

## CHAPTER VII.

GENERAL PHENOMENA OF THE EARLY IRON AGE—  
LATE CELTIC PERIOD.

THE advantages of substituting iron for bronze in cutting implements would not be so apparent to people long conversant with the multifarious bronze objects already in use, as to induce them to make such an innovation *per saltum*. Although, in the metallic state, iron is rarely found naturally, it must have been sufficiently common, as meteoric iron, to have attracted the attention of the Stone Age people who, from long practice, had an observant eye for all natural products, had they recognised in it properties superior to those of their ordinary stone materials. But, even should they have failed to discover the utilitarian value of meteoric iron, it is not likely that their successors, when they became skilled in the manufacture of bronze—involving the reduction of copper and tin ores—would remain ignorant of the method of smelting iron from some of its more common ores, such as bog ore and hæmatite, both being readily recognised and widely distributed. Some archæologists, on these general grounds, maintain that iron was among the earliest known

of the metals, although for various reasons it was the latest to come into general use. According to the late M. G. de Mortillet,<sup>1</sup> iron was first discovered by some of the savage tribes in Africa, probably, as he suggests, from such an incident as a polished axe of hæmatite (a natural form of the ore abundant in Africa) having fallen into the fire—a degree of heat which would be sufficient to disclose its metallic basis. The same authority states his belief that the metal was known in Egypt some 7000 years ago; nay more, that it was with steel implements that the beautiful Egyptian statues of syenite and porphyry had been sculptured. He also holds to the frequently expressed opinion that bronze and iron (or steel) are represented on the wall-paintings of the Egyptian tombs by the colours red and blue; that the name *baa*, by which iron is designated, occurs in the most ancient inscriptions; and that the actual metal has been found in the pyramids of the earliest dynasties. He agrees with M. Chabas and others in ascribing the restricted use of iron, in Egypt, to religious motives.

Bronze was, at all times, an expensive material, owing to the rarity of its ores, and the delay and difficulty of transporting it from foreign lands. During the initiatory stages of the competition between iron and bronze it is probable that the result of the struggle would depend on the comparative expense in the production of the respective metals,—the former, in the first instance, being possibly the dearer of the two. It cannot, however, be supposed that, in face of the abundance and wide distribution of iron ores, the economic problem would long stand in the way had there been no other difficulty to be surmounted. It seems to me that the real hindrance to the adoption of iron in the manufacture of cutting implements was the softness of the metal itself, as, until the

<sup>1</sup> Formation de la Nation Française, 1897, p. 260.

method of tempering it, by suddenly plunging it when heated into cold water, became known, implements and weapons made of it would be actually inferior to those of bronze. Polybius (book ii. c. 33) incidentally records a striking instance of the comparative uselessness of untempered blades. In describing the victory of Flaminius over the Insubres inhabiting Cisalpine Gaul (B.C. 224) he thus writes: "The Romans are thought to have shown uncommon skill in this battle; the Tribunes instructing the troops how they were to conduct themselves both collectively and individually. They had learned from former engagements that Gallic tribes were always most formidable at the first onslaught, before their courage was at all damped by a check; and that the swords with which they were furnished, as I have mentioned before, could only give one downward cut with any effect, but that after this the edges got so turned and the blade so bent, that unless they had time to straighten them with their foot against the ground, they could not deliver a second blow. The Tribunes accordingly gave out the spears of the Triarii, who are the last of the three ranks, to the first ranks, or Hastati; and ordering the men to use their swords only, after their spears were done with, they charged the Celts full in front. When the Celts had rendered their swords useless by the first blows delivered on the spears, the Romans closed with them, and rendered them quite helpless, by preventing them from raising their hands to strike with their swords, which is their peculiar and only stroke, because their blade has no point. The Romans, on the contrary, having excellent points to their swords, used them not to cut but to thrust; and by thus repeatedly hitting the breasts and faces of the enemy, they eventually killed the greater number of them."<sup>1</sup>

<sup>1</sup> Translation by E. S. Shuckburgh.

Those who deny the existence of a Bronze Age as distinct from that of Iron, are in the habit of accounting for the entire absence of iron relics in graves and early habitations by the theory that they have disappeared in consequence of the natural law of decomposition—it being well known that iron is more liable to oxidation than copper or bronze. But this is not an adequate explanation of the facts, as there are many natural conditions in which iron may for a long time resist atmospheric action. It is difficult to believe that steel implements, in such a dry climate as that of Egypt, could have been in use from the earliest times without having left some traces of their existence. Professor Flinders Petrie exhibited at the Loan Collection of the British Association at Liverpool, in 1896, an interesting set of iron tools, including files and saws, which had been found in Egypt. They were catalogued as belonging to the seventh century B.C.; but it was added that they were of Assyrian origin, as such tools were quite unknown in Egypt till later times.

Professor Rolleston, while advocating the view that the contents of the British barrows clearly prove the priority of bronze relics to those of iron, thus notices the oxidation theory: "It will be said by some in answer to this that iron is oxidisable and perishable in an eminent degree, and that it would disappear, whilst the bronze would remain. This suggestion I will not characterise as one of the study as opposed to one of the Barrow, but as one of the laboratory, and the laboratory with its strong reagents supports it in a way that the slow and weak or wholly inert chemistry of the deep sand, or rubble, or gravel-filled grave does not. Of course, if you conceive a stream of water, acidulated even slightly with nitric acid, to pass constantly over an iron spear-head, there is no difficulty in estimating the time which will be necessary for the entire disappearance of an implement so

tested. But no such agent is available in many, I might say most, Bronze Period graves. In some such graves you may find the objects they contain encrusted with a deposit of carbonate of lime, which would have protected an iron weapon of the Bronze Period if there had been any to protect; or you may find, as I am happy often to have seen, the bones in a capital state of preservation, and contrasting to great advantage with the corroded and "perished" bones of Saxons, whose iron weapons were, nevertheless, very present with them; or the grave itself may contain a considerable quantity of free carbonic acid, as other sunk wells do, and yet may be so dry from conditions of superjacent and subjacent rubble and soil as to have afforded no means for the removal of any results of any slight erosion which its contents might have suffered. The phenomena disclosed by the spade must be compared with those disclosed by the test-tube; and there is here a *makro*—as well as a *mikro*—chemistry."<sup>1</sup>

Mr Engelhardt, in his work on the remarkable hoards of the Early Iron Age found at Thorsbjerg and Nydam, in south Jutland, makes the following remarks on the difference between these two peat-bogs as regards their corrosive action on iron: "Iron is almost entirely consumed by the water of this peat-bog [Thorsbjerg moss]. In many places vestiges of corroded iron were seen in the black peat, indicating that iron articles had been thrown in along with the others, but only very small fragments of iron objects had been preserved, and these were almost exclusively found in the upper layer, about a foot above the other remains. It is fortunate that the tannic acid of the Nydam moss has not this corrosive quality in the same degree as that of the

<sup>1</sup> Trans. of the Bristol and Gloucestershire Arch. Soc., 1878; Reprint, p. 5.

Thorsbjerg moss. Numbers of iron weapons and implements of about the same period have been preserved in Nydam, and this deposit, in connection with that of Thorsbjerg, presents a vivid picture of the civilisation of the Early Iron period, in so far as it may be inferred from the remains of dress, weapons, household utensils, horse furniture, and ship-building.”<sup>1</sup>

Dr Schliemann also very pointedly directs attention to the total absence of iron remains in the prehistoric cities of Troy, while relics of copper and bronze were abundantly present. “Nothing,” he writes, “could better testify to the great antiquity of the prehistoric ruins at Hissarlik and at Mycenæ, than the total absence of iron. It is true that Hesiod distinctly states that iron was discovered later than copper and tin, for, in speaking of the peoples who were ancient even in his day, he says that they used bronze, and not iron. But still, in order to show how old the knowledge of iron and steel was, he represents Gaea as making a sickle for Kronos of greyish glittering steel, and he gives to Herakles, besides armour of gold and greaves of bronze, a sword of iron and a helmet of steel.”<sup>2</sup>

We may therefore safely conclude that, had iron been in use to any great extent contemporaneously with the implements and weapons generally recognised as characteristic of the Bronze Age in Europe, we would, by this time, have found some archæological evidence of the fact. But there appears to be none. Whatever may have been the causes which kept this useful metal so long in the background, there are indications that, on its first introduction into Europe, it was a scarce commodity, as we find it used in small encrusted bands to decorate bronze objects. It was thus occasionally used among the Swiss lake-dwellers at the stations of Moer-

<sup>1</sup> Denmark in the Early Iron Age, pp. 25, 26.

<sup>2</sup> Ilios, p. 252.

ingen, Cortaillod, Auvernier, and Corcelettes, to ornament bronze swords and bracelets.<sup>1</sup> From these considerations it is evident that the mere knowledge of iron as a metal is not to be regarded as synonymous with its general introduction into the arts and industry of human civilisation.

