were found at a depth of one foot below the skull, and appeared to have been placed together face to face (figs. 5 and 6). Near them lay the much-corroded remains of a bridle-bit of iron, a bronze pin and buckle (figs. 7 and 8), and a spindle-whorl of stone (fig. 9). With these relics we may associate an iron buckle and a small cross of the same metal (fig. 10), which shortly after the unearthing of the skeleton were picked up within a radius of two or three yards from the grave by the Rev. W. Carmichael, minister of the parish, who kindly made over his find to the National Museum. It seems probable that both of these had been thrown on the surface with the sand in digging out the grave.

The bronze pin measures $4\frac{1}{2}$ inches in length, and is furnished with a moveable ring on the head. The buckle is of a square undecorated type, and has still attached to it a small piece of the metal mounting by which it was attached to a leather belt or strap. The little cross measures $1\frac{1}{8}$ inches in length, and is of somewhat unusual construction. It is composed of a single thin strip of iron. The head is formed by doubling the strip over a ring and bringing the ends together; by a further doubling of the metal composing the sides the arms of the cross are contrived. It is an interesting object, but it is not

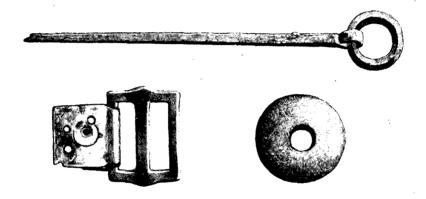




Figs. 5, 6. Two Brooches from a Viking Grave in Reay (1).

necessary to regard it as a Christian symbol: indeed, it is not impossible that it formed part of the bridle-bit.

The brooches, which are double-scaled, measure $4\frac{3}{8}$ inches in length and $3\frac{1}{8}$ inches in breadth. The pins are of iron. Projecting from the surface of each brooch are five conical bosses forming part of the upper scale, each boss being perforated with four holes. One boss is placed on the highest or central point of the brooch. The other four are to be seen on the edge of the upper scale, one at each side, one at each



Figs. 7, 8, 9. From a Viking Grave in Reay, Caithness.

end. On the sides equidistant between these bosses are four flat circular panels, each perforated in the centre with a hole, forming the settings to which were attached hemispherical projections probably formed of lead plated with silver or some other metallic substance. Through one of the holes in these settings there still projects a short metal tang affixed to the lower scale, upon which the projection was affixed (fig. 6). Round the base of these silvered bosses must have run a triple cord of silver wire, of which portions still remain on one of the brooches, running along a sunk channel in the decorative framework which attaches each of the projections to the central boss; and

no doubt the wire also served to bind together the upper and the lower scales of the brooch, passing through small holes which are pierced in the base at either side and either end. Debased animal forms fill the space between the bosses, and are also to be seen on the panels on the lower scale. The brooches show a very slight difference in the treatment of the animal ornament on the upper panels, and in one of them the bosses show no terminal bead. This brooch, which typologically is the earlier, was probably an old ornament



Fig. 10. Small Cross of Iron $(\frac{1}{1})$.

when it was deposited in the grave, as at one end the lower scale has been repaired by riveting upon its lower surface a plate of silver.

In these finds from Oronsay and Reay we have to deal with two pairs of brooches both belonging to a well-known group, but showing a distinct difference in decoration, which indicates that the burials with which they were associated were separated by some considerable period of time. We know that in the evolution of this type of ornament the brooch composed of a single plate of metal preceded the type in which, with a view to heightening the ornamental relief, the upper part was cast separately and affixed to the brooch proper, and is in consequence known as the double-scaled variety. The Reay brooches,

which exhibit this feature, are therefore the later type; the Oronsay brooches are the earlier.

I do not find in our *Proceedings* any attempt either to arrange typologically the brooches of the Viking time found in Scotland, or to deal with their chronology. The number of examples found here is as yet comparatively small. Dr Anderson, writing in 1879, gave the total number of oval brooches recorded as having been found in Scotland before that date as thirty-two. The finds made in recent years bring the numbers to not less than forty-one.

