

ADDITIONAL NOTES ON SMALL ORNAMENTED STONE BALLS FOUND
IN DIFFERENT PARTS OF SCOTLAND, ETC. BY JOHN ALEXANDER
SMITH, M.D., F.R.S.E., ETC. (SEE p. 29.)

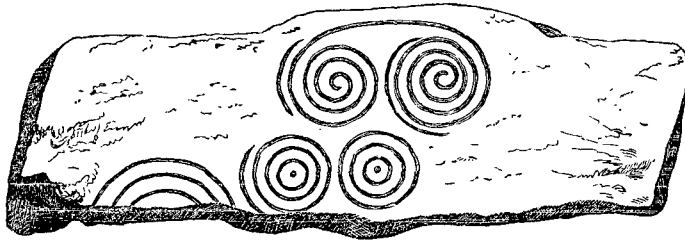
On the Incised Ornamentation of the Stone Ball found at Glasterlaw, Frioekheim, Forfarshire, &c.—Since the paper on the small Stone Balls was read, Dr J. C. Howden has been able to send me for examination the stone ball found at Glasterlaw, which I have already partially described. This ball was found on the farm of Freelands at Glasterlaw, and is of a blackish colour externally, but shows a white colour where chipped; it seems to be formed of a fine-grained clay-slate, like the ornamented stone balls found at Towie and Elgin.



Stone Ball found at Freelands, Glasterlaw ($2\frac{3}{16}$ inches in diameter).

The six projecting discs of this ball are small compared to the diameter of the ball, and as already mentioned, the interspaces between them are therefore much larger than usual. The circular discs are plain or unornamented, and project rather unsymmetrically from the surface of the ball. The large interspaces between the discs are on one side of the ball partially covered with two incised patterns. One of these is a double spiral figure, both spirals proceeding from the opposite sides of

the same central spot, and increasing outwards until they adjoin one of the projecting discs; it measures nearly an inch across in its greatest diameter. The other figure is a series of three rudely formed triangles, one enclosed within another, the outer measuring two inches across the base and an inch and a half in height. (See the annexed figure.) There are one or two slight scratches on the other interspaces of this ball, which look at first sight like rudely formed letters; these, however, are not cut in the bold way that the ornamental patterns are, and from their undecided character are probably mere accidental scratches of a later date. Similar triangular figures to those on this ball, but of less size and regularity, are cut on some of the other balls, already described, apparently to fill up the spaces between the circular discs; as in one of those now in the Perth Museum (see Plate I. fig. 5).



Stone found at Eday, Orkney (3 feet 6 inches long).

The spiral figure or volute occurs, as already shown, in a series of more complex figures on the stone ball with four discs found at Towie, Aberdeenshire. Compound and simple volutes are also cut on the somewhat similar ball, with four projecting discs, at Elgin (see figures of these balls, p. 44, and Plate I. fig. 4).

These spirals or volutes occur both in single and compound forms, as favourite figures cut, generally of a large size, on various rude sculptured stones found in different parts of the country. I subjoin a sketch of a stone found in what was popularly called a Pict's House, in the island of Eday, Orkney, and now preserved in our Museum, which

shows a couple of volutes, and along with them the more common figures of concentric circles, also incised on its surface.¹

A similar style of incised volute and spiral ornamentation also occurs sculptured, on a large scale, on various stones found in the chambered tumuli of New Grange and Dowth, on the Boyne, not far from Drogheda, Ireland. Sir James Simpson described as his seventh type of sculpturing—"Concentric Circular lines of the Form of a Spiral or Volute." He says, "The volute or spiral is perhaps the rarest of the forms of circular ring cuttings in Great Britain; but this type seems common on the incised stones of Ireland and Brittany." (See Sir James Y. Simpson's paper in Vol. VI. of our Proceedings, "On Ancient Sculpturings of Cups and Concentric Rings," &c. p. 7.)

The presence of this same style of ornament, though necessarily on a small scale, on these different stone balls, which I believe to be the stone heads of maces, is therefore of considerable interest. It shows either the very long-continued use and fashion of a favourite style of simple ornament; or it may also suggest at least the possibility that some of these ruder stones and chambered cairns, which display the same style of ornament sculptured so abundantly, may actually turn out not to belong to such a very remote age as has been generally assigned to them by antiquaries, but really to a comparatively recent period.

