

"ANIMAL-HEAD" BROOCHES FROM GOTLAND ($\frac{1}{2}$).
(ORIGINALS IN THE ASHMOLEAN MUSEUM).

TWO TYPES OF BROOCHES FROM THE ISLAND OF
GOTLAND, SWEDEN.¹

By E. THURLOW LEEDS, B.A. F.S.A.

The brooches which are the subject of this paper constitute a part of the important collection of Anglo-Saxon, Scandinavian and Teutonic objects which was formed by the late Sir John Evans, and presented at the end of 1908 to the Ashmolean Museum by his son, Mr. A. J. Evans.

Among many other series which have thus been made available to the general public, the collection of brooches and the like from the island of Gotland occupies a prominent position. The series illustrating the development of the two brooch-types is probably second to none outside the rich collection of Stockholm museum. The two types in question are known as the animal-head (*djurhuvud formad* or *näbbformig*) and the box (*dosformig*) brooches. With the exception of the earlier forms they are almost entirely restricted to the island of Gotland itself; examples of the later forms which have been discovered elsewhere in Scandinavia and in Russia are most certainly exportations.

In spite of the exceedingly confined area in which these brooches occur, they have a peculiar interest, as they afford a striking example of the value of the typological method in archaeology as a means of supplementing scanty data of a more reliable character. The very "insularity" of these types adds weight to the use of this method in the present instance, as no external influences are perceptible in the ultimate evolution of the form; it is only in the decorative motives that such influence shows itself, and the employment of similar motives on contemporaneous forms in Scandinavia itself bears further witness to the correctness of the classification adopted.

These Gotland brooches have been subjected to a critical investigation, firstly by Hildebrand in two important

¹ Read before the Institute, 6th April, 1910.

contributions to Scandinavian archaeology, namely in his *Bidrag till spännets historia*,¹ and in his *Jernåldern på Gotland*²; and secondly, as regards the earlier forms, by the late Dr. Knut Stjerna in *Bornholms befolkning under jernåldern*.³ As all these papers are in the Swedish language, they are perhaps not accessible to many English readers interested in this period, and for that reason a short sketch of the development of these brooch-types, as illustrating the history of the island of Gotland in the Viking

period may not be out of place. The above-mentioned works have been largely drawn upon in this paper.

Other works consulted are Sophus Müller's *Norden*; Salin's *Altornamentik*, and *geschichte Schwedens* of *Sveriges Historia*

In the first half terms "Salin style" and "Karolingian," motives, will be employed without account of mental thus de-

a discussion of their relation to the history of these brooches will be attempted in the latter half.

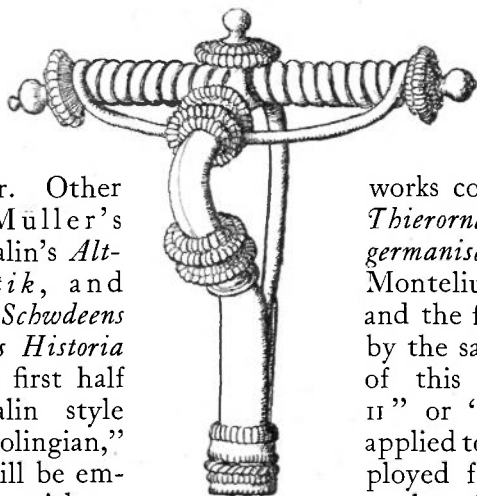


FIG. 1.

SILVER BROOCH WITH REFLEX FOOT ($\frac{1}{4}$).
NORTH GERMANY (ORIGINAL IN THE
ASHMOLEAN MUSEUM).

works consulted are *Thierornamentik im germanische* Thier-Montelius' *Kultur*—and the first volume by the same writer. of this paper the "II" or "style III," applied to decorative ployed for the sake explanation. Some

the orna- systems noted and sion of

THE ANIMAL-HEAD TYPE OF BROOCH.

The earliest brooch that need be taken into consideration in tracing the development of this type is the brooch with reflex foot, better known perhaps under its German title "*Fibel mit umgeschlagenem Fuss*" (fig. 1). This type makes its first appearance in northern Europe

¹ *Antiquarisk Tidskrift f. Sverige*, iv.

² *Månadssblad*, 1878-9.

³ *Antiq. Tidsk. f. Sverige*, xvii, pt. i.

at the end of the second or beginning of the third century, occurring for example in the famous Thorsbjerg moor-find to which an approximate date could be assigned by the Roman coin-types found there, and from a typological comparison of other objects associated with them. The difference in the in this brooch-type Tène forms, or the its origin, fall outside paper. The feature should be directed is the bilateral spring-is continued from to the other by means round under the has earned for it same peculiarity the brooches.

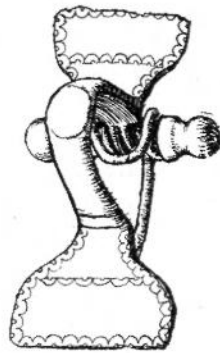


FIG. 2.

SYMMETRICAL BROOCH
OF BRONZE ($\frac{1}{4}$).

GOTLAND (ORIGINAL IN
THE ASHMOLEAN MUSEUM)

During the increasing tendency towards fashioning with symmetrical ends. This tendency expressed itself in various ways, one of which (fig. 2) is derived from a common Romano-another, of somewhat called the "cater-animal it indeed bears This type occurs in the Merovingian no means uncommon amplexes are known Sweden and Finland, belonging to the sixth certain provenance collection is here

A combination of elements of the resulted in a third, nately an example is molean series. an undoubted brooch, but addition of the

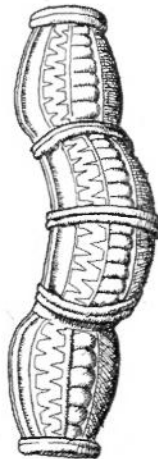


FIG. 3.