The evolutionary stages through which the iron industry has passed, in its struggle for the mastery over bronze, may be regarded as only distantly connected with Scottish archæology, as there is ample evidence to show that a fully developed Iron Age obtained in Central Europe, long before the metal was utilised in the British Isles and other parts of north-western Europe. But although these metallurgical changes were perfected outside the archæological area with which we are here specially concerned, it is incumbent on us to show whence these finished products of the Iron Age, or the skill which produced them, reached our shores.

The culture elements—industrial and warlike—to which one gets familiarised by a study of the archæological remains found at Hallstatt and La Tène, are the greatest landmarks in the history of early European civilisation. They radiated around these centres in successive waves from about the eighth to the second century B.C., and their influence ultimately became felt throughout the largest portion of Europe. La Tène civilisation, being a later development and geographically nearer to Britain, naturally affected the social organisation of the inhabitants of the British Isles more deeply than that of Hallstatt; but, however widely apart its products may be found, whether in Illyricum or in Ireland, they disclose a remarkable similarity, apparently due to unity of origin. The repeated intrusion of the Gauls into the valley of the Po, some centuries before the Christian era, is attested

<sup>1</sup> For illustrations of some of these objects see 'Lake-Dwellings of Europe,' figs. 186, No. 6, and 188, No. 6.

on the most explicit historical and traditional statements, but had history been altogether silent on these warlike episodes of the people who used La Tène weapons and armour, the archæological evidence alone would have been sufficient to establish their truth.

As the result of repeated peregrinations on the trail of the Iron Age in Europe, I have come to the conclusion that the introduction of iron into the British Isles was due to the continuance westwards of the advanced culture elements which successively flourished at Hallstatt and La Tène. To epitomise the evidence on which this opinion could be satisfactorily substantiated would necessitate a deviation into a wide field, involving not only a considerable amount of writing but also a large number of illustrations. Had there been space, a short account of the civilisation and social conditions which flourished respectively at these two centres of the early development of the iron industry would be pertinent to the object and scope of this book, and all the more so as there is no work in the English language which deals with the subject. Nor, indeed, with the exception of one or two special monographs on the Oppidum La Tène and the cemetery of Hallstatt, is there any Continental work, known to me, which gives a general description of these two civilisations, and their relation to each other; nor of the archæological remains found on the wider areas to which objects analogous to those of Hallstatt and La Tène extended. The works of MM. Bertrand and Reinach,<sup>1</sup> Dr Hoernes,<sup>2</sup> and Dr Undset<sup>3</sup> may, however, be read with advantage on this subject.

<sup>1</sup> *Les Celtes dans les Vallées du Pô et du Danube.*

<sup>2</sup> *Urgeschichte der Bildenden Kunst in Europa.*

<sup>3</sup> *Erstes Auftreten des Eisens in Nord-Europa.*



## LATE CELTIC PERIOD IN BRITAIN.

We now come to the investigation of the early Iron Age in Britain, for it is not yet possible to eliminate Scotland from the wider area. The effect of the foreign influences emanating from Central Europe on the civilisation of these "barbarians in the ocean" was to develop a new school of art, which, though retaining the primary features of its Continental prototypes, presented so many deviations, both in design and execution, that it is now regarded as a third and final stage in the evolution of the Celtic art of Europe. Among the first to clearly define this remarkable group of antiquities in Britain was the late Sir A. W. Franks, who, as one of the editors of Kemble's 'Horæ Ferales,' named it "Late Celtic"—an expression which has since become common in archæological literature. His description of the principal objects in that group, so far as they were then known to him, is prefaced by the following remarks :—

"In the peculiar class of antiquities now to be considered, the British Islands stand unrivalled ; a few ancient objects, analogous in design, may be found in various parts of the Continent, and more extended researches in local museums may bring many others to light, but the foreign contributions to this section are scanty when compared with those of our own country.

"The antiquities under consideration consist of shields, swords, and daggers, horse-furniture, personal ornaments, and a number of miscellaneous objects, some of iron, some of bronze, and frequently decorated with enamel. All these antiquities exhibit a style of decoration remarkable for its peculiar and varied forms, and testify to extraordinary skill in working metals."<sup>1</sup>

<sup>1</sup> Horæ Ferales, p. 172.

On finishing his descriptive details of the objects in question—the more perfect and highly decorated being delineated on seven plates of beautiful illustrations—he proceeds to show that their original owners could be no others than the Celts. By a process of analytical elimination he rejects the claims of the Romans, Saxons, and Danes, to be regarded as the owners and founders of this unique style of art. “We have, therefore,” he writes, “only the Celtic races, or some branch of these races, to fall back upon. Moreover, the only designs at all similar, of which the origin is certain, are to be found in early Irish manuscripts; though there intermingled with patterns of a very different kind, and derived probably from a different country. For if we examine carefully the illuminations of Irish MSS., we shall observe that the designs are of two kinds: one composed of the singular wavy or trumpet patterns which occur also on these bronzes, but which, in the hands of the illuminator, become still more intricate and singular; the other exhibiting interlaced patterns of great variety both as to form and as to their component parts. The interlacings may possibly have been introduced with the Christian religion; in a simpler form we find them in Anglo-Saxon designs, and even occasionally in the later Roman mosaic pavements. They are seldom, however, combined with the wavy pattern in England, and then generally in the North of England, or in those places where the influence of the *Scoti* or Irish monks prevailed; we may name as an instance, the famous Gospel of St Cuthbert. Another peculiarity worthy of remark is the greater frequency of the trumpet patterns in the earlier MSS., and the gradual superseding of them by the interlaced patterns in the later MSS. and works of art.”<sup>1</sup>

In briefly noticing some of the Late Celtic remains found

<sup>1</sup> *Horæ Ferales*, p. 184.

within the British Isles, I shall first deal with the more isolated examples, with regard to which the circumstances of the discovery count for little, their archæological value being determined by some special features in their manufacture or style of ornamentation. Afterwards some of the more important objects found in association with collateral remains, such as the contents of graves, camps, hoards, &c., will be considered. As most of the Late Celtic remains described in 'Horæ Ferales' belong to the former category, it will be convenient to follow, as far as possible, the order of classification adopted in that work.

*Shields.*—Two entire shields and portions of six others are described in 'Horæ Ferales.' One of the entire specimens was found in the river Witham, and the other in the Thames. They are both oval or oblong in shape, and decorated with raised designs of Late Celtic character. The boss of the former contains five studs of red coral, and its surface is clearly defined with the stained space on which the figure of an "exaggerated" boar, with very long legs, had been riveted. The second is also ornamented with several groups of studs of red enamel. Some idea of the style of art and perfection of the workmanship on these shields may be gained from the accompanying pencil sketch of the specimen from the river Thames (Pl. V.) Of the other fragmentary portions two bosses are also from the Thames, three from Polden Hill (p. 247), and one from a barrow in Yorkshire. "These," writes Sir W. Franks, "are the only remains of shields of the kind with which I am acquainted. It will be seen that they have not been found out of England; their form seems to have been oval, and they varied in length from 3 feet 9 inches to 2 feet 6 inches."

Every one interested in this class of antiquities should find an opportunity of inspecting these very remarkable re-