In Scandinavia, from whence they come, a very large number of such brooches have been found. Over a thousand have come to light in Sweden alone. They are very common in Norway. In Denmark and the Baltic Islands they are less numerous.

It is obvious that such an abundance of material could not fail to attract Northern archæologists, and to their studies, notably to those of Professor Oscar Montelius, who has done so much for the chronology of the antiquities of his country, we owe it that the evolution of the oval brooches has been worked out.

I propose, with the help of these Scandinavian studies, to show the gradual process by which such ornaments as those before us were gradually evolved, and to deal with the chronology of those found in Scotland.

It is not difficult to find parallels to the Oronsay brooches in Scandinavia, but in our own country we have so far only a single pair which is closely related to them. These brooches were found in a grave at Clibberswick, in the island of Unst, Shetland (fig. 11). Each brooch measures 4 inches in length by $2\frac{1}{2}$ inches in breadth, and is single-scaled. In common with the Oronsay brooches we have the raised band running along the longer axis of the brooch, and the three bosses disposed at regular intervals on either side. The bosses themselves have disappeared, but we can note the flat surfaces on which

¹ Proceedings of the Society of Antiquaries of Scotland, vol. xvii. p. 17.

they stood, and the remains of the tangs by which they were fastened. Lastly, we have a neatly executed band of rope moulding surrounding the brooch on its margin. Instead of the Carlovingian ornament, we find occupying the space between the bosses six projecting animal figures of a well-known Scandinavian type, of which we have examples on similar brooches in Norway, and which is often to be found on some of the larger round fibulæ from the island of Gotland; a seventh figure more debased than the others occupying the apex of the brooch.

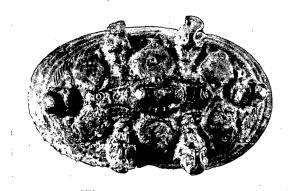


Fig. 11. Brooch from a Viking Grave in Unst, Shetland (2).

With these brooches was found a trefoil-shaped brooch of bronze. The front is covered with Carlovingian animal ornament, the back is tinned. This brooch is in much better preservation than the larger ornaments, and is possibly somewhat later in date.

We shall see from an examination of the Scandinavian finds that these brooches all belong to a distinct group. In Schleswig-Holstein. in Denmark, in Norway, and in Sweden we find parallel

¹ Mestorf, Vorgeschichtliche Alterthümer aus Schleswig-Holstein, fig. 749.

² Muller, Ordning af Denmarks Oldsager, fig. 596.

³ Rygh, Norske Oldsager, fig. 644.

⁴ Montelius, Antiquités Suedoises, fig. 552.

examples, all reproducing more or less distinctly the flat central band, the six bosses, the Carlovingian ornament, and the rope moulding.

Let us trace the origin of this type in Scandinavia. The prototype of our series is to be found in an oval brooch (fig. 12) comparatively small in size, formed from a single piece of metal without any decoration. In some examples, a rib very slightly raised divides the surface into two equal portions. The pin is hinged by being flattened out at one end and the portion so flattened doubled over a single small plate





Fig. 12. Brooches from Uppland and the Island of Öland, Sweden (†).

attached to the inside of the brooch, and kept in its place by means of a small piece of wire which passes through the head and the socket, thus forming a hinge. Such brooches are not uncommon in the island of Öland, and are also found on the mainland in Southern Sweden and Norway. They date from the earlier part of the seventh century. Dating from about the same period, we find both in Öland and Bornholm a number of fibulæ which take the shape of a bird or animal treated in a more or less conventional fashion. Among these is a type reproducing the form of a lizard-like animal, which no doubt at some earlier stage was copied from some quite natural representation, the product of Roman, or at least Southern, art. The late Dr

Knut Stjerna, in a recent study of these ornaments, illustrates as an early example of this form a lizard-like quadruped from the bottom of the Gundestrup cauldron; a vessel which illustrates the treatment in Gaulish hands of motives still clearly retaining the stamp of their classical origin. This animal form, which is not uncommon in Bornholm, seems to have been taken towards the latter part of

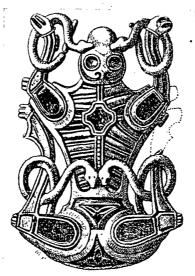


Fig. 13. Brooch from Lousgård, Bornholm (1).

the seventh century to ornament the oval brooches, and some traces of its outline still linger in our finds from Oronsay.