SILVER "CATERPILLAR" BROOCH,
PARCEL-GILT AND INLAID WITH
NIELLO ($\frac{1}{4}$). GOTLAND (ORIGINAL
IN THE ASHMOLEAN MUSEUM).

structure of the foot and that of late La difficult question of the scope of this to which attention the manner in which coil in the later types one side of the axis of a wide arc bent bow. This feature and others with the name of "crossbow"

succeeding period an becomes noticeable certain brooches German type; while later date, has been pillar" type, to which some resemblance. Frankish graves of period, but it is by in the North. Ex- from Norway, most of these latter century. One of un- from the Evans figured (fig. 3).

this latter form with "cross-bow" type of which unfortu- lacking in the Ash-

In this we see "equal armed" modified by the spring-axis with

terminal knobs together with the prominent feature presented by the arc of the spring-coil, as in an example from Uppland, Sweden (fig. 4).

For the next step it is necessary to return once more to the "cross-bow" type, and we find that in a class of brooches, which is well represented in the Baltic Provinces that the arc of the spring-coil passing below the bow is alienated from its original function and becomes a purposeless and purely ornamental band, having no connexion with the spring, of which previously it formed a constituent element. The ends of this band, often terminating in animal-heads, are now joined to the spring-axis by loops or perforated lugs and the arc of the band is [caught up under]neath the bow by means of a projecting tongue.¹

The effect of this change in the head brooches illustrated by an example from the island of Bornholm.² Although the later types are wanting in that island, it is probable, judging from the earlier examples found there, that for a time it received a firm footing in that it received impetus towards development in



FIG. 4.
BRONZE BROOCH FROM
UPPLAND, SWEDEN (†).

this change in the head brooches illustrated by an example from the island of Bornholm. Although the later types are wanting in that island, it is probable, judging from the earlier examples found there, that for a time it received a firm footing in that it received impetus towards development in its ultimate design. Gotland.

At the next stage (plate 1, no. 1) the most important changes take place. The arc is no longer hooked up underneath the bow, but is cast in one piece with the body of the brooch itself; at the same time the spring-coil and axis undergo the same transformation, entirely losing their functional nature, and become integral parts of the brooch itself. A reminiscence of the spring-coil is left in a series of transverse notches along the back edge of the brooch.

Now comes the somewhat surprising part of this transformation, though none the less necessary. After one spring-coil together with its arc had been absorbed

¹ See Aspelin, *Antiquites du Nord Finno-Ougrien*, fig. 1979.

² See Müller, *Ordning af Danmarks Oldsager*, ii, figs. 522 and 523.

in the body of the brooch, another of a similar pattern, though smaller, was substituted for it, working on an axis which was held in position by one or two perforated lugs on the under side of the brooch. Thus gradually a brooch like that shewn on plate 1, no. 2, is reached, and here we see that the various elements have lost the lines of demarcation which remained in the foregoing stages, as relics of their previous separate existence. The spaces between the arc and the body of the brooch have become round holes while the knobs at each side remain as mere excrescences. One feature, only faintly shown in the figures, to which there will be occasion to make further reference, consists of a slight groove running from the holes mentioned above to the outer edge along a line which demarcates the body of the brooch in its initial stages. Along with these changes the brooch increases in height, developing a sharp ridge along its centre, and the front or lower end, i.e. where the pin-catch is placed, is blunted and triangular in shape.

Here we can prophesy clearly the future history of the type, when we take into consideration the predilection for zoomorphic design in all its forms which, from the fifth century onwards, plays such a prominent part in the northern schemes of ornamentation.

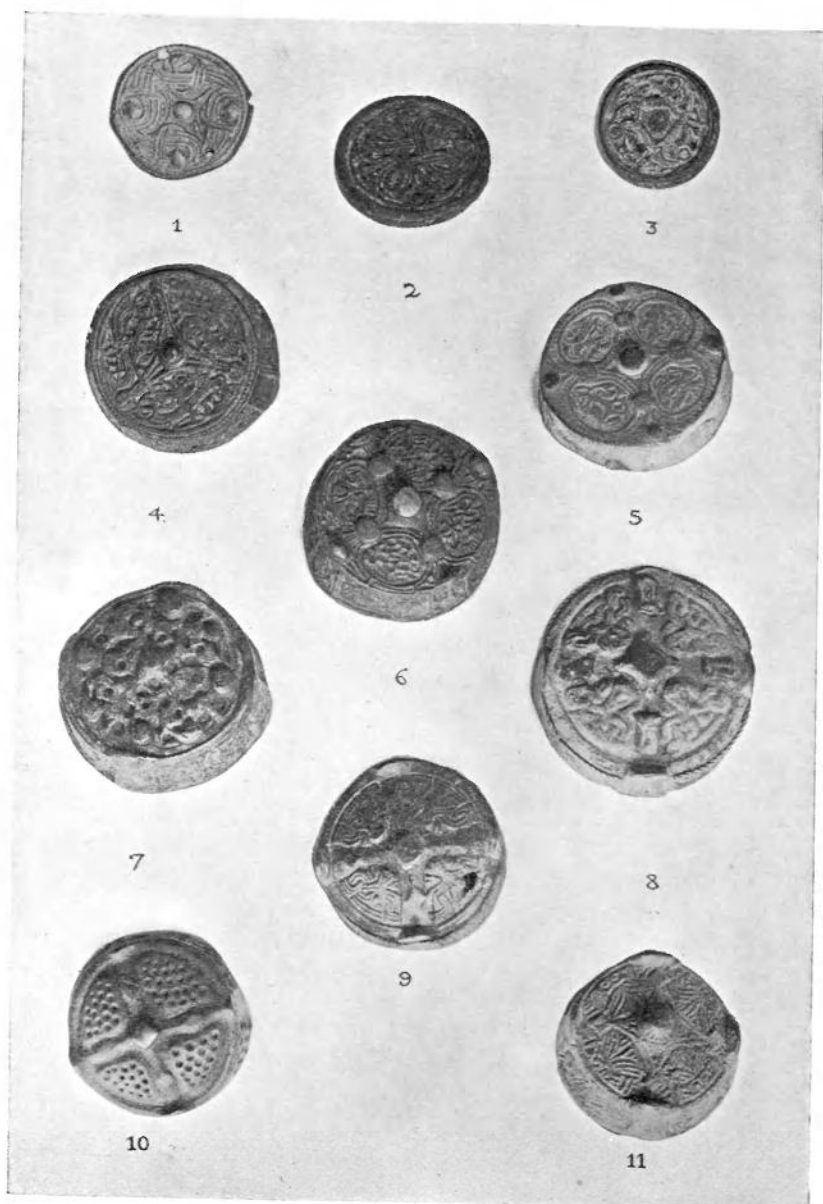
The holes are next filled up and merely indicated by slight depressions (plate 1, no. 3); the brooch still increases in height; the sides become perpendicular and are each defined by a ridge from the upper surface of the brooch; the knobs at the back are correspondingly heightened, giving the appearance of erect ears, when looked at from the side. By this time too, a slight flange, which is visible on the under edge of some of the earlier types has been developed into a flat plate with a triangular opening in the centre. It is either rivetted on or cast in one piece with the rest of the brooch over a sand core, and to it are attached the lugs for the pin-axis and the catch.

