

## SCOTTISH SWAN'S-NECK SUNFLOWER PINS<sup>1</sup>

by J. M. COLES, PH.D., F.S.A.SCOT.

THE discovery in recent years of a number of distinctive bronze decorative pins in Scotland has thrown new light on the relations between this country and the Continent in the late first millennium B.C. These pins are composed of two elements of differing origin, and their combination here and on the Continent provides relatively exact dating for the final phase of the Late Bronze Age.<sup>2</sup>

The essential features of these pins are the swan's-neck stems and the sunflower heads. British swan's-neck pins (without sunflower heads) have been fully discussed by Dunning<sup>3</sup> who considers that the iron pin from All Cannings Cross is typologically the earliest example. This has a long beaded head and is fairly common in Germany where it is dated to Hallstatt C in the south.<sup>4</sup> The All Cannings Cross type, of Iron Age A,<sup>5</sup> led in Britain to bronze renderings of devolved simplified forms with a plain head but retaining the characteristic S-curve of the neck as at Woodeaton, and even simpler forms may be somewhat later, e.g. Jordanhill and Portslade. These have reduced the exaggerated bends of the original type to a simple wide curve, and it is this type of curve that is reproduced on the Scottish pins with sunflower heads. Other varieties of the swan's-neck occur both in Britain and on the Continent, but these have no direct connection with Scotland and the Late Bronze Age.<sup>6</sup>

On the Continent, the swan's-neck pin reached Northern Europe probably in the late sixth century, in the first Iron Age culture of north-west Germany, the Wessenstedt of East Hanover,<sup>7</sup> appearing in Schleswig-Holstein as early evidence of Hallstatt C pressure, and dated in local terms to the second phase of Montelius VI or the Initial Iron Age.<sup>8</sup> At this point, various divergent types began to appear, and in fifth-century Jastorf A the swan's-neck pin lost its horizontal head<sup>9</sup>; the development is also seen in Britain and the types lose their similarities to the Scottish pins. The emergence of the swan's-neck pin in a form recalling the Scottish pins can thus be dated reliably to the late sixth, or, more probably, to the fifth century B.C.

Sunflower heads have recently been discussed by Hodges,<sup>10</sup> but Raftery's map<sup>11</sup> is

<sup>1</sup> Chalmers-Jervise Prize Essay, 1959.

<sup>2</sup> My thanks are extended to Mr Dennis Britton of Oxford, Mr Robert Stevenson of Edinburgh, and Mr John Brailsford of London for valuable assistance, and to the Trustees of the British Museum for permission to publish the Rasharkin pin.

<sup>3</sup> Dunning, G., 'The Swan's-Neck and Ring-Headed Pins' . . ., *Arch. J.*, xci (1935), 269.

<sup>4</sup> Ebert, *Reallexicon der Vorgeschichte*, xi (Berlin, 1928), 371.

<sup>5</sup> Hawkes, C. F. C., 'The ABC of the British Iron Age . . .', *Antiquity*, xxxiii (1959), 170.

<sup>6</sup> Dunning, op. cit., 270.

<sup>7</sup> Schwantes, G., *Die ältesten Urnenfriedhöfe bei Ulzen und Lunenburg* (1911); Jacob-Friesen, K., *Einführung in Niedersachsens Urgeschichte* (1934), Taf. 39, Abb. 4.

<sup>8</sup> Hoffmann, H., 'Die ausgehende Bronzezeit in Holstein. Festschrift . . .', (Kiel, 1936), 93.

<sup>9</sup> Jacob-Friesen, op. cit., Taf. 40, Abb. 3; see also Auhv. Taf. 69, 1280, 1288, 1294; *Præ. Zeitschrift*, 1 (1909), 140, Abb. 1-2; Schwantes, op. cit.; N. Aberg, *Vorgeschichtliche Kulturkreise in Europa* (Copenhagen, 1936), Taf. xviii.

