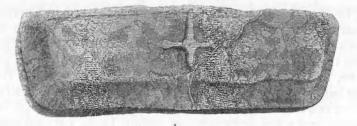
AN ACCOUNT OF COINS AND TREASURE FOUND IN CUERDALE.

In May, 1840, some workmen were employed in Cuerdale, near Preston, in carrying earth to replace the soil which had been washed away from behind a wall formerly built to protect the banks of the river Ribble. In digging for this purpose, they discovered, at a distance of about forty yards from the banks, a large mass of silver, consisting of ingots or bars of various sizes, a few silver armlets tolerably entire, several fragments, and a few ornaments, of various kinds, cut into pieces of different dimensions and weights, amounting to upwards of a thousand ounces, exclusive of about six or seven thousand coins of various descriptions; the whole had been inclosed in a leaden chest, which was so decomposed that only small portions of it could be secured.

The coins have been so fully described, in papers published in the Numismatic Chronicle, that they will not here be alluded to further than is necessary to prove the probable date of the ornaments, which it is the object of this communication to describe. The coins consisted of Anglo-Saxon pennies, pieces of the second race of French kings, a few oriental coins, and some which partially resemble both the Saxon and the French series, which certainly do not belong to any acknowledged dynasty of any country, but were probably struck by some of those piratical northern chiefs who obtained at different times a temporary authority both in England and France. An attentive examination of all these leads to the conclusion, that this mass of treasure was deposited about the year 910, and the ornaments must be considered such as were worn about the time of Alfred, or perhaps somewhat earlier, for none of them appear to have been actually in use at the time of the deposit, but rather ornaments laid aside ready to be broken up, and cut in pieces for the greater convenience of traffic, or for facility in melting. It will be convenient to arrange the treasure in classes, in order to give a clearer idea of the various objects of which it was composed.

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The first to be noticed are ingots; these are of very different forms and dimensions, some are oblong, about $3\frac{1}{4}$ inches long, $1\frac{1}{8}$ wide, and $\frac{3}{4}$ thick; they have been cast in a mould, probably of metal, but perhaps of baked clay, as traces of cracks appear on the under side of some of them, which are proofs also that several ingots have been cast in the same mould; the surface of others shews that some of the moulds were



marked with a cross, fig. 1. These ingots are not adjusted to any particular weight, those cast even in the same mould varying much in weight; some weighing between 3900 and 4000 grains. For the ingots of smaller size also metal-moulds seem



2

to have been used, fig. 2, but by far the greater number of these have been cast in rude hollows formed in sand by the finger, or perhaps a stick; these vary in weight from upwards of 2000 grains to less than 100, and in size from $4\frac{1}{2}$ inches



long to $\frac{1}{2}$ an inch, figs. 3, 4, 5. lumps of silver dropt upon a flat surface, and weighing from about 12 to 70 grains, figs. 6, 7, 8. In many instances,

There are also some mere

these ingots and drops have been hammered on two sides, sometimes on four, figs. 9, 10; perhaps, in some cases, as



a preparation to forming them into ornaments, or articles for use, such as armlets, rings, &c.; but before this intention was fully carried out, they have frequently been cut into pieces of various dimensions and weights.

It would seem, at first sight, most probable that all the ingots and bars in this treasure were made previously to the ornaments found with them, and that they formed part of the materials of their manufacture. But the ingots marked with a cross were doubtless made by a Christian people, such as the northmen, by whom this emblem of their newly embraced religion was adopted on their coins; while the ornaments, as we shall shew, were most probably the work of pagans in the east, and thence imported into Scandinavia. We must therefore consider that some of the ingots and bars were cast in the place of manufacture, whence the ornaments originally came, and that the remainder, i.e., those marked with a cross, were made by the northmen, when they melted down treasure for the purpose of traffic.

Amongst the various manufactured objects entire or in fragments, which were found in this collection, are several armlets in various stages of preparation, from which a tolerably correct idea may be formed of the processes by which they were constructed.

Fig. 11 is a small armlet, probably not quite finished, having been merely hammered into form, the edges and



sides still rough and sharp, and retaining traces of the hammer; it is also entirely without ornament. It is perfectly flat, broad at the middle, becoming gradually narrower towards the extremities, where it terminates in blunt round ends. Armlets of this description vary in breadth at the

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middle from $\frac{1}{4}$ of an inch to $1\frac{1}{4}$, and perhaps more; it is probable that they did not quite encircle the arm, the ends being, when worn, at some distance from each other.

Sometimes the ends were elongated, and rounded into the form of a thick wire, and twisted together into various forms, as represented in some of the figures.

These armlets are generally ornamented, and it may be observed that almost all the ornaments, upon the various articles discovered in this find, are produced by punching with tools of various forms. The patterns are numerous, but the forms of the punches are very few, the variations being produced by combining the forms of more punches than one, or by placing the same or differently formed punches at a greater or less distance from each other, or by varying their direction. Patterns, of the period and localities to which these ornaments belong, are scarcely ever found finished by casting, or chasing ; it would appear also that the use of solder, to unite the various parts of objects, was either little known, or little practised ; for the ends of these ornaments are tied together, and upon other

occasions, where union is necessary, rivets are employed.