The increase of height is accompanied by another new trait, namely the division of the surface of the brooch into panels by means of raised and ornamented bands; firstly a small oblong panel at the back between the "ears," from the top of which panel a ridge runs along the centre

of the brooch to what may be termed the "snout," dividing the surface in half; each of these halves is further in most cases subdivided into two by a second ridge running along the top of the sides. In one instance in the Ashmolean series the central ridge is continued down to the back edge of the brooch, and an additional band runs from side to side across the highest part, so that the usual five panels are exactly doubled (plate 1, no. 7). Both the "ears" and the end of the "snout" are in many cases also ornamented, and partial plating with white metal was used to heighten the effect of the ornament.

In the earliest panelled examples (plate 1, no. 4) the intervening surfaces are left plain except in the case of the back panel. A survival of the former depression and groove (plate 1, no. 5) is seen in a raised band with a fantastic termination representing an animal-head. But at this point the *horror vacui* noticeable in late Scandinavian art asserts itself, e.g. plate 1, no. 6, and every available large surface is covered with what in many instances seems an unintelligible medley of debased zoomorphic ornament.

That the two types shown in plate 1, nos. 5 and 6 are contemporaneous is proved by their association in several recorded finds, and the examples in the Ashmolean series seem to contribute to the same result, but in quite a different manner. Apart from the fact that they are both labelled Nasudden and bear the same date, the ornament on their back plates is of interest. It is executed in a punched design consisting chiefly of two lines running along the outer edge and the edge of the inner hole respectively. They are broken however at the corners corresponding to the "ears" above by two T-shaped motives. The occurrence of this design on these two brooches would in itself not be very strange, if it were not for the fact that in both cases it is set at an angle to the corners but unsymmetrically, and the same want of symmetry in the placing of the design is observable in both brooches. Not only are they contemporary but also they apparently emanated from the same workshop. Mr. Reginald A. Smith of the British Museum has suggested to me that the T-motive may represent the hammer of Thor and have been used as a maker's mark.



"BOX" BROOCHES FROM GOTLAND ($\frac{1}{2}$). (ORIGINALS IN THE ASHMOLEAN MUSEUM.)

The position which these two types ought to occupy in the series is discussed at a later point of this paper at page 248.

A mainland influence seems to be reflected in the execution of the decorative motive in openwork on an outer shell behind which is placed a plain metal back to set off the design (plate I, no. 8). What represents possibly a cheaper method of producing the same effect is shown in plate I, no. 9 where the ornament is only cast in high relief, but bears some resemblance to the pierced pattern.

The same *horror vacui* also appears in a variety which, though of simple character, cannot by reason of its domed form, prominent ears and straight sides be placed earlier in the series than the point we have now reached. Its special feature is the covering of the whole surface, where not occupied by plain bands, with deep pittings (plate I, no. 10). It has sometimes no dividing bands, sometimes only a central one, in which case a curved band often passes across it, extending backwards to the "ears," a curious survival of the arc of the spring-coil in a form in other respects much developed (plate I, no. 11). Even in a fivefold division every panel is filled with pittings.

In the latest types the sides become quite straight and the "ears" still more prominent; and here again evidence is forthcoming of the comparatively late introduction of the pitted type, as the same form is found ornamented with pittings and also with the latest form of zoomorphic ornament (plate I, nos. 12 and 13).

THE "BOX" TYPE OF BROOCH.

Turning now to the "box-shaped" brooches we find that it is not possible to trace back the history of the type to such an early period as in the case of the animal-head form. Indeed its ancestry is not easy to explain. It is however permissible to suspect that in its simplest form it represents merely a change of fashion, for nothing simpler than a flat circular brooch can be imagined, and it is but a short step further to suppose that perfectly plain examples were not an absolute necessity. The tendency of the period to cover any flat surface with

ornament seems to militate against any such form. Even the disk brooches so well known from Anglo-Saxon graves of a century or more previous to the date at which the new type appears in Scandinavia are almost always decorated in some manner however slight.

The earliest known forms of the Gotland brooch consist of a simple disk usually with the rim turned very slightly downwards. In some examples it amounts to little more than a mere thickening of the edge, as is the case in one brooch in the Ashmolean series. Here it seems to have been intended to give additional strength to the brooch at the points at which the pin catch and loop for the spring-axis were placed (plate II, nos. 1 and 2).

The surface ornament is executed in zoomorphic designs consisting of three or four geometrically arranged heads, sometimes closely intertwined, in a svastika or triskele pattern. These animal motives are assigned by Salin to the end of his second and the beginning of his third style, roughly coinciding with the early part of the eighth century.