<sup>10</sup> Hodges, H., 'Studies in the Late Bronze Age in Ireland', *Ulster J. A.*, xix (1956), 29.

<sup>11</sup> Raftery, J., 'Knocknalappa Crannog', *N. Munster Ant. J.*, iii (1) (1942), 72.

more accurate for Ireland. In addition, the Scottish pins should be omitted from Hodges' list as these are not of the straight- or right-angled-stemmed Irish types. Hodges divides the Irish sunflower pins into two classes, Class I with small hemispherical central boss and cast or incised concentric circle decoration, Class II with large conical boss and varying decor. This may take the form of concentric circles, but more commonly is a radial ornament, while some pins are entirely plain. The well-known parallels to Class I pins are Scandinavian and are dated mainly to Montelius V.<sup>1</sup> The origin of the concentric-decorated sunflower pin lies, it has been suggested, in the attachment of the Scandinavian double button with concentric ornament (Montelius IV) to a bronze stem so that the head either turns forward or lies horizontally.<sup>2</sup> A sunflower pin from Heltborg is dated to Montelius IV by Broholm, but a date early in V seems equally as feasible.<sup>3</sup> In north Germany, the sunflower pin is also dated to Period V.<sup>4</sup>

The radial ornament of some Class II pins appears to have a forerunner in the 'East German looped-pin type', dated to the Tumulus Bronze or Montelius II at Namslau.<sup>5</sup> These pins have a loop on their curved shafts, set well below the head, and occur in other areas of Central Europe. In Bohemia, pins of a somewhat different type, with more or less right-angled bend and with loop immediately below the head, show similar although more evolved decoration.<sup>6</sup> These pins, as at Busovice, are dated to the period of overlap between Reinecke C2 and D, or in Scandinavian terms to early Montelius III. A pin from Tschetzchnow near Frankfurt on the Oder shows even closer similarities to the Irish Class I sunflower pins, in its right-angled stem, no loop, and rosette and peripheral zigzag pattern.<sup>7</sup> This find is dated by most authorities to Montelius III, but the radial decoration occurs on other pins with different stems throughout the Early Bronze Age in Central Europe.<sup>8</sup> This form of decoration is not known in Scandinavian contexts, and the lack of intermediate finds between Central Europe and Ireland suggests that we must look elsewhere for the origin of Class II decoration.

As described, the swan's-neck appeared on the North European Plain in Wessenstedt times, around 500 B.C. The Scandinavian sunflower pins were at that time in the last stage of existence, dated sometime around the transition from Ultimate Bronze Age to Initial Iron Age.<sup>9</sup> The combination of the two ideas, resulting in a sunflower pin with swan's-neck stem, appears in east and north-central Germany in the fifth century, and has been studied by Petersen.<sup>10</sup> Some of these pins are entirely of bronze, but certain varieties have bronze heads attached to iron stems. The disc

<sup>1</sup> Montelius, O., *Swedish Antiquities* (Stockholm, 1922), figs. 1326-32; Broholm, H., *Danske Oldsager*, iv (Copenhagen, 1953), fig. 163; *Danmarks Bronzealder*, iii (Copenhagen, 1946), No. 1084.

<sup>2</sup> Broholm, H., *Danske Oldsager*, iv (1953), 75.

<sup>3</sup> Broholm, H., *Danmarks Bronzealder*, iii (1946), 49, No. 454.

<sup>4</sup> Sprockhoff, E., *Jungbronzezeitliche Horifunde . . .* (1956), Abb. 61, 15, Taf. 19.

<sup>5</sup> Seger, H., 'Zur Chronologie der ostdeutschen Osennadeln', *Præ. Zeitschrift*, i (1909), 55-64.

<sup>6</sup> Bohm, J., 'Spätbronzezeitliche Scheibenkopfnadeln aus Böhmen', *Germania*, xx (1936), 9.

<sup>7</sup> Krumbain, C., 'Geometrie im vorgeschichtlichen Kunsthandwerk', *Mannus*, xxix (1937), 413, Abb. 1; A. Götze, *Die Vor- und Frühgeschichtlichen Denkmäler . . .* (Berlin, 1920), 69.

