

## IV.

NOTICE OF THE DISCOVERY OF A MASSIVE SILVER CHAIN OF PLAIN DOUBLE RINGS OR LINKS AT HORDWELL, BERWICKSHIRE. BY THE HON. LORD DUNGLAS. WITH NOTES OF SIMILAR SILVER CHAINS FOUND IN SCOTLAND, BY JOHN ALEXANDER SMITH, M.D., SEC. F.S.A. SCOT.

1. *Berwickshire, Hordwell*.—Lord Dunglas communicates the following account of the discovery of the chain now exhibited :—

“DOUGLAS CASTLE, LANARK,  
(19th October 1880.)

“The chain now sent for exhibition to the Society of Antiquaries was found by Mr Aitcheson, the farmer at Hordwell on Lammermoor, when he was sowing turnips in June last. It caught in the machine, and probably, he thinks, had been dragged for some distance the day before, when the field had been ploughed and harrowed deeper than it had ever been before since he had been on the farm. He can show me the spot where he first saw it, but probably this may be far from the place where the plough first turned it up, therefore I fear further search would be time thrown away. In first finding it the chain was covered with dirt, and he had no idea of its value or what metal it was made of, but thought it was a chain for the end of a carriage pole, and it was taken to the cartshed, where it remained for some time. In time he wanted a pulley chain for lifting sacks and he thought this would do, and hung it on a hook and pulled it to try its strength ; in doing this the end link was broken, and then he discovered what it was made of. This link was a single one, and rather larger than the others as far as Mr Aitcheson can remember. He thinks very little may have been taken off the ends when it was cut with a knife to see what metal it was made of.”

This chain is formed of large plain rings, the silver of which it is composed having been hammered into rods of equal thickness throughout,

and then each has been bent into a circle, the flattened extremities of the rod being thus brought simply into close apposition without soldering, and so forming a large ring. There are twenty pairs of these rings, each measuring  $1\frac{2}{3}$  inch in diameter, and  $\frac{1}{4}$  of an inch in thickness, there are a slightly larger pair at one extremity of the chain, these are about  $1\frac{5}{8}$  inch in diameter, and  $\frac{1}{4}$  inch in thickness, and a single broken one at the other extremity, the other ring of this pair being probably absent. There is, besides, a larger pennanular ring attached to one extremity of the chain, which measures 2 inches in diameter by 1 inch in breadth. It is not simply rounded like the others, but is rounded internally, its outer surface being flat with a rounded bead projecting on each of its edges. The opening of this pennanular ring is fully  $\frac{3}{8}$  of an inch; it seems therefore to correspond in size to the diameter of the larger rings at the extremities of the chain, and thus allows them to be attached to it by being simply passed through the opening, and so both ends of the chain are fastened together as it were by a clasp. The entire chain now consists of forty-one rings, and the pennanular ring, and its total length is  $17\frac{5}{8}$  inches; it weighs 57 ounces 4 dwts. troy.

This chain belongs to a most interesting class of ancient chains, which, as far as I am aware, have as yet been found only in Scotland. It has the external flat band of its large terminal pennanular link quite plain or unornamented; others in the Museum of the Society, to which I shall refer, have however cut on them some of the so-called "Symbols," found on the "Sculptured Stones of Scotland."

In a communication read before the Society, May 12th 1872, and published in vol. x. of the "Proceedings," I included some details of these "Ancient Scottish Silver Chains," gave conjectures as to their supposed use, and attempted to show that they belonged probably to the "Late Celtic period of Art in Scotland." The chains all correspond closely in length, though differing in the size of the rings, and from the clasp-like character of the large pennanular ring, ornamented in some cases on each side of its opening; the idea was suggested that they may have been worn on the neck as an official or personal, though somewhat weighty and

cumbrous, decoration, and I then gave various references to the use of chains worn on the neck in former times.

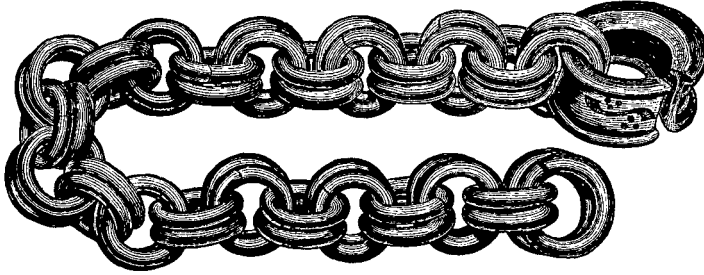
Then as their incised and decorated ornaments, some of them having been inlaid with coloured enamels, are of the same character and pattern as many of the characteristic "symbols" cut on the "Sculptured Stones of Scotland," of which we have in the Museum also another example, cut on a silver leaf-shaped plate, found with other silver relics at Norries Law, near Largo; and as many of these symbols display in the details of their ornament the peculiar C-like curves of the "Late Celtic period of Art," there can be little doubt that we are entitled to class these silver chains as also belonging to the same style of art, and therefore of the same degree of antiquity.