In fig. 13 we have an example of this creature in a bronze fibula from Lousgård, Bornholm.² It is obviously not an early type, as the design is becoming very conventional, and figures of snakes have twined themselves round the limbs. But the shape of the animal is still quite

¹ Stjerna, "Bornholms befolkning under järnåldern," Antikvarisk Tidskrift för Sverige, vol. xviii. p. 148, fig. 39.

² Vedel, Bornholms oldtidsminder og oldsager, p. 414, fig. 404.

distinct and its long legs with strongly marked quarters, its large round eyes, its somewhat conventional backbone, and the outline of its ribs are specially to be noted.

In our next example, a brooch from the Swedish province of Småland (fig. 14), we have the same animal, combined, at a rather later stage of its history, with the simple small oval fibula. Certainly



Fig. 14. Brooch from Småland, Sweden (1).

the beast has lost something of its individuality, and tends to become a purely decorative pattern; but we can still trace the legs, the quarters, the round eyes, the flat plate marking the line of the backbone, and the ribs which unite with it.

It would be easy to give examples of the various stages through which this animal form passed until its identity was finally lost in the ornamental details which were superadded to it; but these we may pass over and proceed to examine another Swedish find, from a

¹ Stjerna, op. cit., p. 196, fig. 135.

grave excavated in 1876 on the island of Björkö, on Lake Malar, which brings us to a period not very far distant from that in which our Oronsay brooches were fashioned.

In this grave on Björkö, an unburnt body, doubtless of a woman, had been laid in an oak coffin. Little or no trace of the bones remained,

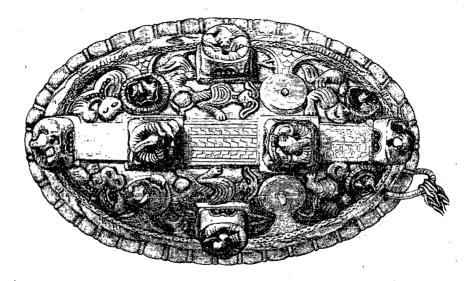


Fig. 15. Brooch from the Island of Björkö, Sweden (1/1).

but lying in a position indicating that they had been laid on the breast were two oval brooches, connected together with a thick chain of silver wire. Beside these lay a smaller highly decorated brooch, a pair of shears, a silver needle-case, the remains of a knife, and at one end of the grave a drinking-glass with a tapering stem.

The oval brooches, one of which is illustrated in fig. 15, are single-scaled, ornamented with a long horizontal raised band inlaid with

¹ Stolpe, "Meddelanden från Björkö," Månadsblad, vol. ix. p. 32.

silver and niello, on which we see four square projections to which are affixed animal figures of circular form. A similar projection appears on the middle of each side. In addition to these there are on each side of the midrib three round projections, to which were fixed hemispherical bosses of lead plated with silver and surrounded at the base by a ring of plaited silver wire.

In these brooches from Björkö we still find three features which are derived from the earlier animal form. In the broad, flat ridge running along the back we have the traces of its backbone. In the two larger bosses on either side of this ridge we have the traces of its quarters. Lastly, in the two smaller bosses which are placed almost on the margin we have its eyes, still retaining the relative position of these features in the animal form.

The relation between the Björkö find and those from Oronsay and Clibberswick is obvious. In our Scottish examples the traces of the original animal form are a stage nearer extinction. The outline of the back is still to be seen, but the bosses on either side are now disposed symmetrically, and the distinction in the spacing of eyes and forequarters has disappeared. Typologically our examples are a little later than those found in the Björkö grave, but the points of resemblance are so many that we can class them all as of common Scandinavian origin, and as being separated by no great period of time. The investigation of the Björkö cemeteries enables us approximately to date the group.