<sup>8</sup> Billig, G., *Die Ausjetitz Kultur in Sachsen* (Leipzig, 1958), Abb. 62; Auhv. i (iv), Taf. 4, 9, 10; *Præ. Zeit.*, xxx-xxxI (1939-40), 412; *Germania*, xix (1935), 206.

<sup>9</sup> Broholm, H., *Danske Oldsager*, iv (1953), fig. 245.

<sup>10</sup> Petersen, E., *Die Frühgermanische Kultur in Ostdeutschland und Polen* (1929).

heads of these swan's-neck sunflower pins are generally slightly concave, and an ornamental disc-plate of another metal, usually gold, may be attached.<sup>1</sup> The head itself is of thin bronze, and the decoration consists mostly of embossed concentric circles (on the ornamental disc-plates) or cast or incised decoration on the disc heads themselves. A few examples have a small star pattern in the centre,<sup>2</sup> and others are plain or with only a few circles near the centre. One from Eickstädtwalde has groups of concentric circles, suggestive of decoration on the Loch Broom pin from Scotland. While one or two examples of these pins are dated by Petersen to Early La Tène,<sup>3</sup> the main body lies in the Initial Iron Age of the North, the period of contact between the swan's-neck stems and the sunflower pins. In the succeeding phase in this area, the devolved swan's-neck pin rarely has a sunflower head attached<sup>4</sup>; the life of the true swan's-neck sunflower pin is thus restricted to the late sixth or fifth century B.C.

A pin from the Iron Age settlement at Fengate, Peterborough, combines an iron stem and bronze head, but this is the only British pin of such combination and type. The associated pottery is of Iron Age A, similar to that from the Hallstatt C-dated site at Staple Howe, Yorkshire.<sup>5</sup> Metal-combination pins are known from Brandenburg; one from Krielow has a slightly concave head,<sup>6</sup> and another from Zilmsdorf has a flat iron head to which a bronze plate, with concentric and short radial lines, has been attached.<sup>7</sup> Other rather exaggerated variations also occur at this time.<sup>8</sup> The Zilmsdorf pin may well have provided a model for Irish bronze works seeking a further decorative pattern for their concentric-lined sunflower pins; while the overall design is different, the idea of short radial lines, seen on Petersen's Eiserne Scheibenkopfnadeln group in its later stages, is duplicated on Irish Class II pins in somewhat more elaborate forms.<sup>9</sup> This possible prototype for Class II is chronologically more suitable than are the Scandinavian Period III pins, and is typologically as close.

In discussing the Fengate pin, Hawkes stated that the only comparable British pin was that from Tarves, Aberdeenshire (fig. 1, 1) and suggested that this was probably only a local rendering in bronze and could therefore not be dated as precisely as the Fengate example.<sup>10</sup> Since 1943, however, a number of these pins has come to light in one way or another. In 1948 C. M. Piggott described a grave group or hoard found in the seventeenth or early eighteenth century at Orrock, Fife, containing one of our group of swan's-neck sunflower pins (fig. 1, 6).<sup>11</sup> And in 1949 a note in the *Proceedings of the Society of Antiquaries of Scotland* described another pin, from Loch Broom, Ross and Cromarty, this being the only Scottish example with

<sup>1</sup> Petersen, op. cit., Taf. 9, f - Lettberg, Kr. Gnesen.

<sup>2</sup> ibid., Taf. 9, g - no loc. given.

<sup>3</sup> ibid., Taf. 30, a - Sprottau, Lower Silesia.

<sup>4</sup> Knorr, F., *Friedhöfe der älteren Eisenzeit in Schleswig-Holstein* (1910), 27, Taf. v 87; Sulldorf, Holstein.

<sup>5</sup> Hawkes, C. F. C., 'The Early Iron Age Settlement at Fengate . . .', *Arch. J.*, c (1943), 199; op. cit. (1959), 178.