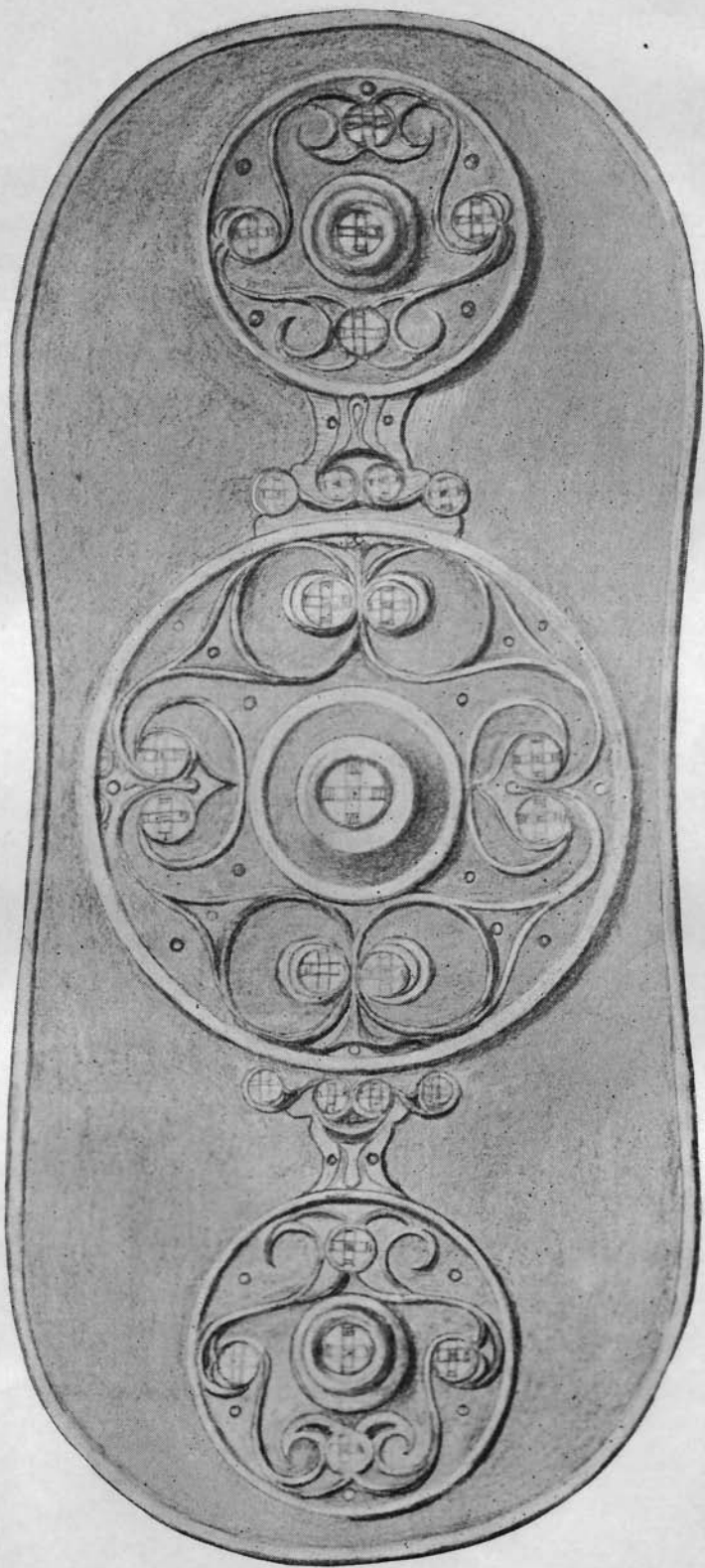


PLATE V.—BRONZE SHIELD FOUND IN BED OF THAMES.  
British Museum (length 2 feet 6½ inches).

mains, now preserved in the British Museum; or at least the coloured illustrations of them in 'Horæ Ferales,' pl. xiv.-xvi.

I may observe that the shields represented on the Gundestrup silver vase<sup>1</sup> are oblong, while those on the bronze *situlæ* found in the Illyrico-Venetic province are either round, oval, or oblong. Various portions of shields have been found in Oppidum La Tène, including handles, bosses, and circular ornaments, generally of bronze, but sometimes of iron, which were fastened on the wooden framework of the shield.<sup>2</sup>

*Helmets.*—No British helmet earlier than Roman times was known to Sir W. Franks when he wrote his notes in 1863, and only one or two German specimens. He refers to one remarkable specimen, found in an ancient channel of the Seine, and figures a number from Greece and Italy. Since then, however, our knowledge of pre-Roman helmets in Europe has greatly increased. They have been found in Gaulish tumuli, in the cemeteries of Hallstatt, Watsch, Ambras, and other localities in the Illyrico-Venetic archaeological area. A very remarkable helmet, found in a tomb at St Margarethen, was made of a kind of basket-work, over which there was a leathern covering. Outside the cap thus formed there were fastened six circular discs of bronze, surrounding a larger central disc which formed the summit, and from the middle of which an iron spike projected. It is now surmised that similar discs, many of which were formerly regarded as shield ornaments, were really parts of helmets of the same type as that at St Margarethen. A helmet of a decidedly Grecian character was found in one of the tumuli of Glasinac.<sup>3</sup>

<sup>1</sup> See Sophus Müller : Nordiske Fortidsminder, 2 Hefte.

<sup>2</sup> See group fig. 89 of the 'Lake-Dwellings of Europe.'

<sup>3</sup> Rambles and Studies in Bosnia, &c., fig. 36.

Some of the warriors figured on the famous *situlæ* from Bologna, Watsch, &c., wear helmets. One scene represents two pugilists with a crested helmet between them, apparently the prize contested for. Actual specimens of these helmets have been found without a crest, and others with one or two crests. It may also be mentioned that the helmets on the mounted figures on the Gundestrup vase are ornamented by various devices, probably badges, such as a crescent, two horns, a boar, and a bird. The officer in command of the infantry has also a helmet crowned with the figure of a boar.

Two fragmentary portions of bronze found on Scottish soil, which are justly regarded as parts of helmets, have a close resemblance to those horned and boar-headed helmets figured on the Gundestrup vase. They are described by Dr J. Alexander Smith in one of those exhaustive monographs by which he has so greatly enriched Scottish archaeology.<sup>1</sup> One of these objects (fig. 144) was found, about the year 1820, in a morass, on the farm of Torrs, in the parish of Kelton, Kirkcudbrightshire, and, having passed into the possession of Sir Walter Scott, is still preserved at Abbotsford. It is made of thin beaten bronze like a mask, with eye-holes an inch in diameter, and two curved hollow horns rising from between them. The ornamentation on the body is in *repoussé*, in the form of divergent spirals ending in volutes, &c., all highly characteristic of Late Celtic work. The horns are also ornamented with "a continuous series of corresponding curvilinear lines and scrolls of finer character, the patterns being less prominent, and formed rather by their outline being depressed or indented in the metal."

The other analogous relic, which takes the shape of a boar's head, was found, at a depth of 6 feet, in mossy ground resting on the underlying clay, at Liechestown in the parish of Desk-

<sup>1</sup> Proc. Soc. A. Scot., vol. vii. p. 334.

ford, Banffshire. It was discovered about the year 1816, and is now preserved in the Banff Museum. Though not so elaborately decorated as the former, it is clearly of the



Fig. 144.—*Bronze with horns found at Torrs, Kirkcudbrightshire*  
(16½ inches in greatest length).

same style of work, and probably of the same period. Dr Joseph Anderson illustrates his account of these objects in his Rhind lectures by a woodcut of a bronze plaque, found in Oland, representing two warriors with remarkably similar

helmets. This plaque is one of four, with similar quaint figures, found in a cairn, and classified by Montelius as belonging to the third period of the Iron Age—*i.e.*, seventh to eleventh centuries.<sup>1</sup>

Mr Llewellynn Jewett describes<sup>2</sup> a remarkable grave at Barlaston, in Staffordshire, in which were a number of enamelled discs which he believed to have been portions of a helmet. Although this grave was regarded by the author as Anglo-Saxon, the ornamentation on some of the objects is so pronounced that there can be little doubt that it is Late Celtic work. The grave, which was 7 feet long by 2 feet wide, was partly cut out of the solid stone, and contained a basin-like cavity for the helmeted head. It was in this hollow that the relics now in question were found. "The fragments in the cavity," writes Mr Jewett, "consisted of several pieces of curved bronze, highly ornamented, which had probably, with other plain curved pieces, formed the framework of the helmet; some thin plates of bronze; a flat ring of bronze, beautifully ornamented (fig. 434), which is conjectured to have been the top of the framework of the helmet; and three enamelled discs of a similar character to what have been elsewhere found, with hooks for suspension or attachment to leather or other substance. One of these is engraved, of its real size (fig. 435). The centre is of enamel mosaic work, ground down level with the metal, as in the old Chinese enamels." Similar relics (figs. 436, 437) were not unfrequently met with in other localities, as for instance in a barrow on Middleton Moor, Derbyshire, where they were associated with the iron umbo of a shield, and a thin vessel of bronze, which probably, according to Mr Jewett, formed portion of a helmet.<sup>3</sup>

<sup>1</sup> *Antiquités Suedoises*, p. 150.

<sup>2</sup> *Grave-Mounds*, p. 258.

<sup>3</sup> *Ibid.*, p. 261.