The design on another small brooch (plate II, no. 3) belongs to this same transitional stage and is interesting, since it permits us to assign an approximate date to the first development of the rim along the lines which led ultimately to the evolution of the box brooch proper. This brooch though only 34 mm. in diameter has already a plain rim 5 mm. high, set at a slightly oblique angle to the main surface of the brooch.

Once an impulse had been given to the development of a rim, it soon appealed to the prevailing artistic feeling, inasmuch as it provided an additional surface on which the craftsman could display the intricate animal designs. This brings us to a type such as plate II, no. 4, the rim of which is still oblique but has increased in depth and is divided into four large oblong panels alternating with four small ones, separated off by intervening ridges. The four larger panels are filled with an animal figure twisted and coiled in a fantastic manner, while the four smaller panels are left plain. These latter developed in another direction at a later stage.

The upper surface is of interest as it is divided into three compartments by a triskele pattern, the legs of

which radiate from a prominent central knob and terminate in a low round boss. The idea of this threefold division seems, as is evident from Stjerna's paper,¹ to have originated in a second variety of the early brooches of this class (fig. 5), in which the ornament consists merely of a number of dotted circles arranged in a definite relation to the centre of the disk. On one brooch of this class from Gotland there are seven of these dotted circles, one in the centre, the remaining six forming an outer ring. In addition three curved punched lines separate off three alternate circles of the outer ring from the other four. The surface is thereby divided into four parts, three portions each containing a dotted circle, and a triple armed compartment within which the remaining four circles lie. So in the present case we have the large while zoomorphic substituted for the the three outer. The legs of the times omitted.²

A narrow in- the under side of stage of develop- runner of the later with a central usually notched in axis to admit of of the heel with provided instead the earlier types in one piece with the rest of the brooch, but in the later forms is usually though not invariably rivetted on, as in the case of the animal-head brooches.

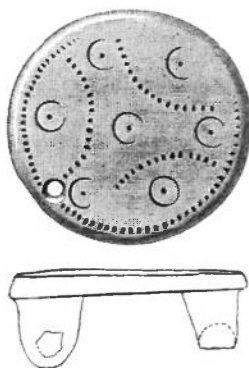


FIG. 5.
BRONZE CIRCULAR
BROOCH ($\frac{1}{2}$). GOTLAND.

turned flange on the rim at this ment is the fore- wide bottom-plate circular hole, front of the pin- the free movement which the pin is of a spring. In this plate is cast

It was but a short step from a threefold to a fourfold division of the surface. The outer knobs of the central decorative motive have been drawn inwards from the outside of the brooch and have now (plate II, no. 5) been placed at the narrowest point of the band dividing the sunken oval compartments, while their place has been supplied with four new knobs set immediately above

¹ *Ant. Tidsk. f. Sverige*, xvii, pt. i, fig. 122, and pp. 188, 189. ² *Fornvannen*, 1907, 233, fig. 41 (13,084).

the four small panels of the rim. These panels have become taller in proportion to the growth of height of the rim of the brooch. In the next two examples (plate II, nos. 6 and 7) the amalgamation of the outer knob and the panel becomes clear. In the first it is still slightly rounded when viewed from above; in the second it has quite a sharp edge and has become an integral part of a side post or buttress projecting above the rim. The first example is also noticeable for the signs which it shows of the decadence, which set in about this time, in the execution of the ornamental design. The side panels still retain in their decoration some resemblance to an animal, but it needs a somewhat flexible imagination to detect one on the upper surface.

This will be a convenient point to examine the relation of the earlier forms of the "box" brooches to the corresponding early animal-head types. The correlation of the two types in their earlier stages is a much less difficult task than is the case with the later forms, as these latter are but seldom associated in the various recorded finds. Graves containing examples of the earlier forms have been discovered in Gotland, in the islands of Bornholm and Oland, and also in Sweden itself. A typical example is a grave from the parish of Vallstena, Gotland,¹ which contained an early box brooch (cf. plate II, nos. 1 or 2) and two small animal-head brooches (plate I, fig. 1), along with other objects. An advance appears in a find from Sandegård, where the same type of animal-head appears along with more developed box types.

At Sandegård² a box brooch with three divisions and knobs was associated with an animal-head brooch with depressions, and a somewhat earlier form of the same. And at Stenbro³ a box brooch with four divisions occurred along with an animal-head type with Karolingian ornament in the depressions. This is what might be expected, as the two classes of ornament occur often on the same brooch. These are a few examples taken from many to show that the finds bear out amply the accepted chronological arrangement of these brooches.

Mention has been made of the tendency of the outer

¹ *Månadsblad*, 1878, 739.

² *Manadsblad*, 1879, 52.

³ Montelius, *Antiq. Suedoises*, figs. 534 and 541.

knobs to move inwards, and mention may here be made of an advanced variety of the "box" type with fourfold division which has no less than thirteen knobs, namely, a large central one, four small ones on the narrow intervals between the panels; four large outer knobs; and besides these the panels themselves are each occupied by a knob with three claws, suggested perhaps by the incoming decorative style.

Resuming the examination of the "box" brooches the next new type to be dealt with is that in which the upper surface is decorated with an openwork design (plate II, no. 7), such as was employed in one of animal-head types. As on them, so here too this openwork decoration is backed by a plain surface; in this case the design is on a separate disk fastened on by the central knob. The type cannot be placed earlier, since the buttress is always fully developed, and also because the decorative motives employed belong to the new class which will be examined at greater length subsequently. It may be remarked in advance that they appear in conjunction with the old zoomorphic designs of an advanced stage of Salin's style III, i.e. the early part of the ninth century, which also appear here on the side panels in a decadent form. The figures on the side-posts seem to be transitional to the next type.