<sup>6</sup> Voss and Stimming, *Vorgeschichtliche Altertümer Brandenburgs*, Pl. i, b.

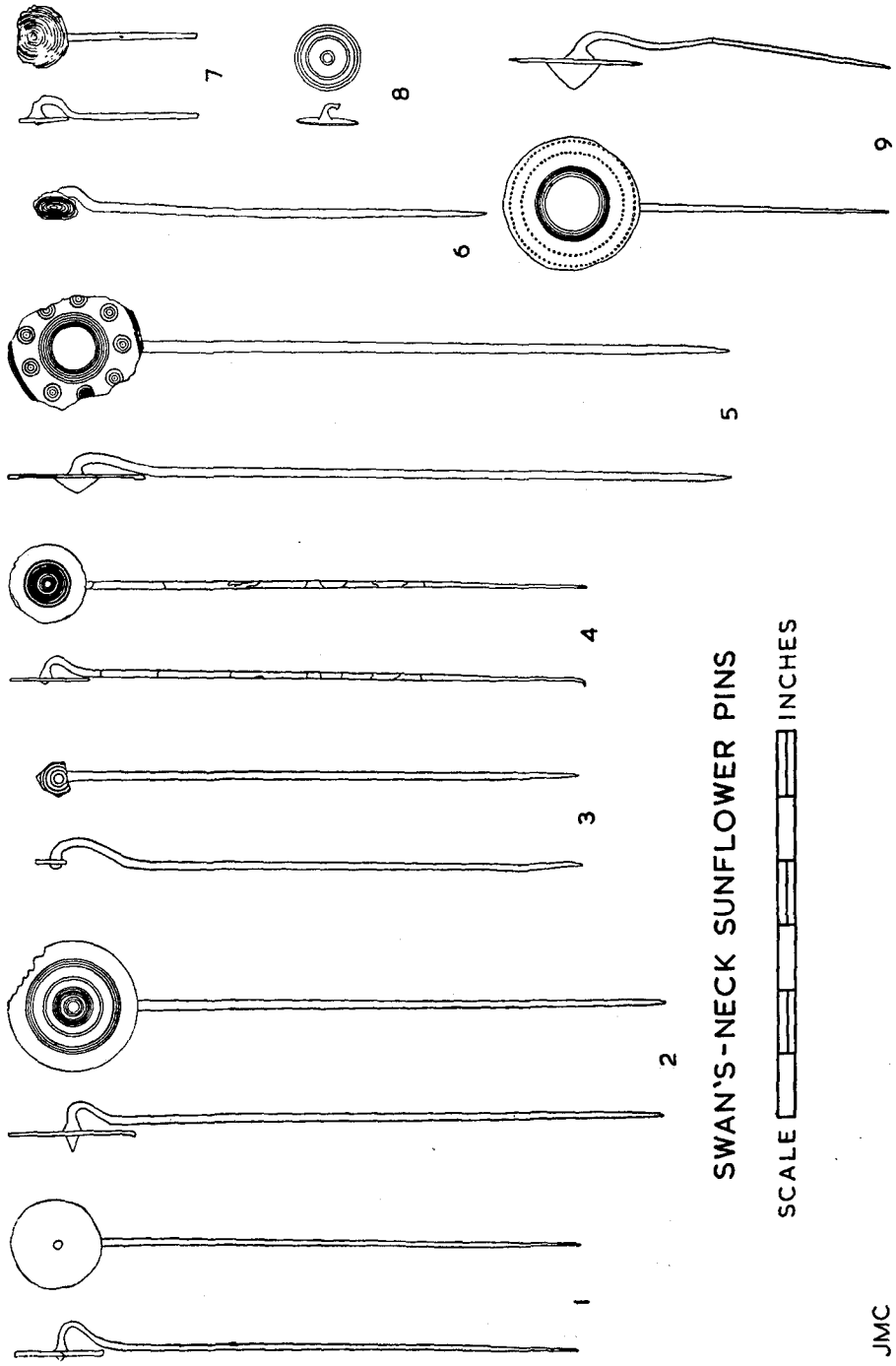
<sup>7</sup> Aberg, N., *Bronzezeitliche und Früheiszeitliche Chronologie*, II (Stockholm, 1931), 101, Abb. 216.