*Swords.*—Some twenty iron swords with bronze sheaths, or the bronze sheaths without the swords, are recorded in ‘*Horæ Ferales*’ as having been found in widely separated districts in Britain; also about an equal number of La Tène types, which are introduced for the purpose of comparison. The same author, writing in 1880,<sup>1</sup> states that to his knowledge the geographical distribution of these swords or their sheaths in England was as follows: Bed of the Thames, 8; Yorkshire, 5; Lincolnshire, 4; Dorsetshire, 2, besides fragments; Hertfordshire, Cumberland, and Lancashire, 1 each. Since then a few more specimens have come to light, notably two in Hunsbury Camp, near Northampton (fig. 145), one in Ayrshire (fig. 146), and four in the bog of Lisnacrogghera in Ireland (fig. 147). The Hunsbury Camp and its relics will be described later on, but meantime the more perfect of the sword-sheaths may be noticed, as it is one of the most typical of the class yet known. It has already been figured and described by Sir Henry Dryden,<sup>2</sup> along with the other remains found in the camp, and also by Mr C. H. Read.<sup>3</sup> “This beautiful specimen,” writes Mr Read, “is formed of a thin bronze plate on one face, the other face being open, and provided only with transverse ornamented plates; the edge is of the usual character—that is, a rounded recurved plate, the two edges of which clasp the plates forming the face and back of the sheath. The end of the sheath is of thicker metal, and of the usual heart-shaped form which characterises other sheaths of the same period. Towards the lower part, 8 inches from the point, is a pair of ornamental bosses formed of curves and circles, resembling birds’ heads. At the back of this part is an engraved plate with scrolls and circles, and two lower

<sup>1</sup> *Archæologia*, vol. 45, pp. 251-266.

<sup>2</sup> *Associated Architectural Societies’ Reports*, vol. xviii.

<sup>3</sup> *Archæologia*, vol. 52, p. 762.

bands, also engraved, which do not correspond with anything on the front. The upper end of the front of the sheath has an elegant pattern of scrolls and circles of the usual Late

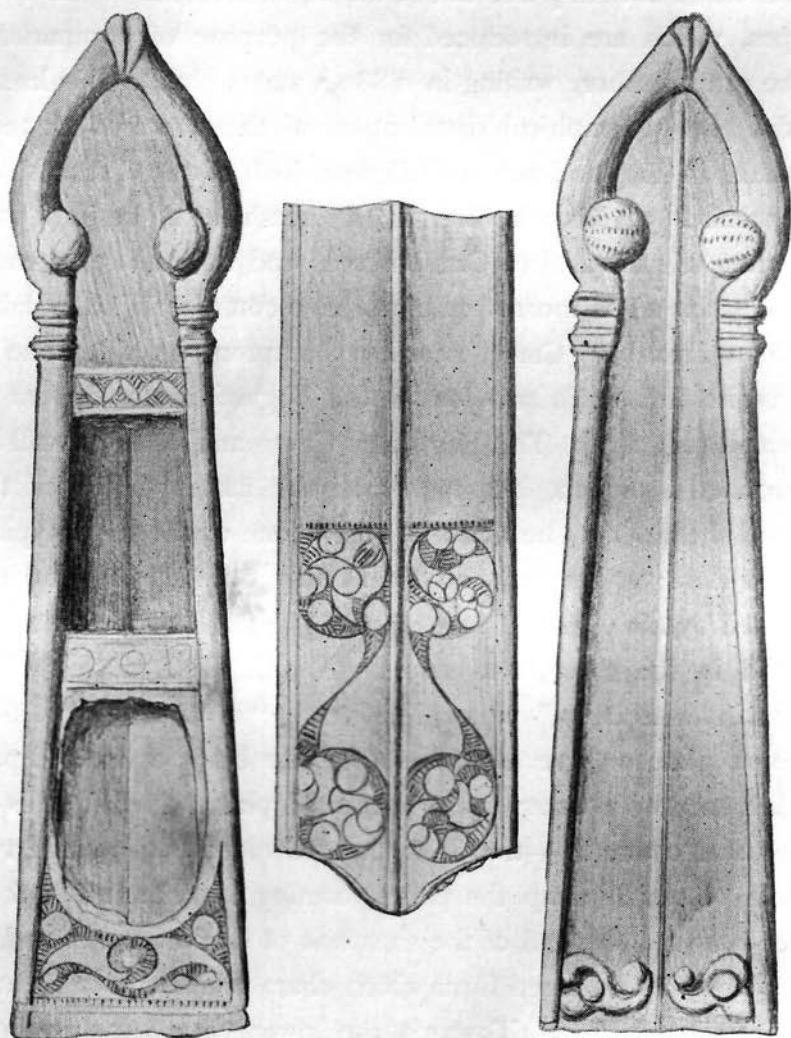


Fig. 145.—Bronze sword-sheath found at Hunsbury Camp, Northampton ( $\frac{1}{2}$ ).

Celtic type, very like the engraved ornaments on the bronze mirror from St Keverne, in Cornwall.<sup>1</sup> As a type, it is quite characteristic of Late Celtic work, and in no part has it any

<sup>1</sup> See fig. 174, p. 266.

resemblance to, or connection with, the production of Saxon times, as has been suggested."

The Ayrshire specimen (fig. 146) was found many years ago in the course of draining, near Bargany House on the banks of the river Girvan, and presented to the Museum of St Andrews. Here I saw it in 1893, and subsequently con-

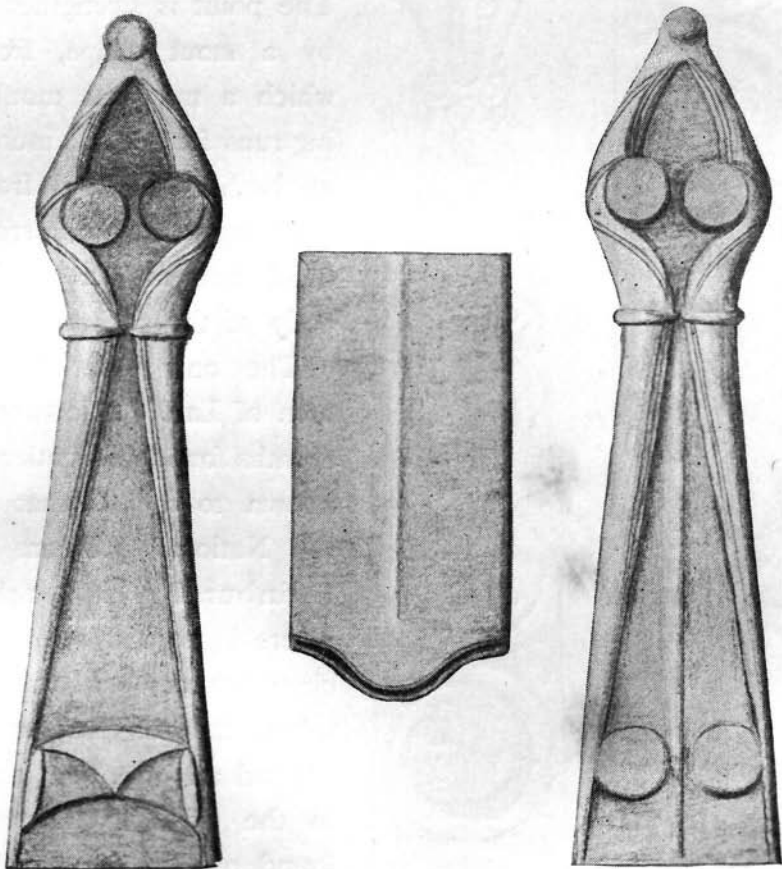


Fig. 146.—*Bronze sword-sheath found in Ayrshire* ( $\frac{1}{2}$ ).

tributed a description of it to the 'Archæological Collections of Ayrshire and Galloway' (vol. vii. p. 48, pl. i.) Although not decorated on its surface with the characteristic scrolls of spiral and curved spaces, like most others of its kind, it bears in all its structural details unmistakable evidence of belonging to the same class of work. It has an elegant form, slightly

tapering towards the point, and measures 24 inches in length by  $1\frac{3}{4}$  inch in breadth. It is made of two plates of bronze, one sufficiently large to be bent round at the margins so as to

overlap the other. The plates were then riveted and soldered together. The point is strengthened by a stout chape, from which a marginal moulding runs for several inches on both edges, and from which again an ornamental band extends across the body of the sheath.