I have not met with any attempt to explain the reason of the employment of this openwork pattern; it does not seem to be a natural nor indeed could it have been an easy method when applied to metal. The most natural explanation is of course that it was an imitation of wood-carving. Several examples of metal saddle-bows of driving saddles, e.g. from Vold, Jarlsberg, Norway,¹ and Ostergotland, Sweden² (fig. 6).

The decoration of these is more advanced than that of the openwork brooch, but that such openwork wood carving was by no means unknown at this period is more than clear from the wonderful carvings in this technique found a few years ago in the Oseberg ship. These have not yet been published, but by the courtesy of Professor Gustafson I was privileged to see them in course of cleaning

¹ Gustafson, *Norges Oldtid*, fig. 243.

² Montelius, *Kulturgeschichte Schwedens*, fig. 447.

and preservation during a recent visit to Christiania. They show undoubtedly how important a part the technique of

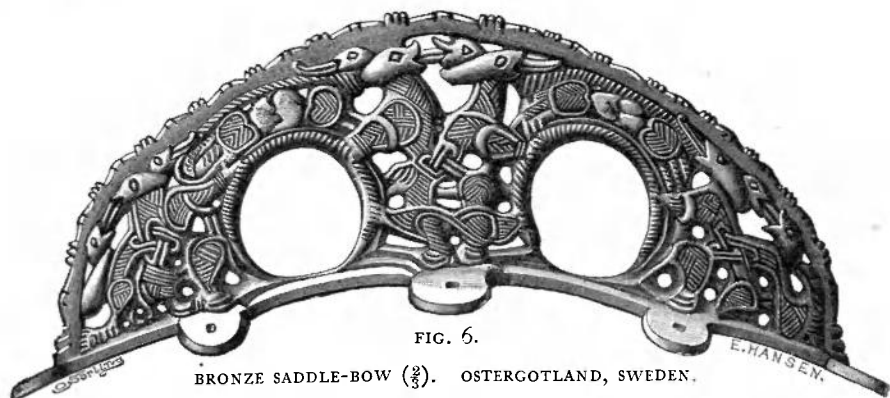


FIG. 6.

BRONZE SADDLE-BOW ($\frac{2}{3}$). ÖSTERGÖTLAND, SWEDEN.

wood carving must have played at that time in moulding the growth of the decorative arts in a country in which the wood carver's art has always stood high among the habitants. And is needed, there saddle from Norway, by Dr. Salin interesting Museum at indeed animals the back-carving ance as above

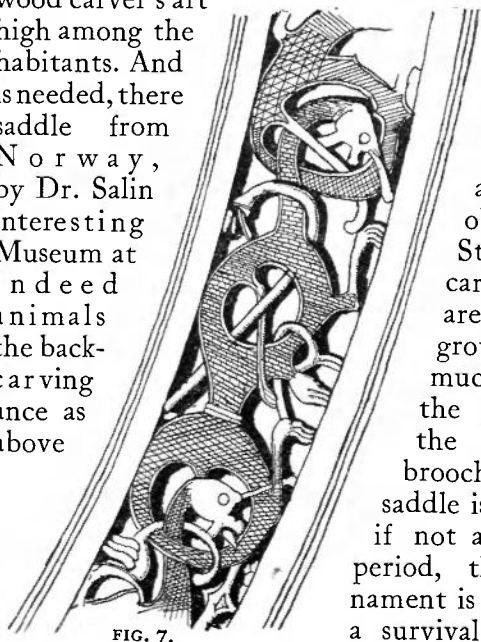


FIG. 7.

DETAIL OF CARVING FROM THE PROW OF A VIKING SHIP, ÖSEBERG, NORWAY (REDUCED).

if further evidence is a remarkable Flom, Gudbrandsdal, pointed out to me as one of the most objects in the Nordiska Stockholm. It is not carved *à jour* but the are in high relief above ground, lending to the much the same appearance the pierced metal shell the plain back of the brooches. The date of the saddle is doubtful; but even if not as old as the Viking period, the zoomorphic ornament is nevertheless certainly a survival of the typical patterns of the ninth and tenth centuries. Even the method of shading employed on the

animals' bodies carved on the stem of the Oseberg ship (fig. 7) are sometimes reproduced in metal.

In the next brooch (plate II, no. 8) considerable changes make their appearance. Firstly the four outlying knobs have been drawn still nearer to the centre and have been incorporated in a pyramidal knob, rivetted on separately, in which they form the corner projections. Their original position is occupied once more by substitutes which often assume the form of animals having sometimes the appearance of an ox when seen from above. What were formerly sunken panels have now been raised above the surface, and in the finer examples, which are often heavily gilded, the ornament is formed of thin plates with embossed and other designs affixed to the brooch. In the plainer examples they are cast with the rest. A feature of the brooches of this period is a silver wire, as in plate II, no. 8, running in a groove round the upper edge of the side and threaded through behind the side-posts. In the more elaborate types these side-posts are rivetted on and the prominent parts of the surface as well as the upper rim are plated with silver with inlaid designs in niello.

The decorative motives are of quite a late type, consisting of much degenerated animal ornament, the elements of which are well nigh unintelligible. The particular design which is typical at this stage on the upper surface is also associated with side panels filled with pittings (plate II, no. 9). Thus we reach a common type in which the ornamentation consists solely of pittings covering the area previously occupied by the zoomorphic patterns (plate II, no. 10).

Finally we come to a smaller and quite degenerate form with high sloping sides, exhibiting much inferior workmanship (plate II, no. 11). In these both the top and the panels are filled with a number of parallel strokes apparently arranged on some definite plan, proving that they represent a slavish copy of a pattern which by this time had lost all meaning. The knobs are again cast in one piece with the rest of the brooch; at the same time the outer ones have receded nearly to their original position.

A chronological arrangement of the later brooches of the series is beset with considerable difficulties, nor indeed

is it possible to arrive at any very precise conclusions. The finds do not afford such harmonious evidence as the earlier ones, and the occurrence of box and animal types in association is so rare, that here we have to rely largely on the typological method.