<sup>8</sup> Ebert, *Reallexicon*, IV, Taf. 192, a.

<sup>9</sup> Evans, J., *Ancient Bronze Implements . . .* (London, 1881), fig. 463.

<sup>10</sup> Hawkes, C. F. C., op. cit. (1943), 199.

<sup>11</sup> Piggott, C. M., 'A Late Bronze Age Burial from Orrock . . .', *P.S.A.S.*, LXXXII (1947-8), 306.



SWAN'S-NECK SUNFLOWER PINS

SCALE INCHES

JMC

FIG. 1

Class II decoration (fig. 1, 5).<sup>1</sup> More recently, the collection of antiquities at Inverary Castle has been found to contain two swan's-neck sunflower pins (fig. 1, 2 and 3); these were exhibited several years ago in Edinburgh where they were erroneously assigned to a hoard containing swords and a flesh-fork. Examination of the records at Inverary shows that all these objects were found separately, and it is not known if even the pins were found together. Unverified information states that the pins were found near Campbeltown, Kintyre.

Recently another swan's-neck sunflower pin has been found at Tents Muir, Fife, and is illustrated here for the first time (fig. 1, 7).<sup>2</sup> Reference to early accounts of the Tarves find suggests that the hoard originally contained two bronze pins, but this addition to the list must remain somewhat doubtful.<sup>3</sup> Little doubt, however, surrounds a pin now in the Perth Museum; in the report on the Orrock find, it was suggested that this Perth pin, of unknown provenance, probably represented the Orrock pin, the couple of centuries accounting for its loss of label. The fact that no objects in the Perth Museum represent any of the other finds from Orrock, such as bracelet fragments and perforated rings, casts some doubt upon this suggestion, and examination of the Perth pin and the Orrock drawing shows that in all probability the pins are different (fig. 1, 4 and 6 respectively). The Orrock pinhead is smaller in relation to the stem, and the position of the head in regard to the swan's-neck curve differs.

Another early record of a possible sunflower pin occurs in Gordon's *Itinerarium Septentrionale*.<sup>4</sup> The pin, formerly in the Clerk of Penicuik collection, passed into the Young of Burghead collection and thence to the National Museum of Antiquities, by which time it had lost its sunflower head. The pin illustrated by Gordon had concentric decoration on the head and a stem bent in several places near the head. While the curves are not absolutely typical of the swan's-neck form, it appears from the illustration that the pin has been damaged by slight straightening, and may well have been of the swan's-neck type. In the *Proceedings of the Society of Antiquaries of Scotland* for 1920, a description of an object purchased from Young of Burghead reads as follows: 'Bronze Age disc-headed pin, said to have been found at Cramond', and Gordon's illustration is quoted.<sup>6</sup> The pin appears to have lost its head at about this time, for the description in the Museum's accession cards notes that the pin has its head wanting. Callander stated that the flat discoid head was attached by the edge to the bent top of the stem, but based this description on Gordon's illustration rather than on the actual object which had by this time apparently lost its head just before reaching the Museum.<sup>6</sup> This then is another possible swan's-neck sunflower pin.

Yet another pin of this type occurs in the Grosvenor Crescent, Edinburgh, hoard (fig. 1, 8). This pin has always been described as an Irish type of sunflower pin with stem broken just below the right-angled bend. Credit for this lies with

<sup>1</sup> P.S.A.S., LXXXIII (1948-9), 243.

<sup>2</sup> With acknowledgment to its owner, Mr R. D. M. Candow, F.S.A.SCOT.

<sup>3</sup> Kemble, J., *Horae Ferales* (London, 1863), 162.