In either view, the fact of the correspondence of the ornament on these stone balls, some of which may date from about the period of the Norman conquest, and on the rude sculptured stones, which have been generally considered to belong to a period of remote antiquity, is at least curious and well worthy of notice.

Stone Balls found at East Braikie, Forfarshire, and Tullo of Garvock, Kincardineshire.—Dr Howden was also polite enough to send me the stone balls found at East Braikie and Tullo of Garvock, already described. Placing the first of these balls before me resting on one of its four discs, the other three rise up towards the top of the ball, and are deeply grooved between, suggesting how easily it might be fixed or tied, in this way, to the top of a short wooden handle. While the latter ball, with only three projecting discs, though ruder in character, and less

¹ Proc. Soc. Antiq. Scot., Vol. IV. p. 185.

regular in form, has a large disc below and two side by side above, with still deeper grooves between them, which could easily accommodate a strong thong or tie to fix it also on its wooden handle. Thus treated, these stone balls would make most efficient maces, which, either thrown from or struck with the hand of a strong man, would be very formidable weapons indeed.

Stone Balls found at Strathwilkie, and Buckhall, Aberdeenshire.—Dr Andrew Robertson, F.S.A., Scot., &c., of Hopewell, Tarland, Aberdeenshire, has recently informed me that both of these stone balls, already described, and now preserved at Balmoral, nearly correspond in weight. The former weighing one pound two ounces and a half, and the latter one pound two ounces.

Stone Balls, Museum, Perthshire.—Quite recently I have been favoured with a letter from Dr John Bower, Montreal Cottage, the Honorary Secretary of the Literary and Antiquarian Society, Perth, who has been carefully examining the old records of the Society for me, and has at last discovered the forgotten history of the three ornamented stone balls now preserved in the Museum at Perth.

Two of these balls were presented to the Museum by John Murray, jun., Esq. of Murrayshall, in November 1832; and in reply to recent inquiries, J. Murray Graham of Murrayshall, Esq., writes, that these stone balls, presented by him to the Perth Museum, "were found in the fields between Murrayshall and New Scone, that is, in the lower part of the valley of Strathmore between the Sidlaw Hills and the Tay." Mr Murray Graham adds, "I had a bullet of stone of the same kind given me a few years since by a cottager."

The third one was presented to the Perth Museum in January 1841, by Mr Crawford, Scone, and was described as a "curious stone ball, found in the bed of the Tay in the course of the dredging operations."

Dr Bower has thus the pleasure of identifying all of these interesting stone balls as having been found in the county of Perth.

Methlick, Aberdeenshire (with 6 Discs.)—To the courtesy of the Rev. Dr James White, manse of Methlick, Aberdeenshire, I am indebted for

the opportunity of examining a fine specimen of a regularly formed stone ball in his possession. It is stated to have been turned up by the plough some forty or fifty years ago, on the farm of Bracklay, in the parish of Methlick. The ball has six circular discs projecting from its surface. These six discs are rounded in outline and deeply cut into the ball, they are unornamented, and vary slightly in size, each measuring about $1\frac{1}{4}$ inch in diameter. One disc is rather larger ($1\frac{5}{8}$ inches) and more projecting than the others, and to it probably a handle was attached; the other discs show slightly rubbed surfaces on their sides, as if from the presence of the tie which might have attached the ball to a handle.

The ball is formed of a compact crystalline and weathered greenstone.

It measures three inches in diameter, and weighs one pound avoirdupois.

Moss of Cree, Wigtownshire (with 6 Discs).—T. B. Grierson, Esq., Thornhill, Dumfriesshire, has kindly sent me a sketch of an ornamented stone ball now in his museum. It was found, Dr Grierson informs me, about the year 1848, by Joseph Ferguson, when cutting peats in the Moss of Cree, and the ball was noticed by him lying among the gravel at the bottom of the moss.