On fig. 12 the ornament consists of straight lines, made by a punch resembling a very blunt chisel.

On fig. 13 also the ornament consists of straight lines, with holes interspersed, struck by a round pointed punch; the diagonal lines which are placed crosswise are not formed by the same punch as those which pass directly across the piece; these latter have upon one edge some projections which prove their origin from a common punch, and their difference from the lines which form the cross.



On fig. 14 the chisel-shaped punch, which has been used, has had one side of the edge crenated, the other smooth, and, the lines having been struck at some distance apart, a plain line has been left between them.

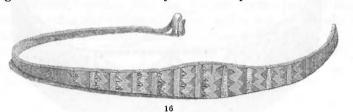


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On fig. 15 the punch has had a triangular point, and, triangles conjoined at their bases having been struck side by side, parallel rows of sunk lozenges have been produced.



Fig. 16 has been made by a similarly



shaped punch, but the parallel rows of triangles are not placed base to base so as to form lozenges, but are separated by a narrow strip of metal; the opposed angles of these sunk triangles form parallel raised zigzags alternating with the narrow lines.



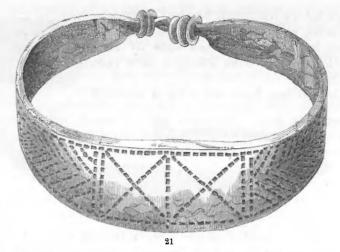
Fig. 17 has been formed in a manner similar to the preceding, but, by a slight change in the position of the punch marks, a series of lozenges or a zigzag line is produced in the ornament, and the straight line between the patterns has been separated into two by the blow of a chisel-shaped punch.

Fig. 18 has been formed by a punch curved like a gouge, as has also fig. 19, but the punch has in this case been much longer.

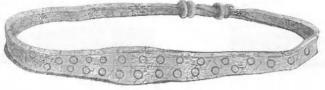


Fig. 20 has a row of raised lozenges along each margin of the armlet, formed by a series of blows by a triangular punch. Fig. 21 is an armlet in the collection of Mr. Assheton,

upon whose property they were disinterred. The punch has



had a small square end, and the ornament is formed by a series of blows in transverse or oblique lines.



 $\mathbf{22}$

Fig. 22 has been ornamented by annular punches, the circles being dispersed without much regard to order.

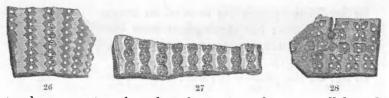


In fig. 23 a similar punch, but of smaller size, has been used, and the circles have been so disposed as to produce a somewhat regularly arranged pattern.

In fig. 24 annular and heart-shaped punches have been used.

In fig. 25 the punch is only heart-shaped.

In fig. 26 the pattern is rather confused, but it seems to have been formed by a punch having a small hole in the centre of a rather broad angular area, the blows having been



struck so near together that the pattern forms parallel sunk lines, with irregular indented edges, and a row of raised circular spots along the middle.

In fig. 27 the punch has had four holes, which gives the pattern the appearance of a series of ovals, with four raised points in the centre of each.

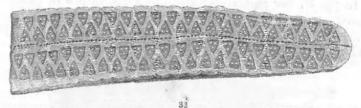
In fig. 28 the punch is egg-shaped, with a dot in the centre; four of these have been struck close together, so as to form a kind of quatrefoil pattern inclosing four dots.



In fig. 29 the pattern has been formed by the use of three punches, one like a blunt chisel, one small triangular, and one triangular inclosing three circular holes; these larger triangles are placed point to point so as to leave between them plain lozenge-shaped spaces.

In fig. 30 the only punch used is triangular, with one hole in the centre.

In fig. 31 the punch is lozenge-shaped, with one large hole in the centre.



In fig. 32 the pattern is formed by a triangular punch inclosing three holes; the line which separates the double series of triangles is formed by repeated blows from a small square blunt punch.

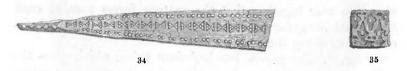
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In fig. 33 the punch has been of an irregular crescent form; the impressions have been joined at the ends, producing rudely waved lines, not very graceful.



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In fig. 34 the pattern is rather elegant, pro-



duced by very simple means; along the centre runs a line composed of triangles, inclosing three points arranged in pairs, apex to apex, so as to form a series of hourglass-shaped forms; along the edges runs a line of small circles. The end is very narrow and taper, and is ornamented by a row of lozenges formed by the spaces left between the pointed ends of the triangular punches.

In fig. 35 the punch is irregularly quatrefoil, with a hole in the centre.





In fig. 36 the pattern is partly formed by triangular punches inclosing three points, and by lines of net-work, the meshes of which are lozenge-shaped, formed by well-arranged impressions of small plain triangular punches.

In fig. 37 the pattern is formed by a double row of punches, placed at some little distance from each other, the form of which it is difficult to describe, but which will be readily understood by reference to the plate.



In fig. 38 the pattern is also formed by a double row of punches, of peculiar form, somewhat conical, the apices placed inwards.





In fig. 39 the pattern is formed by two rows of punches, of nearly similar shape to the preceding, but smaller, and placed at a distance one row below the other.