An associated find of value for this purpose is one from Vesterhedje,¹ where the box brooch with thirteen knobs (p. 245) was accompanied by three of the animal-head type similar to those from Nasudden, namely two like that shewn in plate 1, no. 5, and one like that in plate 1, no. 6.

The box brooch is ornamented on the sides with late Salin style III, according to which it may be dated to the early part of the ninth century, but there is possibly some reason to suppose that the limit which Salin sets to his style III requires some extension.

In a grave opened recently in Stånga churchyard,² in the course of scientific excavations, an animal-head brooch with pitted ornament and a curved band running across the top was associated with four silver coins, namely one of Ethelred (987-1016), struck at Colchester; two imitations of English types, probably Danish; and a German coin struck at Corvey early in the eleventh century. This important find would appear not to admit of the brooch type being ascribed to an earlier date than the end of the tenth century, but it is of course possible that it was an old one when deposited in the grave. As the curved band may be regarded as a relic of the earlier arc of the spring-coil, in view of this find an extended duration of some of the earlier types is perhaps required.

In this connexion it is somewhat tempting to draw some wide inferences from an earlier find from the same locality³ when in an area of three metres diameter, several skeletons, twelve animal-head brooches were recovered, of which no less than eleven were similar to the Nasudden types, while the twelfth was of the pitted variety. Along with them were also found a square-headed brooch ornamented like plate 11, no. 8, a late example as proved by the high buttress, the style of decoration and the employment of a silver thread; a Byzantine coin of

¹ *Månadsblad*, 1879, 56; Montelius
Ant. Sued.: figs. 536, 537 and 539.

² *Fornvannen*, 1908, 241, grave A (Inv.
13,436).

³ *Månadsblad*, 1903-5, 104 (Inv. 11,948).



BRONZE OVAL OR "TORTOISE" BROOCH ($\frac{1}{1}$). GOTLAND.
(ORIGINAL IN THE ASHMOLEAN MUSEUM).

Nikeforos Fokas (963-969), and two coins of Ethelred. But the danger of using a find resulting from haphazard excavations such as this was, is only too clearly shown by the presence of a coin of William I or II, an impossible date for any of the types.

A more reliable instance comes from the parish of Rute¹, where a "box" brooch ornamented with a degenerate perforated design, of a later class than the Ashmolean example as shown by the high buttresses, the silver wire and prominent knobs, was associated with two of the animal-head type which has been placed last in the series.

The other late types are on more than one occasion recorded as having been found together, such as those with pitted ornament or the most decadent forms.

Stjerna in the paper mentioned above has drawn up a chronological table of the types found in Bornholm. It is necessarily of a more or less tentative character, based on the typological method. If we take the box type, according to his scheme he places the plain variety with circles at the end of the seventh century and beginning of the eighth, and that with the semicircular lines added in the latter half of the eighth century, assigning those ornamented with animal heads to c. 700 in agreement with Salin. This same class, but divided into three fields, thus comes in towards the beginning of the ninth century and with three or four fields of a more advanced stage, c. 850. This leaves a century and a half—or perhaps a little more, in view of the rather doubtful combination of types from Stanga—during which the subsequent decadent types must have been evolved. The tenth century agrees well for the bulk of the later class, if compared with the oval or tortoise brooches which correspond to the Gotland brooches on the Scandinavian peninsula, where outside the earliest varieties the Gotland types are of the rarest occurrence. One example found in Kalmarlän, the nearest point of the mainland, may be cited; it is similar to plate I, no. 7.

On the other hand the oval brooches are very rare in Gotland. A fine example of a variety assigned to the end of the eighth century is included in the Evans collection (plate III).

¹ *Månadsblad*, 1897, 39 (Inv. 10,290).

The same comparative scarcity of the later types of Gotland brooches is also noticeable in the Baltic provinces of Russia. This is all the more to be wondered at as the penannular brooches so common there, as a glance at Aspelins' *Antiquités du Nord Finno-Ougrien* will show, are by no means rare in Gotland. The Evans collection includes no less than sixteen examples.

One example of the latest type of animal brooch, figured in Bähr's *Gräber der Liven*, comes from this quarter.

Here it should be noted that, it may be, tempting as it is probably very dangerous to regard these animal brooches as in- tended to represent a animal. any special the assumption that Bähr, on the bear at that period must have been held in some awe and respect, saw in this brooch a representa- tion of that animal, and the wearing of a brooch fashioned in its image would acquire a sign of

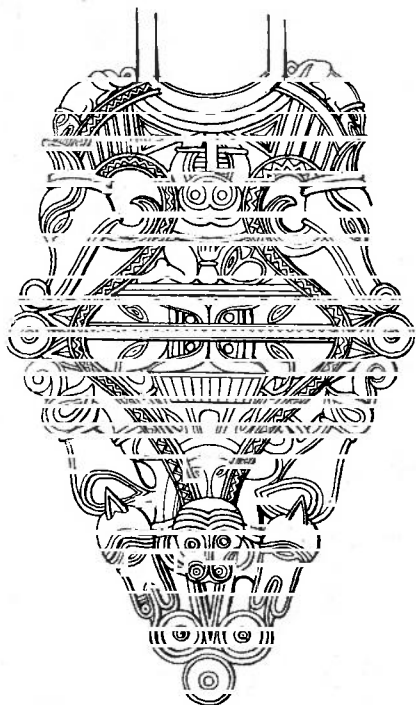


FIG. 8. DETAIL OF PORTION OF SILVER BROOCH ($\frac{1}{2}$). SJAELLAND, DENMARK.

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The figure of the bear as depicted by Scandinavian artists of the early middle ages is certainly negatively conclusive so far as Scandinavia is concerned.¹ It is safer to regard the form as an expression of the artistic tendencies of the time in terms of the prevailing zoomorphic ornament, which was only ousted in the early middle ages by the influx of linear and floral designs derived mainly from the Karolingian renaissance of classical motives.