I shall not, however, enter farther into these matters here, but shall simply add notes of all the different specimens of these silver chains now known.

II. *Caledonian Canal*.—The first discovered and the largest of these chains was found in 1809, in a bed of gravel about 2 feet from the surface, while the Caledonian Canal was being made, and is now in our Museum. It consists of sixteen pairs of plain rings, and a single ring at one extremity of the chain, thirty-three in total number, the single ring at one extremity and the pair of rings at the other being rather larger in size. It measures now 18 inches in length, and weighs 92 oz. 2 dwts. troy. The single ring at one extremity measures  $2\frac{2}{8}$  inches in diameter, and the pair at the other extremity of the chain  $2\frac{2}{8}$  inches in diameter, the thickness of the terminal rings is  $\frac{3}{8}$  of an inch; the other rings measure  $1\frac{6}{8}$  inch in diameter and  $\frac{3}{8}$  in thickness. It is probable that a plain ring is now wanting at one extremity, and also its large terminal pennisular ring which was not preserved, as it was stated at the time of its discovery that there was also "a large grooved ring which had not reached Edinburgh with the chain." This shows that it was of an exactly similar character to the others described.

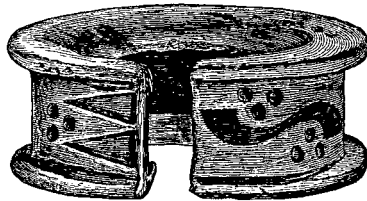
III. *Aberdeenshire, Parkhill*.—The next chain is complete, consisting

of twenty-three pairs of plain rings, and a large pennanular ring, forty-seven in all. It was found in digging at Parkhill, parish of New Machar,



Silver Chain found at Parkhill, Aberdeenshire ( $17\frac{1}{2}$  inches in length).

Aberdeenshire (1864). The rings measure each  $1\frac{2}{8}$  in diameter and about  $\frac{2}{8}$  of an inch in thickness, the last pair being a little larger,  $1\frac{3}{8}$  inch in diameter. The pennanular ring is  $1\frac{6}{8}$  inch in diameter,  $\frac{9}{8}$  of an inch in

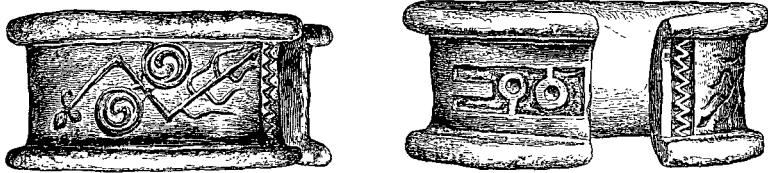


Pennanular Ring of Silver Chain found at Parkhill. (Actual size.)

breadth, and  $\frac{2}{8}$  inch in thickness; its opening measures  $\frac{3}{8}$  of an inch, and a deep groove  $\frac{3}{8}$  of an inch in breadth is cut along its whole inner surface. The chain measures  $16\frac{1}{2}$  inches in total length and  $17\frac{1}{2}$  including the larger pennanular ring, and weighs 39 oz. 15 dwts. troy. The large ring has incised on it the double curved ornament and triple dots of the "Sculptured Stones" on one side of the opening, and on the other two acute-angled triangles side by side and between their points the triple dots are repeated. These figures show traces of having been filled with red enamel.

IV. *East Lothian, Haddington*.—This silver chain was found (1873) in Haddington, and not near Holyrood as was formerly stated. The links are rather smaller in size than the last described chain, measuring  $\frac{7}{8}$  of an inch in diameter and  $\frac{3}{16}$  of an inch in thickness. There are thirty-one pairs, and one single link, or sixty-three rings in all; probably a plain ring and also the pennisular ring are now wanting. It is now  $16\frac{6}{8}$  inches in length, and weighs 22 oz. 7 dwts. troy.