In fig. 40 the pattern is formed by a punch of similar shape to the two former, placed in the angles of a zigzag ornament, at each point of which is an annulet. A small border runs along the edge of the armlet, formed by a series of contiguous blows from a blunt-pointed punch.

Fig. 41 presents a rather complicated pattern, formed by small square, triangular, and circular punches, arranged with some reference to a punch of peculiar shape, but resembling that noticed in the preceding.

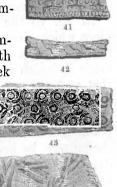
Fig. 42 is a small portion of a narrow armlet, stamped by a small sharpish chisel, with an ornament somewhat resembling the Greek meander.

The pattern upon fig. 43 is formed by two punches, a circular and a semicircular one, so arranged as to form something like a flower.

The pattern of fig. 44 is formed by small blunt chisel-shaped punches, so arranged as to have somewhat of the appearance of foliage, disposed cross-wise, and forming a lozenge-shaped pattern.

All the patterns hitherto described have been upon armlets, perfectly fiat, and hammered into shape from the rough ingot, some broader and longer than others, but all having the same general form, large in the middle, gradually tapering towards the extremities, where they terminate rather abruptly, without any fastening; or they are hammered out into wire-like ends, which are twisted into knots of various forms, as may be seen in the figures.

There are some armlets where more labour has been bestowed, and a more elegant and delicate ornament has been the result. In these the metal has been hammered much



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thinner, and the whole length of the armlet has been made concave towards the arm, convex of course to the outside; the ends of these terminate in thick wires twisted or hooked together.



In fig. 45 the pattern is formed by a triangular punch, inclosing four pellets; by a chisel-like punch forming a double or treble continuous line between the rows of triangular punches; and, in some places, a row of lozenges, formed by a double row of small triangular punches, is introduced to fill up a vacant space.

In fig. 46 the pattern, upon the small piece which alone remains, is so irregularly formed that it is difficult to describe the mode in which it is produced. It appears that along the middle is a row of lozenges formed by triangular punches; on each side

is a row of peculiar formed punches, within which the sharp point of a chisel has been used, to give a kind of richness to the pattern by breaking up the surface by a series of angular diggings, and, along the edge of the armlet, a row of quadrangular punches inclosing a pellet.

In fig. 47 the pattern is far more elegant than in any of the others, is much more elaborate, in much deeper relief, and has the appearance at first sight of having been produced by some very different means; upon examination, however, it will be perceived,

that the effect is produced only by a more skilful and laborious use of instruments of similar description. Along the middle is a row of lozenges formed by a triangular punch, along the edges a row of half lozenges, formed by the same punch; between them is a broad pattern consisting of a zigzag ornament, each point terminating in three pellets. This is formed by a punch similar to that used in fig. 37, placed in





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the same manner, but with more regularity, and struck much deeper into the metal; an annular punch is then used, which by three blows upon the broad space between the bases of the peculiar ornament, produces the three pellets at each point of the zigzag, forming altogether a pattern of very great elegance.

There are also in this Cuerdale treasure several other armlets differing much in form from the preceding; they generally terminate in thick wires twisted together, but like the preceding seem to be entirely formed by the hammer, and ornamented, if ornamented, by punches.

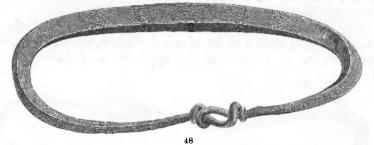


Fig. 48 has a quadrangular section, thickest in the middle, tapering towards the ends, one angle being towards the arm, which appears to have been an inconvenient arrangement for the wearer.



Fig. 49 is perfectly similar to the preceding, except that it is smaller, and that the form of the fastening is somewhat different. Neither of these have any ornament.



Fig. 50 is also a quadrangular, but one of the flat sides is turned towards the arm; it has not on that side any orna-

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ment, but the three other sides have each a row of lozenges formed by a triangular punch.



Fig. 51 is part of an armlet, which has also been quadrangular, but has been spirally twisted; the wirelike end has been cut off.

Fig. 52 is also part of an armlet, apparently unfinished; it is ornamented with a series of spiral grooves, produced by the hammer, so as to give it the appearance of having been twisted.



Fig. 53 is circular, thick in the middle, tapering towards the ends, where it is twisted in a rather unusual manner. This appears to have been entirely formed by a hammer.



Fig. 54 is also circular, fastened in the more usual manner. Upon it is strung a ring formed on the same principle as the armlets, quite flat, tapering to a point at the ends, which are tied together. This practice of fastening rings upon armlets seems to have been very common, several instances of it having occurred in Denmark. One found at Vaalse in the island of Falster, in 1835, had ten rings suspended from it. Fig. 55 appears to be part of an armlet, hammered round,

but unfinished; it was perhaps intended to have terminated in a hook, thin at the bend, increasing towards the end which is abrupt; like those which usually occur upon the gold torques, as that engraved in the Archæological Journal, vol. ii. p. 379.