The only other specimen of Late Celtic sword-sheaths found in Scotland, known to me, is that in the National Museum in Edinburgh (fig. 148). There is no history of the circumstances in which this sheath was discovered, beyond an inscribed label to the effect that it was found on the Mortonhall estate, at the foot of the Pentland Hills. It meas-

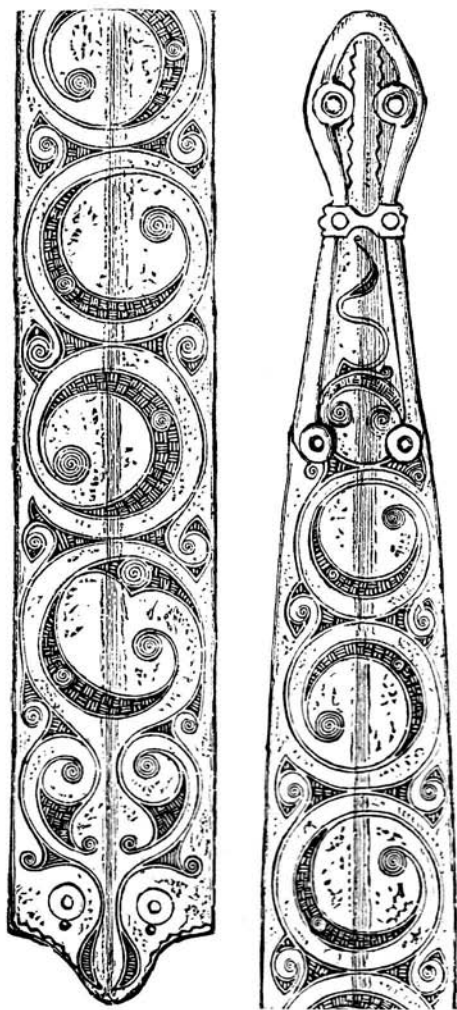


Fig. 147.—Bronze sword-sheath found in the bog of Lisnacroghera, Ireland ( $\frac{1}{2}$ ).

ures  $23\frac{1}{2}$  inches in length by  $1\frac{1}{4}$  inch in breadth, and, according to Dr Joseph Anderson, "is formed of thin beaten bronze; the ornamental cup-shaped expansions at the lower end are solid castings, and the ornamental strap carrying the loop in front is fastened on with pins. The back of

the sheath is a thin slip of bronze sliding in grooves in the inner margins of the two sides.”<sup>1</sup>

Another bronze sheath of this type was found by fishermen in the river Tweed, near the village of Carham, now preserved in the collection of Canon Greenwell. It is 21 inches long and  $1\frac{3}{4}$  inch broad. “It consists of the front of the sheath with a raised line in the centre, terminating in a triangle and with a solid end; of the back only the lower part remains, the rest having been probably made of leather.”<sup>2</sup>

A very fine iron sword, still in its bronze sheath, was found, in 1868, in a barrow at Grimthorpe, associated with the bronze mountings of a wooden shield and a small disc decorated with raised trumpet-shaped ornaments—all of Late Celtic work.<sup>3</sup> Near the same locality, at a place called Bugthorpe, a body was discovered with which an iron sword in a bronze sheath and an enamelled bronze brooch were associated.<sup>4</sup>

For additional illustrations of these sword-sheaths in England, I would refer my readers to ‘*Horæ Ferales*’; ‘*Collectanea Antiqua*’ (vol. iii. pl. xvi., and vol. iv. pl. xxxiii.); and ‘*Catalogue of Antiquities in Alnwick Castle.*’

<sup>1</sup> Scotland in Pagan Times, p. 120.

<sup>2</sup> Archæologia, vol. 45, p. 256, pl. xvi.

<sup>3</sup> Reliquary, vol. ix. p. 180; and Grave-Mounds, pp. 238, 245, and 263

<sup>4</sup> British Barrows, p. 50.

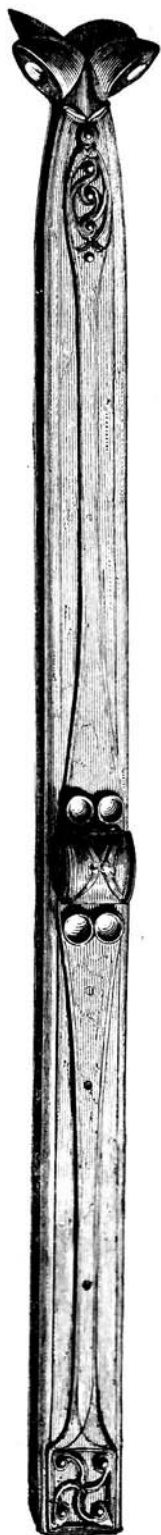


Fig. 148.—Bronze sword-sheath found near the Pentland Hills (length  $23\frac{1}{2}$  inches).

*Daggers.*—Of six specimens of iron daggers with bronze sheaths described by Sir W. Franks, five were found in the Thames and one in the Witham. This latter (fig. 149), one of two which still retained their bronze handles, is remark-

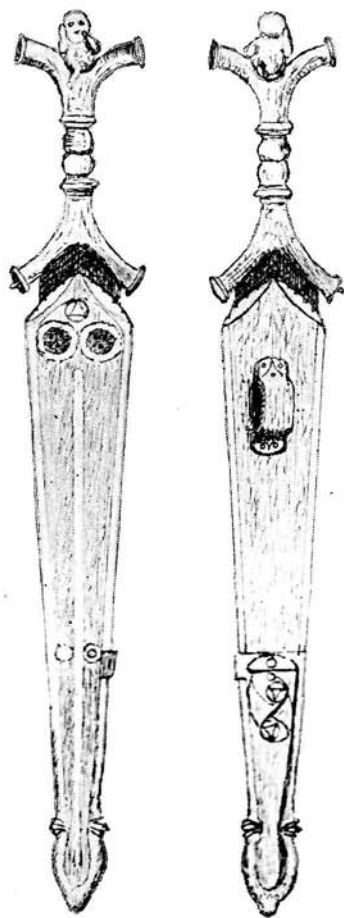


Fig. 149.—Iron dagger with bronze sheath found in the river Witham ( $\frac{1}{4}$ ).

able for the two horn-like projections on its hilt. Weapons with this type of handle have been found at Hallstatt and several places throughout Europe, extending in a narrow band from Bologna to the Pyrenees, but reaching northwards only to the southern limits of Belgic Gaul. MM. Bertrand and Reinach<sup>1</sup> enumerate no less than twenty-five localities within this area, chiefly graves after incineration, which have yielded one or more specimens. According to these eminent authorities, the horned weapons (*épées à antennes*) are products of the proto-Celtic stratum which, chronologically, lies between the earlier megalithic chambers and the later Gaulish tumuli—both these, be it observed, being characterised by burials after the rites of inhumation. Their

bronze sheaths were constructed and ornamented after the fashion of those of the short swords of the period, with which the larger specimens are sometimes confounded.

One of the sheaths from the Thames, figured in 'Horæ

<sup>1</sup> *Op. cit.*, p. 68.

Ferales' (pl. xviii. fig. 3), and in the 'Archæological Journal' (vol. x. p. 259), has a strong resemblance to another found in the Thames, and figured in 'Archæologia' (vol. 54, p. 497).

*Horse-trappings.*—The mountings of horse-harness, rings, bridle-bits, &c., are of much importance in illustrating the Late Celtic culture of Britain, more especially the art of enamelling, which is known historically to have been practised by the Celts of Western Europe. But as it would greatly exceed my limits to give a detailed *résumé* of the numerous discoveries of this kind which have been put on record, I must confine myself to a bare statement of a few of the more important.

At Polden Hill, near Bridgewater, the following objects were turned up by a man ploughing a field: three bosses of shields, fourteen bridle-bits, a nose ornament for a horse, a torque of iron with bronze wire, a large number of rings and ornamented plates of bronze, some being decorated with enamel.<sup>1</sup>

At Hagbourn Hill, Berkshire, several oblong pits were exposed at a depth of about 4 feet, and in one of them there was a circular excavation containing two bronze bridle-bits, some rings with bronze knobs on an iron plate, a bronze celt, and two javelin-heads. Two silver coins are also said to have been found with these objects.<sup>2</sup>

In a pit within the intrenchments at Stanwick, Yorkshire, at a depth of about 5 feet, were found bridle-bits, rings, plates, fragments of *repoussé* work, portions of iron chain-mail, a sword-sheath, and other fragments having traces of enamel on them. Adjacent to these were the tyres of chariot wheels.<sup>3</sup>

On the opening of a barrow at Arras, Yorkshire, the

<sup>1</sup> Archæologia, vol. 14, p. 90.

<sup>2</sup> Ibid., vol. 16, p. 348.

<sup>3</sup> Arch. Institute, York Vol., p. 10.

following objects were found in a circular cist cut down to a depth of  $1\frac{1}{2}$  foot in the chalky rock: two chariot wheels, one on each side of a human skeleton lying supine, the heads of two wild boars, and some horse bones, near which were two bridle-bits made of iron, and plated with bronze. The diameter of the wheel tyres was 2 feet

11 inches. Another barrow in the same group at Hessleskew contained the remains of wheels, a bridle-bit, a fibula, and other objects.<sup>1</sup>

At Saham Toney, in Norfolk, five rings and two enamelled ornaments were discovered.<sup>2</sup>

At Westhall, near Halesworth, Suffolk, a number of rings, some



Fig. 150.—Enamelled ring, Westhall, Suffolk ( $\frac{1}{2}$ ).

being enamelled, were associated with “a bronze lamp of good Roman workmanship.”<sup>3</sup>

At Hamden Hill, Somersetshire, several human skeletons, tyres of wheels, lance- and arrow-heads of iron, and some bronze objects were found.<sup>4</sup>

As examples of the enamelling of these harness ornaments, I have given a couple of pen-and-ink sketches from the coloured illustrations in ‘*Horæ Ferales*.’ One (fig. 150), from Westhall in Suffolk, shows the enamelled portion darker, so as to bring out at a glance the elegant spiral scrolls. The other

<sup>1</sup> Arch. Institute, York Vol., p. 26; and *Crania Britannica*, pl. vii.