To Birka, the little town which stood upon this island in the Malar Lake, St Anschar brought Christianity in the year A.D. 820, and the single-scaled brooches have been found in some of the earliest graves of the Christian period.¹ One pair similar to those described was found with a Byzantine coin of Theophilus (A.D. 829-842),² but, as

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¹ Montelius, "Öfversigt öfver den nordiska forntidens perioder," Svenska fornminnesföreningens Tidskrift, vol. viii. p. 157.

² Arne, "Sveriges förbindelser med Östen under vikingatiden," Fornvännen, 1911, p. 4.

Professor Montelius points out, such brooches were frequently wellworn ornaments when they were buried with the women who wore them, and the type is generally attributed to the first half of the ninth century.

We have so far in Scotland no other brooches which belong to the series I have dealt with. The most of the examples we possess owe their peculiar decoration to a parallel development which I shall now endeavour to trace.

At the same period in which we find the simple undecorated oval fibula which formed the prototype of our series, we find another

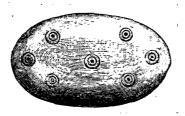


Fig. 16. Brooch from Öland, Sweden (†).

brooch precisely similar in its general outline, but with a design consisting of a series of dots surrounded by incised concentric rings. An example from Öland is shown in fig. 16. These circles are usually disposed, one in the centre and three at either end, in such a way that if a line be drawn connecting them together the surface of the brooch would be divided into two diamond-shaped figures. As the brooch grows larger, the incised ornaments gradually become projections increasing in number from seven to ten, and lines are introduced connecting them together, while the intervening spaces are filled in with animal forms. A good example of this stage is to be seen in another brooch from Öland (fig. 17), in which the projections have taken the shape of quatrefoils, and the animal ornament, which

is still subservient to the general design, is confined to panels slightly lower than the general surface.¹

In the next stage the bosses are ten in number, and of simple hemispherical shape. As in the last figure, the groundwork of the design consists in lacing the bosses together so as to form a geometrical figure, through which debased animal forms, recognisable from the limbs and hands which grasp one another, wind in inextricable confusion. Fig. 18, which belongs to this class, was found in the



Fig. 17. Brooch from Öland (1).

Swedish province of Uppland, and is assigned by Professor Montelius to the latter part of the eighth century. From this point we can follow the evolution of the brooch by means of examples found in Scotland, and it is interesting to put beside this specimen from Sweden one belonging to a pair found in 1895 at Ardvouray, in the island of Barra, the Hebrides, now in the British Museum (fig. 19). A comparison of these specimens would prove, if proof were necessary, the Scandinavian origin of such ornaments, so closely do the designs resemble one another. The Ardvouray brooches were found in

¹ Stjerna, op. cit., fig. 141.

September 1862 by Commander Edge, R.N., while engaged in surveying the Hebrides.¹ The grave in which they lay appears to have contained a human skeleton, together with a sword, remains of a shield, portions of buckles, a whetstone, and a comb of boxwood.

During the past year a third example of the type of brooch found at Ardvouray has been brought to the National Museum, having

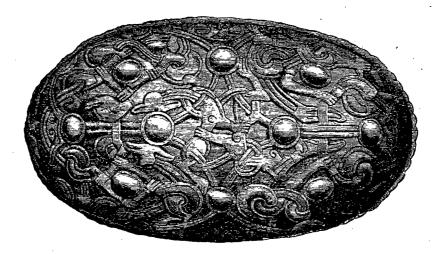


Fig. 18. Brooch from Uppland, Sweden (1).

been discovered in the island of Sanday, Orkney. It is unfortunately in very poor condition.

In our next stage, which I shall term the Pierowall type, from the place of find (fig. 20), the brooch is still cast in a single piece, with the exception of the projecting bosses, which were evidently of some other material. Where these have entirely disappeared, as in a specimen in our collection, the short projecting pins to which they were affixed clearly indicate their position. In this type the number

¹ Proceedings of the Society of Antiquaries of London, 2nd series, vol. ii. p. 229.