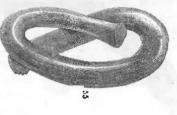


Fig. 56 is circular, perhaps unfinished, the ends appear to have been intended to terminate in heads of serpents or dragons: the marks hammered at the sides being probably meant for some representation of teeth. It cannot be said that these terminations are much like heads of any animal, but they are perhaps less unlike dragons' heads than any thing else; and may therefore be considered as such. If however such has been the intention, it must be remarked that though dragon-like ornaments appear in relief upon some objects, such as will be described in a future page, yet such a termination to an armlet of the tenth century is extremely rare, if not unique. It is very probable that this piece may have been formed by the same people who made the ornaments fig. 91, as the animal form is common to both, and the workmanship about the teeth is similar to that of the figure referred to.

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Fig. 57 is an armlet of a totally different construction; it consists of two pieces of silver, hammered nearly round, thick in the middle, tapering towards the ends, which are twisted together into a knot.

Fig. 58 is somewhat similar but more elegant and complex; it consists of six wires hammered round, and tapering towards the ends, two of these have been twisted together forming three cords, and these cords again are twisted together into a rope forming the armlet; when found it was attached to another of similar form, but just so much smaller as to allow of its lying within; the ends of both were hammered into a four-sided tapering termination, which was fastened by a hook and eye as here represented in fig. 59.

In Mr. Assheton's collection are other armlets formed of only a single rope, the threads of which are of much larger diameter, terminating in the same manner and fastened by a hook and eye; as these vary from the preceding only in size, it has not been deemed necessary to give a figure of them. Fig. 60 is the end of a similarly constructed armlet,

but the ends of the four wires of which it has been con-



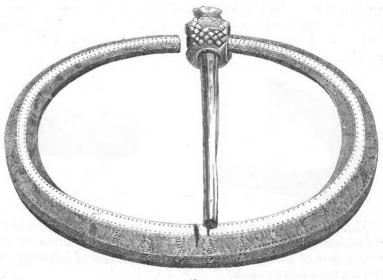
structed have been welded together and hammered to a fine point that it might be easily tied to the other end of the armlet after the usual manner.

Fig. 61 is only a fragment; and of what kind of object might have been unknown, but from

the discovery of some entire ornaments which may have been used either as armlets, or, by the addition of a tongue, as fibulæ. One of these,



of bronze, was discovered near Catarinaholt, and is published in Annaler for Nordisk Oldkyndighed, 1836, 1837. tab. vii. fig. 2. It is a twisted circle terminating in two knobs formed very nearly like the one here figured, and ornamented with circular punches. This however has not any ornament upon the knob, but upon the remains of the circle has a row of lozenges, with a pellet between the external angles.



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The next objects to be noticed are *fibulæ*: one of considerable interest is very large, fig. 62, formed in a manner similar to that of the armlets; it is octagonal, tapering from the middle towards the ends; all the angles, except the two interior, are ornamented by a row of small triangular punches along each side, the whole length of the ornament. The ring of the tongue is ornamented by a series of round globules arranged in lines, crossing each other at right angles.

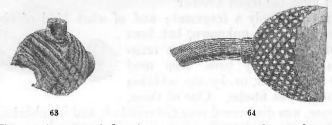


Fig. 63 is part of the ring of a tongue similar to that represented in the preceding figure : it shews more explicitly the mode in which the pattern has been formed. It is in the collection of Mr. Assheton.

Fig. 64 is a portion of a fibula resembling one which was found in a bog near Ballymoney, in the county of Antrim, and now preserved in the public collection in Dublin. The ornament is formed by stamped lines diagonally intersecting, and the squares they enclose are made round by a circular punch. The Irish fibula is figured in the Archæologia, vol. xvii. p. 323.

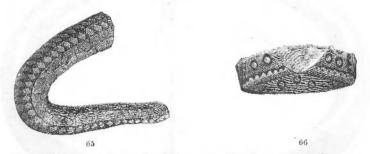


Fig. 65 is a portion of a fibula, similar to fig. 61, also octangular, but only the three external sides have been ornamented with a row of lozenges formed by a double row of impressions from a triangular punch.

from a triangular punch. Fig. 66 is a fragment cut off from some object the exact form of which cannot be ascertained or illustrated from any other specimen in this or similar discoveries. It is ornamented by punches similar to those which have been noticed upon the armlets and fibula.

The next objects are *rings*, also found amongst these treasures.



Fig. 67 is merely a piece of metal hammered flat, thinner and narrower at the ends, and formed into a circle; the ends lapping over, but without any fastening. It is entirely without ornament. In some specimens the metal is hammered and bent into the form of a ring, in the same manner as the flat one here figured.

Figs. 68, 69. These are two rings formed exactly in the same manner as the armlets, figs. 15, 21, and ornamented by the same means.

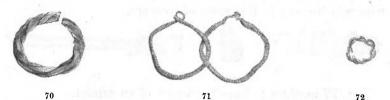


Fig. 70 has been hammered into a small four-sided bar, then twisted, and ultimately formed into a ring, the ends of which meet but have not been united.

Fig. 71. Two wires have been hammered into a roundish form, tapering towards the ends, which have been tied together. Each wire has been ornamented by transverse blows of a blunt chisel, and has the appearance of being also twisted; these two have been entwined together to form one ring, in a manner somewhat similar to the armlet, fig. 57.

Fig. 72 is a portion of a ring formed of two small wires twisted together.

Fig. 73 is a portion of a ring formed of three wires twisted together, each wire having been indented

transversely, so that, when the three are twisted together, each has the appearance of having been previously twisted; and the whole together exactly resembles a common rope.