<sup>2</sup> Norfolk Arch., vol. ii. p. 400.

<sup>3</sup> *Archæologia*, vol. 36, p. 454.

<sup>4</sup> *Ibid.*, vol. 21, p. 39.



(fig. 151) was found at Norton, also in Suffolk, and shows two coloured enamels, the small circles being bright yellow and the dark portion red.

These harness mountings, both with and without enamelling, are not unknown in Scotland. Sir Herbert Maxwell describes one specimen, found by a drainer at Auchendolly, Kirkcudbrightshire, which shows a design in yellow and red enamel, not unlike that from Westhall just

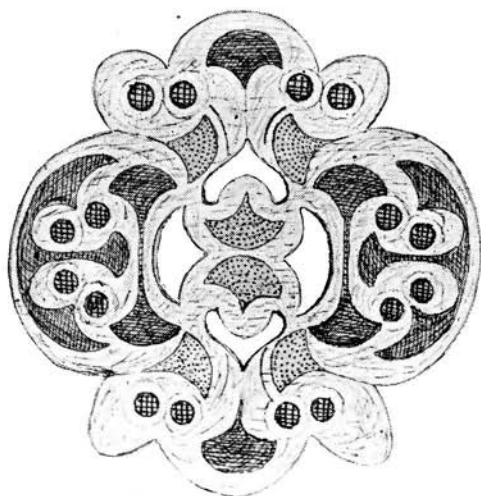


Fig. 151.—*Enamelled ornament for harness, Norton, Suffolk* ( $\frac{1}{2}$ ).

mentioned.<sup>1</sup> A round button-like object, ornamented with a setting of red enamel, was found in the broch at Torwoodlee, associated with a bronze harness ring and some Roman pottery and glass.<sup>2</sup> A circular ornament picked up on the exposed bed of the Loch of Dowalton (fig. 152) has trumpet-shaped spaces which appear to have been filled with enamel.



Fig. 152.—*Ornament found in Loch of Dowalton* (2 inches diameter).

Bridle-bits of Late Celtic workmanship have been recorded from various localities in Scotland and Ireland. One well-known specimen, found in a moss at Birrenswark (fig. 153) more than a century

<sup>1</sup> Proc. Soc. A. Scot., vol. xx. p. 396.

<sup>2</sup> Ibid., vol. xxvi. p. 81.

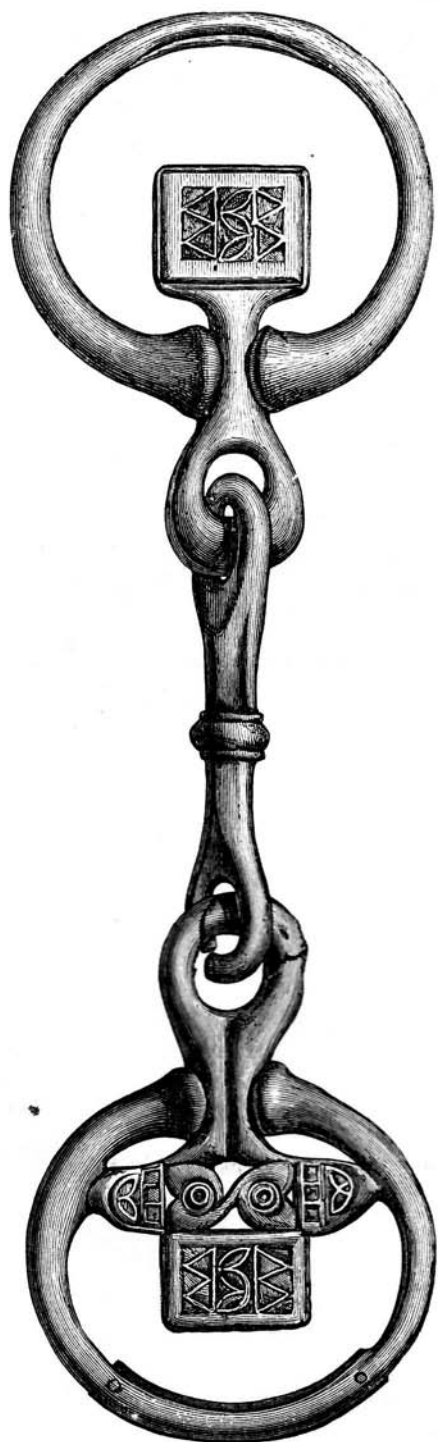


Fig. 153.—Bridle-bit found in a moss at Birrenswark, Dumfriesshire ( $6\frac{3}{4}$  inches in length).

ago, and now preserved in the National Museum in Edinburgh, exhibits this style of art both in enamel and metal work. It is figured and described by Dr J. A. Smith, along with a couple of bronze rings from a cairn at Towie, Aberdeenshire.<sup>1</sup>

In the year 1737 two bridle-bits, rings, and other ornaments, apparently the harness furniture for a couple of horses, were found in a moss at Middlesby, Annandale. The find is described by Sir D. Wilson,<sup>2</sup> who compares them with the analogous antiquities found at Stanwick, in Northumberland, with which "they are nearly identical in type." "The bridle-bits," he remarks, "though plainer than the one found at Birrenswark, are of the same type, and one of them corresponds to it in the

<sup>1</sup> Proc. Soc. A. Scot., vol. xv. p. 320.

<sup>2</sup> Prehistoric Annals, vol. ii. p. 156.

want of uniformity of the two rings: designed, as has been suggested, for use by the charioteer with a pair of horses, where the more ornamental ring would be worn on the outside, and fully exposed to view."

While discussing the subject of ancient enamelling, I may as well dispose of the few remaining specimens of this art found in Scotland. A hollow bronze disc,  $1\frac{1}{8}$  inch in diameter, apparently some kind of mounting, having a central dot of yellow enamel surrounded by concentric circles in red enamel, was found by Dr Angus Smith while excavating in the vitrified fort of Dun Mac Uisneachan.<sup>1</sup>

Perhaps the finest specimen of enamelled work known to have been found in Scotland is a bronze cup, or *patera*, from Linlithgowshire, and described in the Proceedings of the Society of Antiquaries (vol. xix. p. 45). The form is that of an ordinary Roman *patera* in bronze, ornamented in enamel of blue, red, and green colours, and forming a combination of elegant patterns of a wreath, a floriated scroll, and bands with serrated edges. It carries a flat handle,  $3\frac{1}{2}$  inches in length, and the bowl measures  $4\frac{1}{2}$  inches in diameter and  $2\frac{1}{2}$  inches deep. Similar vessels have been found only in the Celtic area of Western Europe; and of three other specimens known to exist, two were found in England—one at Braughing, in East Herts, and the other at Bartlow, in Essex. The third specimen was dug up in a moss at Malbeck, in Denmark.

*Personal Ornaments.*—Torques of Late Celtic art, or fragments of them, are recorded in 'Horæ Ferales' as having been discovered in the following localities in England: a bronze torque formed of two portions united by iron tenons, one flat and the other composed of eleven wreathed beads, found in a stone quarry in the parish of Rochdale, Lancashire; another

<sup>1</sup> Proc. Soc. A. Scot., vol. xix. p. 248.

of a similar type was found between limestone flags on a moor above Embsay, near Skipton, Yorkshire; a portion of a bronze torque resembling the vertebræ of a fish is recorded from Perdeswell, near Worcester; a bronze torque weighing 2 lb. 12 ½ ounces, ornamented with wavy patterns and sockets for gems, found near Tower House, Wraxal, Somersetshire; fragments of a bronze collar similar to the last-mentioned, found at Trenoweth, in Cornwall.

A few torques of Late Celtic art have also been discovered in Scotland. A beautiful specimen of the Beaded Torque was found, enclosed in a bronze bowl, by a labourer while cutting turf in Lochar Moss, Dumfriesshire. As shown on figure 4, it consists of (1) a solid piece highly ornamented, and (2) fourteen ribbed beads, with a smaller bead separating each pair, like the vertebral bones of a fish. "The beads," writes Sir Daniel Wilson,<sup>1</sup> "are disconnected, having apparently been strung upon a metal wire, as was the case in another example found in the neighbourhood of Worcester. A waved ornament chased along the outer edge of the solid piece seems to have been designed in imitation of a cord,—the last tradition, as it were, of the string with which the older necklace of shale or jet was secured. Altogether, this example of the class of neck ornaments styled Beaded Torcs furnishes an exceedingly interesting illustration of the development of initiative design, in contradistinction to the more simple and archaic funicular torc, which, though continued in use down to a late period, pertains to the epoch of primitive art."