Fig. 19. Brooch from the Island of Barra (†).

of bosses varies from seven to nine, and they are usually connected together by raised bands with somewhat debased animal ornament in the sunk panels on the upper part and sides of the brooch.

The example of this type in the possession of the National Museum was found about 1851 in a series of graves excavated in the links of Pierowall, Westray, Orkney, a find of peculiar interest, because associated with it was a Celtic penannular brooch, also preserved in the same collection. Altogether, three pairs of brooches seem to have



Fig. 20. Brooch from Pierowall, Orkney (2).

been found in the course of this excavation, all of which, according to Dr Anderson, appear to have been of single-scaled construction.

The other recorded finds of brooches belonging to this class are:—
(1) A single example found in 1861 in the island of Unst, Shetland, now in the National Museum. It closely resembles the Pierowall example, though the relief is less sharp. A single boss on either side is cast as part of the brooch, and shows a rudely executed human head. (2) A pair of brooches found in a grave at Newton, Islay.² These are a

¹ Anderson, "Notes on the Relics of the Viking Period of the Northmen in Scotland," Proceedings of the Society of Antiquaries of Scotland, vol. x. p. 552.

² Proceedings of the Society of Antiquaries of Scotland, vol. xiv. p. 71.

little coarser in execution than the Pierowall brooch. Professor Montelius dates the brooches of this class as belonging to about A.D. 800 and the beginning of the ninth century, the same period to which I would refer the Oronsay brooches.

A pair of brooches of the same class have been found in a grave at Tuna, in the parish of Alsike, Sweden, with nine Arab coins dating from the period A.D. 706-785.²

With these examples we leave behind us the single-scaled brooches. The later brooches are double-scaled, except perhaps the latest stage of all, not so far represented in Scotland, in which we find the type reverting to a very poorly executed single-scaled brooch, with debased ornament.

Our next stage in the development of the brooch might be styled the Ballinaby type, from the finely preserved pair of brooches found in 1878 in a grave at Ballinaby, Islay, and described by Dr Anderson,³ one of the few Scottish finds from the Viking period in which the entire grave goods have been carefully preserved and described.

The Ballinaby brooches, one of which is illustrated in figure 21, are the only examples of their class in Scotland. They differ very little in design from the preceding class, except that the whole of the ornamentation, which in the earlier brooch appears in relief, is here cast separately and stands out from the lower scale, which forms a gilded background. The two scales were kept together by threads of twisted silver, and the nine bosses of plated lead or some other material were affixed to the upper scale. The pins are of bronze, and are provided with a form of spring.

Brooches showing little or no variation from the pair found at

¹ Montelius, "Öfversigt öfver den nordiska forntidens perioder," Svenska förnminnesföreningens Tidskrift, Band viii. p. 157.

² Almgren, "Vikingatidsgrafvar i Sagån vid Sala," Fornvännen, 1907, p. 18, note.

³ Proceedings of the Society of Antiquaries of Scotland, vol. xiv. p. 51.

Ballinaby have been discovered at Björkö, where they are assigned to the middle of the ninth century. The following dated finds of this type are quoted by Professor Montelius:—1

A brooch from Salum, Torsåkers parish, Ångermanland, Sweden, was found buried with two silver coins of Louis the Pious (814-840).

In a grave at Söndre Bö in Sigdal, Norway, two brooches of the same type were found with seven silver coins, of which one was English,

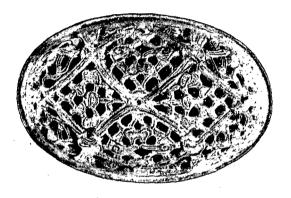


Fig. 21. Brooch from Ballinaby, Islay (2).

having been struck for Coenwulf of Mercia (796-819) and six were Frankish (one struck for Charlemagne and five for Louis the Pious).

In a grave at Björkö two such brooches were found, with a Byzantine coin of the Emperor Theophilus (829-842).