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Fig. 74 is a portion of a ring formed of two cords like the preceding, soldered longitudinally together.

Fig. 75 is a piece of ribbed wire, such as those of which the preceding have been formed.

Fig. 76 is perhaps a portion of a ring formed to resemble a string of very small beads.

It may be as well to notice in this place the WIRES of various dimensions which have been used in the formation of different objects in this find. The larger wires almost universally bear the marks of the hammer by which they have been rounded, but the smaller ones cannot have been formed by this process; they must have been formed by drawing in some manner not very different from that in use at the present day. The following figures exhibit various dimensions of drawn wire which occur in this mass of treasure.



Fig. 77 appears to have been part of an armlet.

Fig. 78 is a specimen of fine wire, tied into a knot with some care and trouble, but whether with any especial motive it is not easy to pronounce.

Fig. 79 is a portion of some ornament the nature of which cannot be exactly ascertained; it appears to have originally consisted of three loops, the six ends of which have been welded together; but the termination has been cut, and its form can scarcely be conjectured.

The people of these times appear to have been exceedingly ingenious in the construction of CHAINS, of which there are, in this find, some very elegant specimens, and which next claim notice.



Fig. 80 is a fragment in the collection of Mr. Assheton; it consists of a series of rings, compressed together in the middle, and bent so that the two loops thus formed are brought close to each other; the whole then forms two loops presenting openings in opposite directions, through each of which two other loops are passed, forming a kind of double chain one interlinked with the other, each link being immediately dependent upon the next link but one to itself.

Fig. 81 is in the collection of Mr. Assheton; it is composed of small wires, and is constructed in a manner similar to the preceding.



Fig. 82 is part of a chain rather rudely formed of wire, apparently prepared for the purpose of suspending some ornament.

Fig. 83 is also in the collection of Mr. Assheton, it appears to have been composed of links of a form similar to those of the preceding chains, but differently put together, so that when completed the chain is correctly four-sided and hollow.

Fig. 84 is probably a portion of an armlet, in the collection of Mr. Assheton, and

may be included amongst the chains; it is composed of fine wire knitted precisely in the same man-



ner as a modern stocking; it is hollow, so that a large pencil may be easily passed within it; one end is inserted into a flat piece of silver, bent, the sides rivetted together, to contain the silver ring by which the two ends were united to fix it upon the arm.

MISCELLANEOUS OBJECTS.

Fig. 85 is a small object somewhat like a HAMMER in shape, it is furnished with a ring for suspension. When it was first discovered, not attached to any other object, it appeared not improbable that it

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might have been used as a button or fastening of some sort; but, amongst a number of objects of similar age and character discovered in Denmark, three or four of like form, plain or ornamented with triangular punches, occurred, one of which was suspended, with some plain round wires, to a small ring; the whole having the appearance of an ornament of dress. It is very probable that it may have had some symbolical meaning.

Fig. 86 has now the appearance of a HOOK; it has been hammered into its present form, but

whether it was formed into a hook originally, or was afterwards accidentally bent into that form. may be

tally bent into that form, may be ⁸⁶ doubted. It may have been originally suspended from a ring, like the Danish ornament just mentioned; or perhaps, more probably, it was the tongue of a fibula.

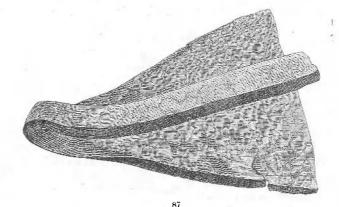


Fig. 87. There are two objects of this form; both are entire, no piece having been cut off, as is the case with by far the greater number of objects of which this find was composed. They are formed entirely by the hammer, very rudely, and are apparently unfinished. For what they were intended is a matter of uncertainty, as no finished ornament of similar form has been discovered.

I propose to notice in a future number the objects forming the next class of ornaments, which are of a very different character from those which have already been described, both in their style of workmanship and in the nature of the devices with which they are decorated.

EDWARD HAWKINS.

Archaeologieal Journal.

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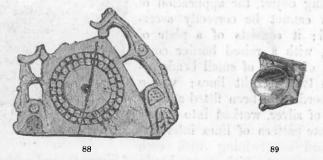
SEPTEMBER, 1847.

AN ACCOUNT OF COINS AND TREASURE FOUND IN CUERDALE.—(Continued.)

THE objects forming the next class of ornaments which require notice are of a very different character from those which have already been described, both in the style of workmanship and in the nature of the devices with which they are decorated.

This find does not afford any specimen of an attempt at producing a round figure, nor any attempt at sculpture; but there are a few fragments which shew that the makers of them were not withheld by any superstitious repugnance from producing imitations, rude, indeed very rude, of animal forms.

Fig. 88 is a fragment, of what it is difficult even to conjecture; it appears to have been produced entirely by hammer and punches. In the middle is a depressed circle, containing



two concentric circles of globules, within which has been inserted probably a button or knob similar to fig. 89. The figures at the sides are evidently intended for dragons; the

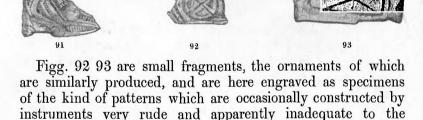
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surface is quite flat and smooth; the teeth, limbs, &c., are all produced by repeated blows of a small punch; not by casting or by chasing. Of knobs similar to number 89 there are several specimens of different sizes.