¹ See, for example, Montelius, *Antiquités Suedoises*, figs. 518 and 521.

In some ways the most reliable test for the relative dating of the various forms of these two brooch-types is to be obtained from a comparative examination of the ornamental motives employed in their decoration. As far back as the latter part of the fifth century, the northern races began to exhibit that love of zoomorphic design which is so characteristic of their art during the entire later period of their pagandom. An investigation of the development of these zoomorphic motives has been



FIG. 9.

BRONZE BELT-PLATE ($\frac{1}{4}$). UPPLAND, SWEDEN.

FIG. 10.

"BOX" BROOCH OF BRONZE ($\frac{1}{4}$). GOTLAND.

carried out by Salin in his masterly work, *Die altgermanische Thierornamentik*. He has shown that it is possible to date within comparatively narrow limits of time any object decorated with such designs, but the scope of his work only includes part of the brooches which are the subject of this paper. His system distinguishes three periods or styles; the first includes part of the fifth century and the sixth; the second covers roughly the seventh century, while the third reaches from c. 700 into the ninth century. Ex-

amples of these styles respectively are here given in figs. 8, 9 and 10. The latter limit of time is imposed upon his style III by the finds from Björkö, an island in the Mälär

Lake, as only two or three objects ornamented in this style are known from some 2,000 graves, while the settlement can on other grounds be assigned to the ninth and tenth centuries. History records a visit by one of Sweden's early missionaries Ansgar in the early ninth century, and in 1070 almost all traces of the city had disappeared.

The earlier brooches can according to this system be assigned to the end of the seventh century as the round prototypes of the box brooches bear zoomorphic designs which belong to a transitional stage between Salin's styles II and III. In some examples the pointed chin, a characteristic of style II is still preserved (e.g. plate II, no. 1. It may be objected that dating by this method is of a somewhat arbitrary nature, but in the absence of written records, it seems to be the only method left. At any rate, if we have a series of objects falling between two well-assured dates, we are justified in working on a hypothesis of steady and continuous evolution of types, provided that care is taken to avoid too strict an application of such comparative method.

If therefore we may assign such brooches as those in plate II, nos. 1-4 to c. 700, we must place the more developed examples showing the process of evolution of the box brooch proper in the eighth century. They are ornamented in Salin's style III, which, as he shows, is developed along perfectly normal lines from his style II. By the adoption of Salin's system, the period of time within which the earlier forms can fall, can be narrowed down to far closer limits than was feasible under the older scheme for the division of the decorative styles as put forward by Müller in his *Thierornamentik im Norden*, as his Gotland style comprises not only Salin's style III, but also a large part of his style II. Müller's name for this style was due to the fact that the soil of Gotland has yielded up many of the finest examples as well as the greatest number of objects thus ornamented. Not only can we obtain an approximate date for the earlier forms owing to the employment of style III in their decoration, but we are also provided with a clue to the date of the introduction of an entirely novel class of design. This new style makes its appearance during the period when style III was still in use. It differs so widely from all the Scandinavian

ornamental motives with which we are acquainted hitherto that some explanation other than that of an indigenous origin has to be sought for. The introduction of this latter style did not in any way contribute to the improvement of the ornamental designs then in vogue. Indeed it would appear to have been largely responsible for the decadence which marks the Viking period, as subsequent to its appearance may

be noticed a gradual departure from the graceful and harmonious curves which characterise the older zoomorphic designs and the substitution of a crude and tiresome meaningless system of often engaging ornament only be explained by its attribution to the influence of the new motive.

this motive, not quite



An example of its earliest stages, in its earliest stages,



FIG. II. "BOX" BROOCH OF BRONZE, WITH DETAILS OF RIM ($\frac{1}{2}$), GOTLAND.

can be seen on a "box" brooch from Gotland (fig. II). On it side by side with an advanced form of style III there may be observed on the buttresses and on the four panels of the upper surface distorted and uncouth animal forms of which the most marked feature is the manner in which they grasp with their paws not only the ears, necks, and

limbs of their neighbours, but even of themselves. The same combination appears on the huge square-headed brooches which are among the finest examples of the workmanship of the period. In these the knob on the bow takes the form of a typical box brooch (cf. Salin, *op. cit.* fig. 619).

It must be clearly understood however that except within rather narrow limits it is impossible to trace a continuous development through a series of closely interdependent types. We are confronted with a period of decadence in which a preference for the grotesque and a misinterpretation of all the foregoing stages are the prevailing features.

As Müller has well observed¹, a marked feature of the period is the prevalence of the products of individuals, and these stand in sharp contrast to the adherence to ornamental marks the of Scandinavians we can say is amply exhibited pronounced signs advancing decadence can be assigned to a later date. This motive was not the North. That much seems certain.

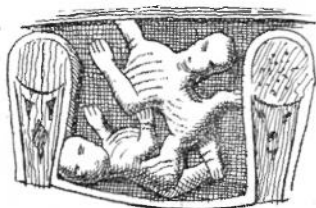


FIG. 12. DETAIL OF AN OVAL
BRONZE BROOCH ($\frac{1}{4}$).
CHRISTIANIA MUSEUM, NO. 2320.

No prototypes can be adduced from the preceding period of Scandinavian art. We come in contact with a broad massive animal of quite a different character to the graceful forms then in use. Some early examples are figured by Müller² (fig. 12) and the only possible explanation is that it is a loan from the Karolingian art of those times, borrowed at the same time as the acanthus design which appears on some objects of Scandinavian fabric. The naturalistic animal-forms appealed however more strongly to the Northern artist and became the basis of a new zoomorphic ornament.

We can perhaps in this instance do what is not possible

¹ Müller, *Die Tierornamentik im Norden*, 151.