<sup>4</sup> Gordon, A., *Itinerarium Septentrionale* (1726), Pl. 1, 13.

<sup>5</sup> P.S.A.S., LIV (1919-20), 149.

<sup>6</sup> P.S.A.S., LV (1920-1), 35.

Anderson<sup>1</sup> who made the perfectly understandable error of showing the continuation of the broken stem as completing the right angle. The Tarves pin was the only swan's-neck pin known at this time in Britain, and the Irish nature of the Grosvenor pin was assumed and defined by Anderson's drawing. However, examination of the broken stem shows a slight inclination towards the base of the head, and this is substantiated by the presence of a patch of wear, a polished surface, at this basal point, and indeed the metal has been slightly worn away here. The wear is identical to that on the Loch Broom pin, and none of the Irish sunflower pins show such traces. The Grosvenor pin is valuable in another way, because its decoration appears to be related to that of Northern Bronze Period VI.<sup>2</sup>

The only other evidence for sunflower pins in Scotland is the mould for a conical-bossed head at Jarlshof, Shetland.<sup>3</sup> It is of course impossible to state whether or not this was to have a swan's-neck stem, but the chances are that it would not. A mould for a straight stem may have provided an Irish-type stalk for the pin, and in addition the position of the site, on the Irish-Scandinavian route, and the Class II nature of the sunflower head all point to the suggestion that the sunflower pins manufactured here in the late first millennium B.C. were of the straight-stemmed Irish variety.

The technique of decoration on the sunflower heads is incision with some sort of compass arrangement, although several pins, including that from Loch Broom, seem to have cast decoration. The edge of the disc is sometimes pressed slightly forward, possibly to protect the decoration from wear, and this slightly concave effect reflects Petersen's Scheibenkopfnadeln. Scandinavian sunflower pins seem to lack this feature in general, being mainly convex, and some at least have cast decoration.<sup>4</sup> The Grosvenor Crescent ornament is partially compass drawn, its four outer circles inscribed in this way, while the inner two circles are too close to the centre to allow accuracy with a compass and appear to have been drawn by eye in a rather clumsy fashion. The uniformity of circle decoration also varies on certain pins; the Perth pin has ten incised lines of varying depths and widths, and the lines on the two Kintyre pins are different in this respect.

The stems of these pins appear to have been inserted through a small hole in the head, and then clenched by heating and hammering. The pin from Kintyre with small conical boss was treated in this manner, but more care would be needed to preserve the projecting boss of the other Kintyre pin. The Loch Broom pin differs from the others in its Class II feature of a large conical boss, which seems to have been attached by running on, although the mould from Jarlshoff shows that some Class II heads were cast complete. The concentric line decoration surrounding the centre piece is generally uniformly thick and deep, but some variation is seen in the nine groups of circles surrounding this central work. The groups are composed each of a dot and three concentric circles except for one group which has a dot and five circles. Possibly this group was the first to be drawn and the effect was adjudged too jammed and displeasing to the worker who thereafter reduced his plan to the

<sup>1</sup> Anderson, Jos., *P.S.A.S.*, xiii (1878-9), 322, fig. 2.

<sup>2</sup> Hansson, H., *Gotlands Bronsvalder* (Stockholm, 1927), fig. 157, 178, 186.

<sup>3</sup> *P.S.A.S.*, Lxvii (1932-3), 116, fig. 35, 2, fig. 36, 2.