Fig. 90 is entire, and appears to have been the ornament at the end of a strap which has been inserted into a slit, and fastened by two rivets.

The principal ornament is composed of a sort of cross with a square in the centre, and a triangle at the end of each limb; in each angle is a dragon. The whole of this ornament appears to have been produced by the hammer and punch, not by the graver.

Fig. 91 is a small fragment similarly manufactured, and ornamented with portions of a snake or dragon.



purpose. Fig. 94 is a very singular and interesting object, the application of which cannot be correctly ascertained; it consists of a plate of silver, with a raised border composed of a row of small beads between two straight lines; within this border has been fitted another plate of silver, worked into a very intricate pattern of lines intersecting and intertwining with each

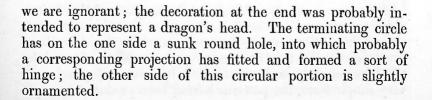


other, amongst which appear heads of serpents, and perhaps a lion. Knobs with cord-like wire round their bases serve at once for ornaments and rivets. The spaces between the lines are perforated.

Fig. 95 is only a fragment of what must originally have been a very rich ornament; it consists of a plate of silver, the under side of which has two broad grooves, into which probably some other object has been fitted. The upper side is decorated with

circular knobs, of various sizes, encircled by one, two, or three wires, indented transversely so as to give the appearance of a row of beads, or, diagonally, to look like cord. Similar wires are also used across or along the object, to give richness to the pattern.

Fig. 96 is a small specimen of a similar description of workmanship; a wire transversely marked to imitate a twist, has been soldered along the edge of the object, round the small pellets composing the rosette, and round the circle, in the centre of which was probably a button like fig. 89. Fig. 97 is a fragment of some object of the form of which







AN ACCOUNT OF COINS AND TREASURE

Fig. 98 is a fragment the object of which cannot now be ascertained; when entire it has had a border formed of a corded pattern between two broad lines, and was decorated by a sort of fringe, composed of corded loops crossing each other, and supporting what appear to be sheep's heads, the large head at the extremity being perhaps intended for that of a bull.



Fig. 99 is a four-sided ornament, which has been originally fastened upon something else, possibly a leathern strap, for at the four corners are still remaining four rivets, and at one end are the remains of a thin fillet of silver, still fastened by another rivet. This object is singularly decorated with four lions, placed tail to tail, their heads forming rather large projections at the corners. At each end, between the lions' heads,



is a bull's head. This ornament has so strong a resemblance to the decorations which are found upon the capitals of some columns of the very earliest period of Christian architecture in this country, that it would be difficult to suppose that it was not the workmanship of the same people. It has been cast, carved with a graving tool, and gilt. Much the same observation applies to fig. 100, which is a fibula, the tongue of which has been lost; or, perhaps only a loop; (see Annaler for Nordisk Oldkindighed, 1844-5, tab. ii. fig. 4.) it is decorated with four birds feeding. It appears to have been cast, and rudely finished by a graving tool and the corner of a sharp punch; it has been gilt.

From the description which has been given of the various objects discovered at Cuerdale, it appears that there are some remarkable differences in the mode in which they have been constructed. By far the greater part have been formed by the hammer only, and ornamented by means of punches of very simple form, the patterns having been produced by repe-

titions of the same punch, or by combinations of two or more; the connections of the two ends of the armlets or rings have also been effected solely by the hammer; no attempt has been made to produce any resemblance to any form of organic life, unless the supposed attempt at a dragon's head in fig. 56 be produced as an exception. The same absence of any other instruments than the hammer and the punch appears in almost all the objects belonging to the same period which have been discovered in this and other countries, and the cause of this mode of operation would form an interesting subject of investigation. It appears as if the result obtained by the hammer might probably have been accomplished with greater ease and more elegance by other means; and it might therefore be supposed that the people by whom these ornaments were constructed were generally unacquainted with any other mode of producing the effect required. And again, the absence of all resemblance to any created being might be supposed to arise from the incompetence of the artists, or it may have been occasioned by some religious or superstitious objection to such representations. This leads to an examination of the question where and by what people these objects were manufactured. The coins found with them were, with the exception of 27 pieces, either English, French, or, as we believe, struck by the sea kings of the north; at first sight therefore the presumption would be that amongst these three classes the manufacturers must be looked for ; but as the 27 coins excepted are oriental, it is not impossible that these objects may have been fabricated in the east. Now it must be observed that none of the ornaments appear to have been in a state fit for wear; all have been crushed together for convenience of packing, or have been cut to pieces; they do not therefore appear to have been the personal ornaments then actually in use by the persons who were owners of the property at the time the deposit was made; and it is not unreasonable to suppose that they may have come into the possession of the then proprietors by the same channel and from the same source as the 27 coins; in short, they may have been oriental ornaments.