² Müller, *op. cit.* 147.

with the animal forms of the older ornament, namely guess at its nature. In short we have here the lion (though expressed in terms of Northern art) which is met with in illuminated manuscripts. The example in metal work quoted by Müller on a helmet which is regarded by Lindenschmidt¹ as Frankish belongs probably to an earlier period. Compared with the mainland of Scandinavia this new form of zoomorphic decoration played only a somewhat subordinate rôle in Gotland. It seems here too, to have brought about a decadence, but the islanders clung with some tenacity to the older class of design.

In the rest of Scandinavia and Denmark it is all-pervading, for nearly the whole series of oval or "tortoise" brooches exhibit its influence.

This difference can perhaps only be accounted for by the altered conditions of the Viking period which brought the Vikings of Denmark and the Scandinavian peninsula into contact with the West, while the rich finds of silver etc. in Gotland and in part of Sweden witness to the eastwardly activity of the Varjagr.

As is proved by the large brooch, mentioned above, the new motive did not displace the old one, but flourished side by side with it, and indeed never entirely succeeded in ousting it, although it must have been largely responsible for the degraded taste, which even in Gotland stamps the products of the greater part of the ninth and tenth centuries. Even on the latest examples of these brooches, e.g. on the side panels of the animal-head type, as on the borders of some of the oval brooches, a disjointed, well nigh unintelligible design is employed, which is nothing else than a reminiscence of the animal which by the eighth century had been interwoven and twisted in a manner so complex and yet graceful that we cannot help but admire the mastery of design and technique displayed by the artificers of that period.

It is indeed difficult to understand Gotland's position in reference to the mainland of Sweden as illustrated by the history of these brooches. From its geographical position it shared with the islands of Bornholm and Öland a particularly favourable situation as a centre of trade.

¹ Lindenschmidt, *Altertümer u. b. Vorzeit*, iii, 10, pl. 5.

Even in the earlier centuries of our era it reaped the benefit of this advantage as shown by the large finds of Roman coins. Two of the principal trade routes from the South emerged on the Baltic coasts at the mouths of the Vistula and the Oder, and these islands lay directly in the path of vessels passing to Sweden. We do not know the reason for the non-occurrence of the later types of these brooches outside of Gotland itself. The fact remains that from about A.D. 850 onwards this island occupied a peculiar position of independence, which recalls vividly its "insular pride" in the early days of the Hansa power. Though socially connected, it was politically independent from the Scandinavian peninsula, while an examination of the dialect spoken in the island at the present day shows considerable affinities to their German neighbours.

In the middle of the ninth century began a period of close relations between Scandinavia and Russia. Large bands of Northmen, whether driven out by stress of overpopulation or led by their love of the sea, fared forth to seek their living in those harrying and plundering expeditions which made the name of the Vikings so feared in the Western world. For Norway, Denmark and probably the west coast of Sweden the usual direction followed was to the west, where they left their traces in the British Isles, in France, and even penetrating to the Mediterranean. But for the rest of Sweden the natural outlet for the Varjagr, as they were called on this side, was eastwards. The sagas have handed down the stories of many expeditions to Russia.

These expeditions were not however always of a war-like character. The Varjagr were quite alive to the possibilities of trade and some of the sagas relate what to us may seem delightfully naïve accounts of occasions when the two occupations were combined. In the Egil saga we are told how the famous Egil Skallagrimsson and his brother set forth in the summer of 925: "they sailed to Kurland and made peace with the inhabitants for half a month and held a market during that time; but when the time had elapsed, they began to harry the land."

It was through these expeditions that the enormous

number of Cufic coins made their way to Sweden, and by far the greater proportion have been found in Gotland. There was probably no direct trade between the East and Scandinavia, Russia forming an intermediary, and the relations of the two latter were further cemented by the establishment of bands of Swedes in certain localities in Russia. The ruling houses of Novgorod and Kiev were Swedes; the former according to the Russian chronicler Nestor was settled by Varjagr, who were called Russer, under the leadership of Rurik, and in the tenth century they were closely bound by marriage to the ruling house of Sweden. From these the Russian rulers down to 1598 were descended. Apart from this an expedition of Varjagr to the Caspian is recorded.

The majority of Cufic coins found in Scandinavia were struck between the years 880 and 955, the larger half belonging to the Samanid princes chiefly minted at Samarkand. Others came from southward of the Caspian and were struck by the Abassid Khalifs, as at Baghdad. These coins were found in Gotland along with other silver in the form of ingots and bracelets, all testifying to this eastern intercourse.

Though undoubtedly obtained for the most part on foraging expeditions, this treasure may partly be accounted for by the trade chiefly in furs and in horses, for which latter Scandinavia was then famous.

After the middle of the tenth century this eastward stream of commerce abated, for so far as the Cufic coins afford any evidence they become scarce after that time; the latest example found in Scandinavia is dated 1010. A partial explanation is perhaps to be found in the growing power of the Swedish princes in Russia and their consequent independence of the support of their own people. That they were becoming assimilated to their environment is shown by the Slavonic character of their names, e.g. Vladimir and Jaroslav. It is at this point that a stream of westward relations appears to have set in in Gotland. From now onwards the coins are no longer Cufic, but Anglo-Saxon, German, Frankish, etc; and a large portion of the tribute paid by Ethelred found its way to Gotland.

Gotland seems therefore to have occupied a similar position during the latter centuries of the first millennium

to that which it held in the early Hanseatic days, namely a treasury house for the wealth which poured into the Baltic, a position thrust upon it as an intermediary in the trade between the mainland and Russia.

I desire in conclusion to express my thanks to the following Northern antiquaries for kindly permitting me to make use of illustrations from their works: to Professor Montelius for the use of fig. 6; to Dr. B. Salin of figs. 4, 5, 8, 9, 10 and 11; and at the same time to the Kungl. Vitterhets Akademie, Stockholm, for the courteous loan of several blocks; to Dr. Sophus Müller for use of fig. 12 and to Professor Gustafson of fig. 7.