<sup>4</sup> Montelius, O., *Swedish Antiquities* (Stockholm, 1922), 1329 etc.

simpler groups. This pin appears to be a local variety, with continental swan's-neck stem and Irish-type ornament, although the Zilmsdorf pin shows that the radial decorative style could have been of continental origin. The peripheral ornament on the Loch Broom pin is more Scandinavian-like than Irish, with concentric designs rather than radial lines.<sup>1</sup> However, the large conical boss is clearly of Irish Class II inspiration, and is generally acceptable as a purely Irish feature. This Class II pin thus serves to set the date of Class II pins well before the 250 B.C. proposed by Hodges.<sup>2</sup>

The only known Irish swan's-neck sunflower pin, from Rasharkin, Co. Antrim, is also of Class II, but the decoration consists of a series of concentric circles around the large central boss and two outer circles formed of dots. On the back of the disc head there are several blurred lines of similar dots leading from the circumference to the interior, but the exact design is impossible to decipher (fig. 1, 9). This pin and the Loch Broom pin show that the swan's-neck must have been transferred to the straight or right-angled stems of the more normal Irish Class II sunflower pins.

The Tarves pin was found with two or three swords, a chape and possibly another pin. The chape is of the normal tongue-shaped type found in the south of England with objects of the Wilburton complex, but this find and others show its continued use throughout the Late Bronze Age in the Highland Zone. One of the Tarves swords is of the normal Ewart Park type but with the unusual feature of a slot in the tang. The second sword has a cast bronze grip and pommel, the grip with edge ridging and rivet holes, the pommel cast separately. Several other swords with bronze grip and pommel have been found in Scotland, including one in the Grosvenor Crescent hoard, associated with other Ewart Park swords, a buckle and a swan's-neck sunflower pin as described. In this regard it is interesting to note that the only two finds of the Late Bronze Age from the Loch Broom area are a swan's-neck sunflower pin and a sword with cast bronze pommel, not found together but possibly associated chronologically. The Orrock, Fife, find contained another pin of this type, along with perforated rings and fragmentary penannular armlets with expanded terminals. The rings have rectangular perforations at the sides rather than on the outer edges, and in this respect are matched by a larger ring in the Poolewe hoard. The armlets are among the most southerly Scottish examples of bronze bracelets and represent local renderings of the more common gold armlets centred in the south-west of Scotland.

The swan's-neck sunflower pins found in Scotland and Ireland may be divided into two groups, the major group of pins close in form to the continental Scheibenkopfnadeln, the minor group showing continental swan's-neck stems joined to Irish-decorated heads. This latter group is composed of the Loch Broom and Rasharkin pins, and its importance lies in the fact that it shows that some at least of these pins must have been locally manufactured, that is, in Scotland or Ireland. If then the pins of the minor group were produced here, what of the other larger group? Judging from the published examples of continental swan's-neck sunflower pins, the differences between these and the local pins are important. The disc heads of the

<sup>1</sup> Montelius, *op. cit.*, fig. 1149.

<sup>2</sup> Hodges, H., *op. cit.* (1956), 46.

German Scheibenkopfnadeln are distinctly concave, whereas the Scottish examples are only slightly dished, if at all. The continental stems approximate closely to the original swan's-neck (non-disc head) pins, while the Scottish pins have varying degrees of curve; the two pins with the least exaggeration, that is, farthest from the continental prototype, are the Loch Broom and Rasharkin pins. Of the known continental pins, many have no decoration, and many others have decorative plates