This leads to the enquiry as to the discoveries which have occurred elsewhere of ornaments of similar fabric. The most important of these finds was that of Vaalse in the island of Falster, in the year 1835, of which an account has been given in the Annaler for Nordisk Oldkindighed for 1842-3. This find consisted of classes of objects clearly resembling those found in Cuerdale, viz., coins of Germany, England, &c., and a considerable number of oriental; the bullion also was of a similar description, bars, armlets, and ornaments, formed by the hammer and ornamented by the punch, similiar to fig. 1 and fig. 70; objects with northern ornaments as in figg. 88 to 95, and others of manufacture similar to figg. 97, &c.

The evidence in favour of any particular source whence the peculiar objects under consideration may have been derived, is exactly the same in the two finds of Cuerdale and Vaalse.

At Catharinenhof, not far from Riga, were discovered some bronze ornaments so similar in construction and ornament as to leave no doubt of their having the same origin as these of Cuerdale, but with them there were not any other objects to indicate from whence they came.

At Halton-Moor a very fine silver armlet of the same description of work was discovered, together with coins of Canute, and very rude pieces, apparently German.

About two or three years since some entire armlets of twisted silver, like fig. 57—60, with fragments of several others cut into pieces, and also some rough ingots, were found about two miles from Christiana in Sweden, and with them some oriental coins.

In public and private collections in the north of Europe several ornaments of this description are preserved, but unfortunately no accurate statement exists of the peculiar circumstances under which they were found, nor of the precise spot where they were disinterred; but enough of information respecting them has been handed down to enable the enquirer to ascertain with sufficient accuracy, the districts from whence these objects have been derived.

It appears to be clear that such treasures are discovered generally near the sea coast, in places accessible to and frequented by the maritime chieftains of the north; that they are very rarely discovered in the interior of any of our northern countries; that where they have been found, Cufic or oriental coins have been found likewise, and that they have not been found in districts where Cufic coins also have not been found. The evidence then is strong in favour of the oriental origin of these objects, and viewed as such, they, with the coins which are usually found in the same districts,

afford an interesting illustration of the commerce of the north during a period of which perhaps the commencement of the tenth century was the most active epoch. Such deposits, it has been seen, have been found in the north of England, more frequently in Denmark, on the southern coast of Sweden, on the islands of Falster, Bornholm, Oland, and still more frequently in Gothland, which appears to have been the chief station for carrying on the intercourse between the east and the north. It is probable that the traders from the districts around the Caspian sea worked their way up the Volga to Novogorod, and then across to Riga, where they were met by the maritime chieftains of the north, who, partly warriors, partly merchants, formed their chief depot in Gothland, from whence they carried the produce of their arms and their trade to those various parts of Europe to which their predatory or commercial disposition led them. It is along the coast that we might most reasonably expect the discovery of these objects, and there it is exactly that they are found, and in such proportions also as might be expected if Gothland were the great depot from which Europe was supplied with the produce of the east; in proportion to the distance from Gothland, these discoveries become less frequent, and where there is no reason to believe that the northern seamen had any communication, these articles are not found at all.

The absence of any representation of created beings is a further argument in favour of the eastern origin of these ornaments; the oriental coins generally found with them, or in the same neighbourhood, were struck by the followers of Mohammed, who rejected with abhorrence any such representations. On the contrary, the taste of the Saxons and northern nations, founded and formed in a great degree upon a Greek and Roman origin, led them to adopt animal forms, barbarous and grotesque indeed, in almost all their decorations.

There are, however, archæologists of distinguished reputation who do not take the same view of the subject as is here represented, and are of opinion that the ornaments were of northern manufacture, and that they may as probably have been deposited on their way towards the east as from it; if such however had been the case, it would be reasonable to expect that such things would be found not unfrequently in the interior of those northern countries where they are supposed to have been made, and also in countries with 196

which the northern seamen had little or no intercourse, and also with which no oriental intercourse can be traced. Such however is not the case, and it is scarcely consistent with sound reasoning upon all the facts of the case, as far as they are at present known to us, to assign any but an oriental origin to those objects. There is one branch of evidence wanting, necessary perhaps to entire conviction, which is the actual discovery of such objects in the east, or in those parts of Russia along which the oriental traders took their way when proceeding to meet the northern traders in Gothland. This evidence, it is expected that a better knowledge of Russian archæology may produce, and it is with much hope and expectation that we look forward to the results of those examinations of Russian collections and investigations of Russian antiquities which will shortly be conducted upon the spot by Mr. Worsaae, who has contributed so much to our knowledge of primeval remains by his admirable little work on the olden time of Denmark, and by whose experience and suggestions I have been greatly aided in forming the views set forth in this paper.