The next stage of development is represented by such brooches as the pair from Caithness (figs. 5 and 6 above), which we may term, from the place of find, the Reay type. Like the brooches from Ballinaby, they are double-scaled, but the upper scale does not so completely envelop the lower scale, of which there is visible not only the more or less flattened edging, but also a band of debased animal

¹ Montelius, op. cit., p. 158.

decoration surrounding the brooch. On the upper scale, and forming part of its casting, are at least five hollow conical bosses, each perforated by four holes. Some examples of these brooches show slight ornamental projections on the rim. To this type belongs the greater number of the Viking brooches found in Scotland.

In addition to the Reay brooches, we may note, as belonging to the same group, a pair found in 1788, also at Ballinaby, Islay,¹ now in the National Museum; a pair of brooches found in 1872 in Tiree,² of which one specimen was presented to the National Museum; a pair found in 1840, at Longhills near Wick, Caithness,³ also in the National Museum—this pair is slightly dissimilar in pattern; a pair found in the neighbourhood of the Broch of Lamaness, island of Sanday, Orkney, one of which is illustrated in our *Proceedings*, the place of find not being given.⁴ Professor Montelius assigns this type to the end of the ninth and the first half of the tenth century. He states that at Björkö such brooches were found by Dr Stolpe, with coins dating from the beginning of the tenth century, while a pair found in a grave at Gårdby in Ôland was associated with an Arab coin minted for the Emperor Theophilus A.D. 908–9, which had been worn as an ornament.

A worn pair of such brooches, which were thus probably old possessions when they were buried, were found near Smolensk, in Russia, with silver ornaments and Oriental coins, of which the latest was struck in the year 953.⁵

Many brooches of this type come to light in Iceland, where they cannot have been buried before the last quarter of the ninth century. On the other hand, Professor Montelius notes that the type in ques-

¹ Anderson, Notes on the Relics of the Viking Period, p. 554.

² Ibid., p. 560.

³ Ibid., p. 551.

⁴ Charleson, "Notice of some Ancient Burials in Orkney," Proceedings of the Society of Antiquaries of Scotland, vol. xxxviii. p. 559.

⁵ Montelius, op. cit., p. 160.

tion, as well as the one which follows it, is very rare in Denmark and in certain southern parts of the Scandinavian peninsula—an indication, without doubt, that in these districts Christianity came earlier, and with its coming the custom of laying ornaments and similar possessions in graves passed away.

The final stage in the evolution of these brooches, as far as our finds go in Scotland, is to be seen in a pair found in 1786 at Castle-

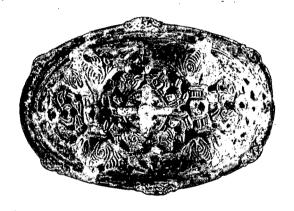


Fig. 22. Brooch from Castletown, Caithness $(\frac{2}{3})$.

town, in Caithness (fig. 22). They lay in a grave which had been dug in a green mound which had accumulated above the remains of a broch. One of the pair is now in the Royal Northern Museum at Copenhagen, the other is in our national collection.

In this brooch, which may be styled the Castletown type, we note slight ornamental excrescences on the rim, three on either side; but the most striking change is to be seen in the treatment of the five projecting bosses forming part of the upper scale. The central of these has become larger and shows four lateral projections, while the remaining four have assumed an animal form. The type is

undoubtedly developed from the one we have just dealt with. In Sweden it is dated as belonging to the last half of the tenth century. Professor Montelius cites a find from Haugen in Jarlsberg and Larvik amt, Norway. The brooches had been placed back to back, and in the inside lay, among other things, two whole and one half Arabic coins, very worn, but sufficiently legible to make it possible to determine that the latest in date was struck in the year A.D. 910.

In Scandinavia the series ends in the first half of the eleventh century, in a brooch formed from a single casting, which is obviously a debased copy of the preceding type, but such ornaments have not so far been met with in Scotland, and we are unable to illustrate from finds in this country the gradual process by which the oval brooch grew coarser and heavier, until it fell out of use.

The Society of Antiquaries is indebted to the Royal Academy of History and Antiquities, Stockholm, for permission to use the blocks figs. 12, 13, 14, 15, 16, 17, and 18.