Another torque of the same type, but in fragments, has been recently found on a crannog near the town of Lanark (fig. 154). The back portion, which was apparently an iron rod, is almost entirely decomposed, and only small fragments of it remain; but several of the beads, which are enveloped in

<sup>1</sup> Prehistoric Annals, vol. ii. p. 141.

rust of iron and bronze, have been recovered. They were strung together by means of an iron wire which passed through a small rectangular hole in the centre of each bead.

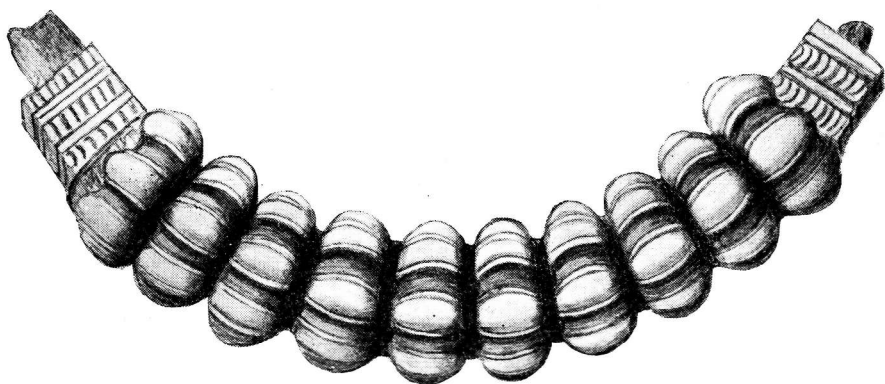


Fig. 154.—Portion of beaded torque found on the Hyndford Crannog ( $\frac{2}{3}$ ).

The ribbed beads have alternating with them thinner and smaller beads precisely similar to the Lochar moss specimen.

A bronze collar (fig. 155) was discovered in 1747, about 7 feet below the sur-

face, while digging a well, at the east end of the village of Stichel, in Roxburghshire. Its ornamentation, which is highly characteristic of Late Celtic



art, is analogous to that on a bronze

Fig. 155.—Bronze collar found near Stichel, Roxburghshire (greatest diameter,  $7\frac{5}{8}$  inches).

armlet found in 1826, near Plunton Castle, Kirkcudbrightshire (fig. 156). Both these relics open by means of a hinge and are closed by a pin clasp.<sup>1</sup>

Two massive bronze armlets, found on the farm of Pit-

<sup>1</sup> Proc. Soc. A. Scot., vol. vii. pp. 348, 351.

kelloney, near Muthill, Perthshire, and now in the British Museum, show a broad coiled pattern with oval medallions of red and yellow enamel at both ends.<sup>1</sup>

The Pitkelloney armlets belong to a type which is peculiar to Scotland, and of which many specimens have been found in different parts of the country. They consist of a solid casting of bronze, smooth on the inner surface and embossed on the outer by running scrolls in high relief. They are penannular and more or less oval in shape, with ends rounded, slightly expanded, and perforated with a circular opening for

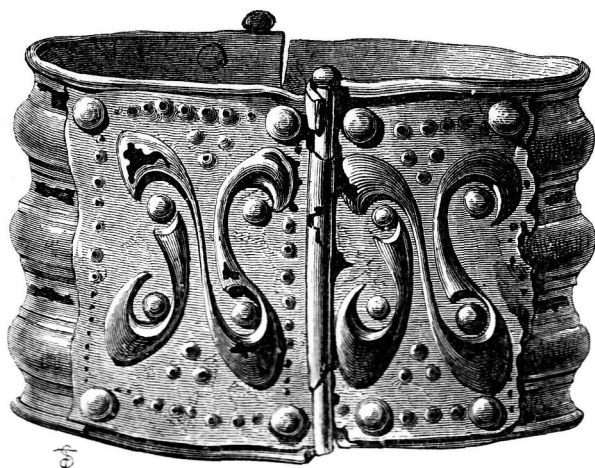


Fig. 156.—Bronze armlet found in the parish of Borgue, Kirkcudbright (†).

an enamel disc. The decoration usually takes the form of three convex and parallel bands ornamented with trumpet-shaped elevations, and connected by oblique ridges.

Dr J. A. Smith, who has written an elaborate account of these remarkable armlets,<sup>2</sup> recognised some differences in their ornamental details sufficient to entitle him to classify them into two varieties, which he distinguishes as the “oval” and the “spiral” patterns. In the former the outer band is a continuous link which closely surrounds the central band,

<sup>1</sup> Archæologia, vol. 28, p. 435.

<sup>2</sup> Proc. Soc. A. Scot., vol. xv. p. 316.

except at the vacant end spaces (fig. 157). In the other “the design is a spiral starting from one side and passing round the opposite medallion, then recurved back and passing

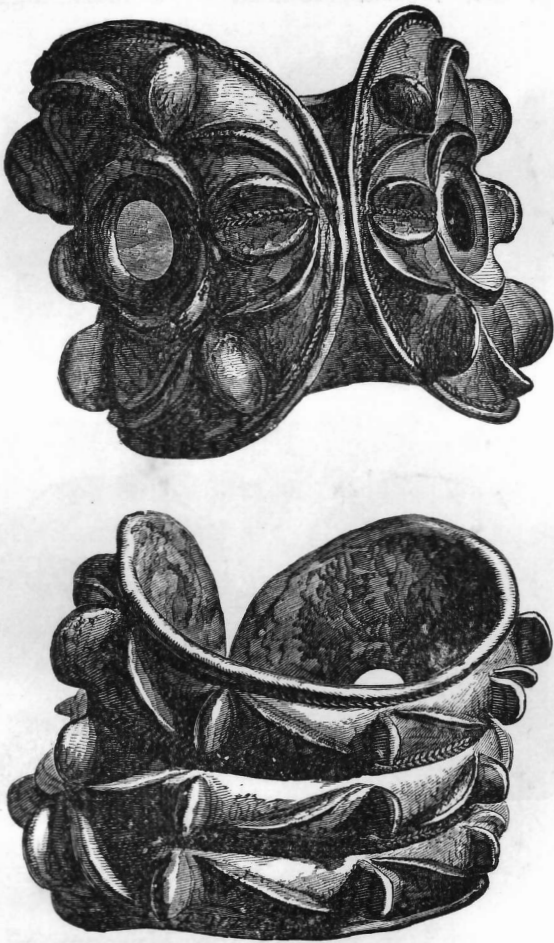


Fig. 157.—Bronze armlet found at Auchenbadie, Alwah, Banffshire ( $\frac{3}{8}$ ).

round the other medallion and then back again, and terminating as at the other end.”

To the latter class the Pitkelloney specimens belong, as well as one of two reported to have been found many years ago at Bunrannoch, Perthshire. Another armlet of this variety was found by a man while digging a field near Seafield Tower, between Kinghorn and Kirkcaldy, in Fife (fig.

158). To the same group also belong some fragments of an armlet preserved in the Perth Museum, as well as the only specimen discovered out of Scotland. This latter was found near Newry, Co. Down, Ireland, by a man digging into a

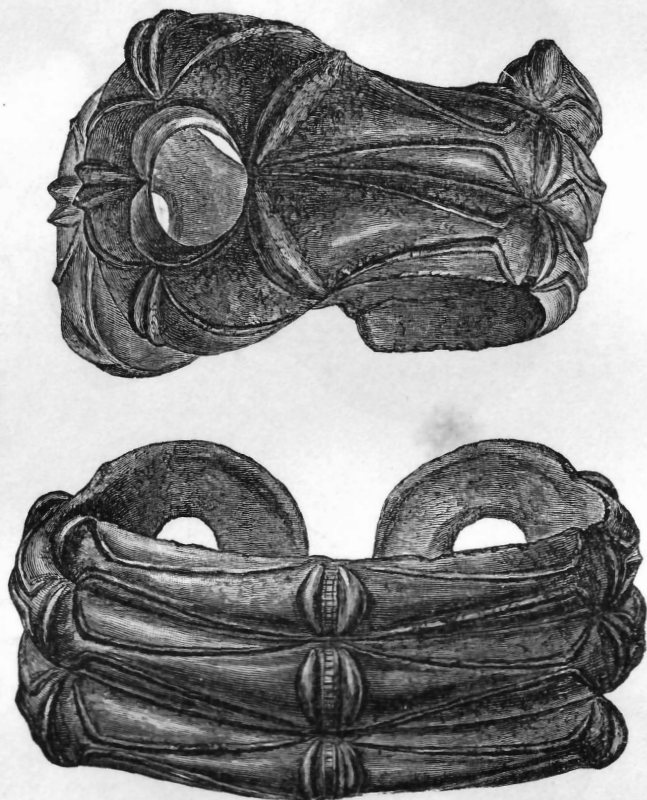


Fig. 158.—Bronze armlet found near Seafeld Tower, Fife ( $\frac{1}{2}$ ).

bank of earth, and is now in the Museum of the Royal Irish Academy.