This stone ball is formed of a white compact quartz rock, it is tolerably regular in form, and has six projecting circular discs cut on its surface, (each disc measures about $1\frac{3}{4}$ inches in diameter), leaving thus considerable interspaces between them. The discs are polished smooth and the hollowed interspaces are roughened in character; this would, of course, strengthen the hold of any thong or tie passed over them to fix the ball to a handle.

The ball measures 9 inches in circumference, and weighs a little more (two drachms troy) than a pound avoirdupois.

Stone Weapon or Ball from New Guinea.—Mr Joseph Anderson tells me he saw recently in the Museum of Dundee a stone weapon brought from New Guinea, which seemed closely allied to some of these stone maces. It was, however, pierced through with a hole evidently for attaching it to a handle, corresponding in this way to one of those already described as found in an underground building at Skara, Skaill, Orkney. This rounded stone measured $4\frac{1}{2}$ inches in diameter, was flattened

on two of its sides, and was cut into a series of three rows of rather angular knobs projecting from its surface, somewhat like the style of the heads of some of the wooden clubs of the Fiji islanders.

Stone Balls or Weapons from Niue or Savage Island, and the Sandwich Islands, Pacific Ocean.—Rounded and carefully smoothed stones about the size of cricket-balls, formed of stalagmite found in caves on the Island, are used as missiles in war by the natives of Niue or Savage Island, lying between the Hervey and Tongan groups, in the Pacific Ocean. They hurl these balls from the “hand with wonderful force and accuracy, not using the sling as is the case with so many Polynesian tribes.” A specimen of one of these stone balls is in the Museum of Science and Art here. It is formed of a compact stalagmitic rock, and is very smooth and globular in shape, but slightly pointed at its opposite poles, this diameter (measuring $4\frac{3}{4}$ inches) being thus rather longer than the other, which measures $3\frac{1}{2}$ inches. It weighs 2 lbs. 7 ounces avoirdupois. Other specimens are preserved in the Christy Collection in London.

The celebrated Captain Cook also tells us of the use of other stone weapons or balls of considerable weight, in his “Voyage to the Pacific Ocean,” when describing the weapons used by the natives of the Sandwich Islands, under the date of February 1778:—

“We also suspected they used slings on some occasions; for we got some pieces of the *hæmatites*, or blood stone, artificially made of an oval shape, divided longitudinally, with a narrow groove in the middle of the convex part. To this the person, who had one of them, applied a cord of no great thickness, but would not part with it, though he had no objection to part with the stone, which must prove fatal when thrown with any force, as it weighed a pound.

“We likewise saw some oval pieces of whetstone well polished, but somewhat pointed towards each end, nearly resembling in shape some stones which we had seen at New Caledonia in 1774, and used there in their slings.”

The Locality and Use of the Stone Balls.—These stone balls which, with the exception of one found in Ireland, have as yet, as far as I am aware, been discovered only in Scotland, have now been recorded as found from Dumfriesshire and Wigtonshire in the south of Scotland

to the Orkney Islands in the north. The greater number have, however, been found in the eastern parts of Scotland; indeed, with the exception of one described as found in the Isle of Skye, none have as yet been apparently noticed in the more western parts of Scotland. They would appear, therefore, to have been principally used in those parts of Scotland where you had perhaps the largest intermixture of the old Saxon with the Celtic population of the country.

I have already shown reasons for believing that some of the stone balls found in Scotland were the heads of maces, and that these maces were also frequently used as missiles thrown by the hand. When referring to the resemblance of these maces to the short knobbed wooden club of the Fiji Islander, I should have mentioned that it is named a throwing club *Ula*, the act of throwing being *ulaula*.¹ The Fijian is said to carry two or more of these short clubs stuck in his girdle, ready for use in this way. Similar short clubs are also used in a corresponding way by the natives of Southern Africa.

It is not impossible that some of the smoother or less cut varieties of these stone balls found in Scotland may have been also used simply as missiles thrown by the hand. Missiles of at least a somewhat corresponding character have apparently been used in this way in different and distant parts of the world, and even in our own day, as just referred to, in Niue or Savage Island.

¹ See "Natural History of Man," by the Rev. J. G. Wood, M.A., F.L.S., &c. London, 1870. 8vo.