V. *Lanarkshire, Whitecleuch*.—This chain is also referred to in my paper, but at that time no correct information could be got as to where it was found, and it was then believed to have been found near Drumlanrig in Dumfriesshire. The chain was exhibited, and an account of it was



Pennisular Ring of Chain found at Whitecleuch. (Actual size.)

read before the Society by J. Gilchrist Clark of Speddoch, Esq., F.S.A. Scot., on 8th March 1880, which is published in last years "Proceedings," New Series, vol. ii. p. 223. It was found at Whitecleuch, on the farm of Shieldholm, Lanarkshire, about 18 inches below the surface, in the side of a sheep drain. It is perfect, and consists of twenty-two pairs of rings and a large pennisular one, forty-five in all; each of the rings measures  $1\frac{1}{2}$  inches in diameter and  $\frac{2}{8}$  in thickness; the two terminal rings are  $1\frac{6}{8}$  inches in diameter; the pennisular ring is 2 inches in diameter,  $\frac{7}{8}$  in breadth, and  $\frac{3}{8}$  in thickness; its opening is  $\frac{3}{8}$  of an inch, and there is incised on one side of it the "spectacle and zigzag" ornament, and on the other the "oblong ornament;" both so-called "symbols" of the "Sculptured Stones;" the inner surface of the ring is simply rounded in character (see woodcut). It measures 20 inches in total length, and weighs 62 oz. 12 dwts. troy. It was stated by Mr Clark that the silver of which it is

made is *not quite pure*. It is now exhibited by His Grace the Duke of Buccleuch in the Museum of the Society.

VI. *Berwickshire, Greenlaw*.—Another instance of the discovery of a large and massive chain, may also be noticed; probably from the use it was being put to of a very similar character to those now described. It is mentioned by Sir Walter Elliot in his opening address to the Berwickshire Naturalists' Club for 1869 ("History," vol. vi.), and was found near Greenlaw, and given to the blacksmith there named Mitchell, who, when about to use it for repairing the "rig-wooddie" or "rig-body" (that is the rope or chain that crosses the back of the horse and supports the shafts) of a cart broken in passing through the town, found that the large black chain was not iron, as he supposed, but apparently silver. The Rev. John H. Walker of Greenlaw tells me, the story of the chain and its great weight, is still remembered in the parish, but no one survives who had seen it, and Mr Matheson, blacksmith, whose father succeeded to Mitchell, thinks it must have been disposed of by Mitchell some ninety or perhaps a hundred years ago; so that, unfortunately, no trace of it can now be got.

As no analysis has been made of any of these silver chains, a very small quantity was taken from the broken ring of the chain found at Hordwell, by a careful analytical chemist, W. Ivison Macadam, F.I.C., F.C.S., Lecturer on Chemistry, &c., and he has favoured me with the following notes and analysis of the metal of which the chain is composed; which shows that the character of the metal corresponds with the supposed antiquity of the chain:—

"ANALYTICAL LABORATORY, SURGEONS' HALL,  
*Edinburgh, 17th December 1880.*

"Analysis of Silver Chain found at Hordwell, received from Dr John Alexander Smith, Society of Antiquaries of Scotland.

Silver,	. . . . .	76.505
Gold,	. . . . .	4.237
Copper,	. . . . .	19.183
		99.925

“The above results show that the Hordwell chain has been made, most probably, directly from an ore of silver by a rough metallurgic process.

“W. IVISON MACADAM, F.I.C., F.C.S.,  
*Lecturer on Chemistry.*”

The following letter is a reply to some enquiries of mine in reference to the analysis of the chain :—

*Edinburgh, 28th December 1880.*

“DEAR SIR,—I have your note of the 23d. You are correct in stating that a large proportion of the silver now produced in this country is obtained from galena (lead ore), and that the process of extracting silver from its ores by means of a lead flux is one of long standing.

“The chief sources of silver which were worked in this country in past ages were ores of that metal, such as Argentite, of which there is a vein at Alva, Stirlingshire, where also Fahlore or Fahlerz<sup>1</sup> is found, and it is possible that the copper may have been derived from this source. The presence of such a large proportion of gold goes far to prove rough metallurgy. Had the chain been made lately, no such percentage of gold would have been left in the alloy.

“The composition of British coin and plate is :—

Silver,	92.5
Copper,	7.5
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	100.0

“Yours sincerely,

W. IVISON MACADAM.”

<sup>1</sup> Grey copper ore, often argentiferous.