The next class of objects, such as figg. 88 et sqq., are of a totally different description and character; they were probably hammered into shape, and the decorations appear to have been made by punches; not however by repeated blows of the same punch producing a pattern by a methodical arrangement of the same forms, but by using a punch instead of a graver to produce unvaried ornaments resembling in some degree animal or vegetable productions, or forms which probably admitted of some symbolical interpretation. In fig. 90 may be seen four repetitions of some animal in the angles of a cross having triangular terminations to each limb; if these forms are compared with the ornaments which decorate a beautiful gold and enamel ring or crown, bearing the name of Ethelwulf Rex, and now preserved in the British Museum, no doubt whatever will be entertained that the two articles were produced by a people who were actuated by the same motive, and directed by the same taste. Amongst the pieces found in the Island Falster, tab. ii. f. 8, is a circular object decorated with a trefoil ornament entirely resembling another of the forms which appears upon this ring of Ethelwulf. In fig. 90, and other similar fragments, will be observed forms which we immediately recognise as resembling those on the ancient pillars and crosses which abound in various northern countries. All nations in the earliest stages of their existence seem to have delighted in decorating their persons with natural objects or imitations of them, and to have indulged themselves in making images of animals and human beings, either for ornament or worship; probably, objects originally intended only for ornament degenerated into objects of superstitious worship. Such was probably the position of the northern nations when their intercourse with the Romans commenced; after that period they imitated the forms of their more cultivated visitors, and their coins and other works of art bear evident marks of the influence of Greece and Rome. Such influence was indeed feeble and ineffective, still however it existed, and as the religion they professed did not in their estimation prohibit the representation of human or animal forms, they employed them in decoration, as nature had prompted, and Rome had instructed them. The ornaments therefore immediately under notice, may safely be considered as the productions of those northern districts in which they are generally found.

The remaining class of ornaments to be examined varies remarkably in workmanship from those which have been already described. In those there has been reason to believe that the rude instruments of the hammer and punch alone were used; but upon these there are evidences of much more advanced modes of operation. There are wires of various dimensions, the thicker evidently formed by the hammer, and belonging to the class which has already been considered oriental; but the wires of smaller diameter, scarcely larger than a hair, must have been drawn through a gauge, very much in the manner in which such things are manufactured in the present day. It is not only in the wire itself that evidence is perceptible of a more ingenious process of manufacture, but in the mode of applying it, in the production of several useful and elegant ornaments; by making transverse bars across the wire, as in figg. 71 and 75, previous to twisting two of them together, the whole when completed has the appearance of a cord of many threads. The chain, fig. 80, is very elegant in form, and rather intricate in arrangement; the small fragment, fig. 81, which is a portion of a quadrangular tube, is perhaps more elegant, and displays more ingenuity. The armlet, fig. 81, is perhaps still more so, the wire itself is ъd

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finer and more delicate, the mode of operating also different; that (80) must have been made by inserting the separate links into each other, and then uniting the ends by soldering; in this (84) the article is produced from one continuous wire knitted precisely as a modern stocking is made, as will be perceived by examining accurately the forms of the stitches both on the inside and the outside.

In the description of some of the objects the use of solder was mentioned, and it will be seen by examination of the fragments such as figg. 95, 96, that such a means must have been adopted in their formation; upon a thin plate of silver, a small stud is soldered down, round it is soldered a thinnish wire, the upper side of which is marked with transverse lines, which give it a twisted appearance, and similar wires are fastened in a similar manner forming curves and spirals, and producing patterns of considerable elegance; and it is somewhat remarkable that silver ornaments, constructed in a manner perfectly similar, are at this day manufactured on the coast of Lycia and in the Greek islands; it is not therefore impossible but that this portion of the Cuerdale find may have derived its origin from the east; yet on the other hand the pattern upon fig. 94 so much resembles the intricate patterns upon very early crosses and architectural remains, that it is difficult to assign to it any other than a northern origin; but the round knobs surrounded by ribbed wire connect it with figg. 95, 96, and claim for both a common origin.

It has been already observed that hardly any of the various ornaments comprised in this find are in a condition to have been worn, but they have been crushed together for the convenience of package, or, like the ingots and bars, have been cut into pieces to facilitate the adjustment in the scales of a required weight. This find seems to afford a rational explanation of the mode by which in those days trade and commerce were conducted : it would seem that for ordinary transactions, money, actual coins, struck with some device, adjusted to a correct weight, well known and easily recognisable by all persons, were commonly used; that in transactions of larger amount, silver, in whatever form, was used, not as money, but as an article of barter; any rude ingot, or bar, or ornament being thrown into the scale, the party being provided with a number of pieces cut off at random, of various sizes, in order to adjust the weight to the value required. Various kinds of personal ornaments, such as armlets, fibulæ, rings, &c., have been called ring-money, and it has been maintained that such objects were formed for the purpose of circulating as money, that they were adjusted to a regulated weight, and that their value was universally recognised as soon as they were looked at. We believe the whole of this notion to be erroneous; that all these ornaments and lumps of metal were negotiated always by weight and never by tale, and that it was for the purpose of facilitating mercantile transactions so conducted that these objects were ready cut up into pieces of such various dimensions, as we find them in this mass of Cuerdale treasure. It is not impossible but that this division into small pieces may have had a double object, viz., the convenience of traffic, as has been already mentioned, and the preparation for coining money. It has already been stated as highly probable that a large portion of the coins discovered at Cuerdale were struck by the northern sea-kings, and it is remarkable that when the whole mass of silver was looked at in the state in which it was disinterred, it had the strongest possible resemblance to the stock of a maker of money in the east at the present day, where the process is to run the silver into holes of various sizes made in a box of sand, or on the ground, according to the quantity of bullion the coiner has got to melt at any particular moment. These ingots are cut into small pieces, adjusted to weight, then melted into globules, flattened and struck with the proper type for circulation. Though this similarity of appearance exists, it is not probable that such was the object with the depositors of the Cuerdale treasure, as no implements of any kind for the purposes of coining were found.

EDWARD HAWKINS.