Specimens of the oval pattern have been found in the following localities: a pair was discovered in an earth-house in the garden of Castle-Newe, Aberdeenshire (fig. 159); one was ploughed up in a field on the farm of Mains of Auchendadie (fig. 157), parish of Alvah, Banffshire, and presented to the National Museum in 1864. A pair was found about 6 feet under the surface on the links of Drumside, parish of



Belhelvie, Aberdeenshire. Three were found near Aboyne, while ploughing ground which apparently had not been before broken up. But perhaps the most important discovery was in 1876. Mr Lindsay, the tenant of the farm of Stanhope, Peeblesshire, while searching for a rabbit beneath a

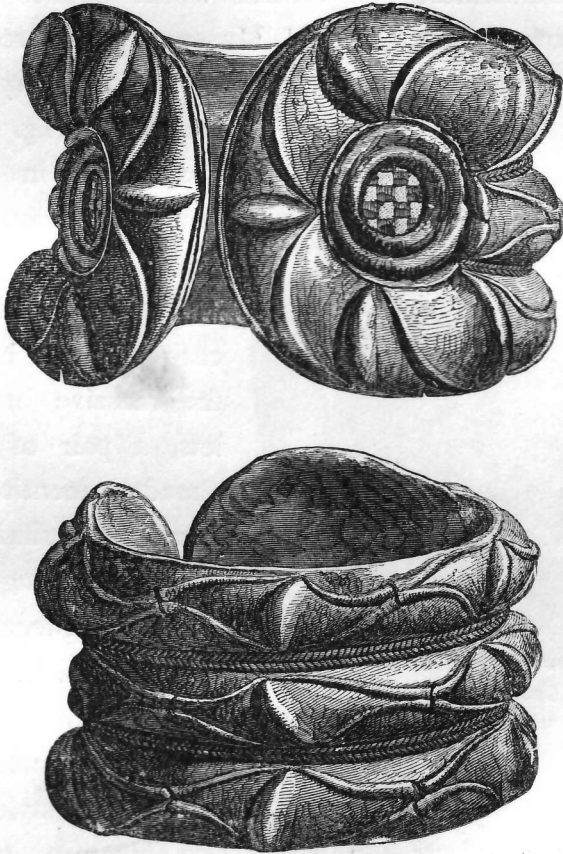


Fig. 159.—Bronze armlets found at Castle-Neuve, Aberdeenshire  
( $5\frac{3}{4}$  inches in greatest diameter).

large flat stone, found an armlet, of the kind now under discussion, which is of special significance, inasmuch as it was associated with two other bronze relics—viz., a buckle and a Roman saucepan.

The spiral variety of these armlets is regarded as a transition link between the oval pattern and the spiral snake-like

armlets, which are of the same style of art but showing a more decided zoomorphic character. A magnificent armlet of this latter class was picked up in 1827 on the Culbin sands. Another was found as long ago as 1732 at Pitalpin, near Dundee, but unfortunately no history of the discovery has been transmitted—a remark which applies to a third example now in the National Museum. With regard to a fourth, however, the circumstances of the discovery are most

instructive (fig. 160). It was found in an earth-house at Grange of Conan, near Arbroath, a fact which brings it on the chronological horizon of the massive bronze armlets, a pair of which, as already mentioned, was found in a similar underground dwelling at Castle-Neve, Aberdeenshire. Dr J. A. Smith, in his description of the snake-like armlets,<sup>1</sup> comments on it

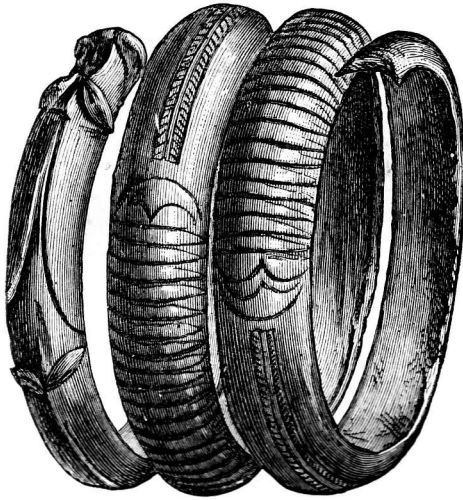


Fig. 160.—Bronze spiral armlet found at Grange of Conan, near Arbroath ( $2\frac{3}{8}$  inches internal diameter).

thus: “It is of the same general form and style of ornament as the others,—a snake-like creature, terminating in zoomorphic or conventional style of head at each of its extremities, with well-marked transverse lines crossing the body, the rest being ornamented by a double cord pattern running along the centre of the spiral band, in a groove, towards the heads; where there are also longitudinal and stronger oblique and transverse projections or terminal ornaments.” This specimen has one of the heads

<sup>1</sup> Proc. Soc. A. Scot., vol. xv. p. 350.

broken off, but in all other respects it has the special characters of the group. In the same locality were found the following objects: a bronze ring  $3\frac{1}{4}$  inches in diameter, a needle of bronze 2 inches long, some broken stone and earthen vessels, bones of animals, &c. To this class may also be assigned the fine bracelet (fig. 161) found at Barhullion, Wigtownshire, and included in the valuable collection of



Fig. 161.—Snake-headed armlet from Barhullion, Wigtownshire ( $\frac{1}{4}$ ).

antiquities presented to the National Museum by Sir Herbert Maxwell.<sup>1</sup>

Harp-shaped and other characteristic fibulæ of the Late Celtic period have been occasionally met with both in Britain and Ireland. Three from the latter country are engraved in 'Horæ Ferales' (Pl. xxi. figs. 1-3), and others in Wilde's Catalogue of the Royal Irish Academy, of which three specimens are here figured (figs. 162, 163, and 164). One fine example from a Yorkshire barrow, and associated with the remains of a chariot, is figured in 'Crania Britannica.' A

<sup>1</sup> Proc. Soc. A. Scot., vol. xxiii. p. 151.

few have been found in Scotland, and are now preserved in the National Collection—notably two from the valley of the

Forth, one of which, found near Falkirk (fig. 165), clearly discloses its relationship to Hallstatt types.

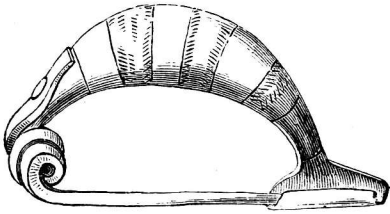


Fig. 162.—*Bronze fibula found in Ireland* (†).

Some bowl-shaped bronze dishes were found in one of three graves after inhumation at Birdlip, near Bristol,<sup>1</sup> which,

judging from the objects associated with them, leave no doubt that they belong to this period. A bronze bowl, 9 inches in

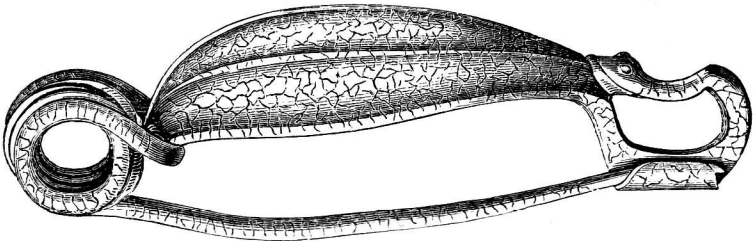


Fig. 163.—*Bronze fibula with snake's head found in Ireland* (†).

diameter, lay inverted over the face of a skeleton; and among the other contents of the cist were a smaller bowl of bronze,

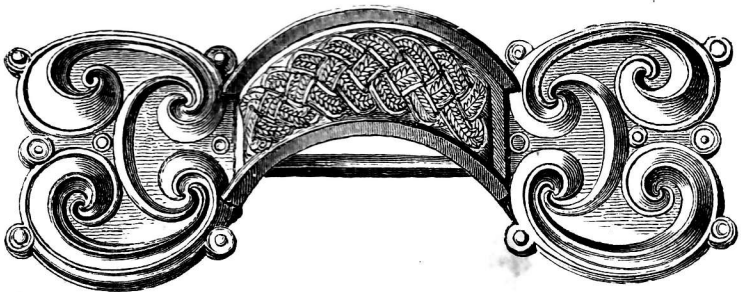


Fig. 164.—*Bronze fibula found on crannog of Ardakillen, Ireland* (†).

a mirror ornamented with characteristic Late Celtic designs, a harp-shaped fibula of silver plated with gold, a bracelet, a key-

<sup>1</sup> Proc. Bristol and Gloucester Arch. Soc., vol. v. p. 137.