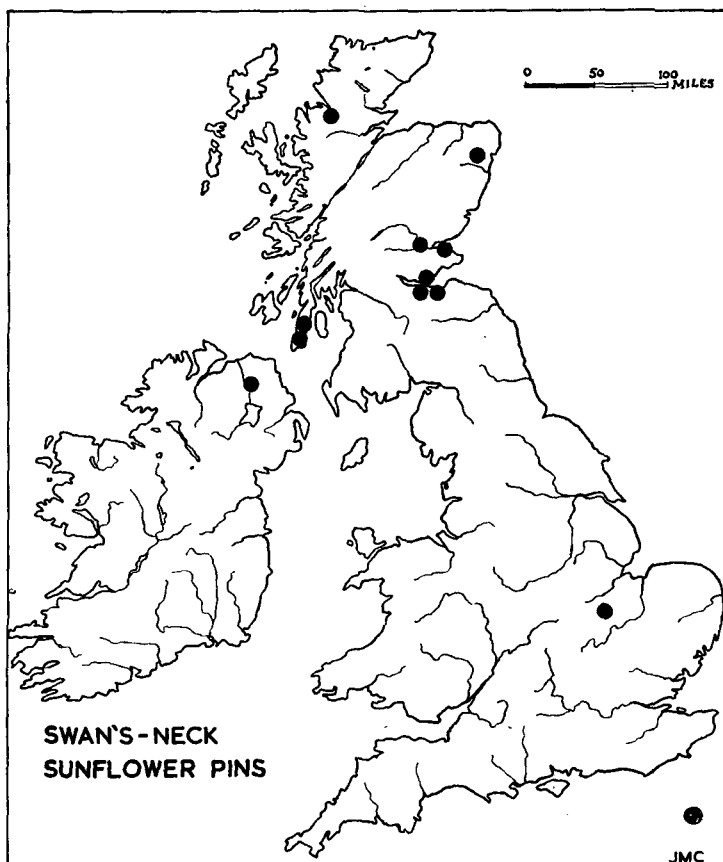


FIG. 2

attached. Only the Tarves pin lacks decoration among the Scottish group, and the irregular arrangement of the circles on the Grosvenor Crescent and Kintyre (No. 2) pins is hardly a Wessenstedt feature. The fairly sharp projection of the central boss of the latter pin is not characteristic of the Scheibenkopfnadeln, and rather points to the Irish type of sunflower pin; this of course may explain the probable western find-spot of the pin. The evidence as far as it is available seems to point to the production in Scotland of our swan's-neck sunflower pins rather than to an importation of the type, yet in view of the short life of the pin on the Continent, the Scottish dates can hardly be far from the late sixth and fifth centuries B.C.



The distribution of the major group of Scottish pins is distinctly eastern (fig. 2), yet well within the range of Irish influence as shown by other Late Bronze objects, including armlets as well as gold work. The preference of the people of Scotland for this type of pin, as opposed to the Irish varieties that clearly must have been available, is puzzling in view of the mass of evidence of Irish-Scottish trade from the seventh century onwards. But it should be noted that in north-eastern Scotland, from the Tay to the Moray Firth, a province had existed from this seventh century separate from the more widespread south and west Irish-influenced area. It seems possible that the Covesea Settlement of the north-east may have maintained its autonomy in Scotland as well as its contact with the North European Plain well into the fifth century, and that these swan's-neck sunflower pins show a southerly expansion of the traditional Covesea territory towards the close of the Late Bronze Age.

## CATALOGUE OF SWAN'S-NECK SUNFLOWER PINS IN BRITAIN AND IRELAND

(numbers refer to fig. 1)

1. Tarves, Aberdeenshire	<i>P.S.A.S.</i> , xxvii (1893), 349-52	B.M. 58, 11-15, 5
2. ?Campbeltown, Argyll	—	Inveraray Castle
3. ?Campbeltown, Argyll	—	Inveraray Castle
4. probably Perth area	<i>P.S.A.S.</i> , lv (1921), 35	Perth Museum
5. Loch Broom, Ross	<i>P.S.A.S.</i> , lxxxiii (1949), 243	N.M.A.S. DO50
6. Orrock, Fife	<i>P.S.A.S.</i> , lxxxii (1948), 306-8	—
7. Tents Muir, Fife	—	R. Candow, Esq., F.S.A.SCOT.
8. Grosvenor Crescent, Edinburgh	<i>P.S.A.S.</i> , xiii (1879), 320-2	N.M.A.S. DQ202
9. Rasharkin, Co. Antrim	<i>Later Prehistoric Antiquities</i> (1953), 34, fig. 13, 5	B.M. WG1593
Fengate, Peterborough	<i>Arch. Jour.</i> , c (1943), 199 ff	—
Cramond, Midlothian	<i>Itinerarium Septentrionale</i> (1726), pl. 1, 13	N.M.A.S. FT76
Tarves, Aberdeenshire	<i>Horae Ferales</i> (1863), 162	—