II.

NOTES ON A FURTHER EXCAVATION OF ANCIENT DWELLINGS AT SKARA, IN THE PARISH OF SANDWICK, ORKNEY, MADE DURING AUGUST 1913. By W. BALFOUR STEWART, F.S.A. Scot. WITH NOTES ON THE REMAINS FOUND, BY HON. PROFESSOR W. BOYD DAWKINS, F.R.S., D.Sc., F.S.A.

It is now upwards of fifty years since the late Mr Watt excavated a portion of the ancient dwellings situated on the Bay of Skaill, in the parish of Sandwick, Orkney. Mr George Petrie fully described the work done at that time in the *Proceedings* of the Society of Antiquaries of Scotland, April 1867.

During August 1913, while on a visit to Skaill, with permission from the Trustees of the late Mr W. G. T. Watt of Breckness and Skaill, I commenced to clear the principal dwelling, and passage, which is shown on the plan, copied from that made by Mr Petrie in 1867, and published in the *Proceedings* mentioned above.

A large quantity of sand and weeds had to be removed, to place the dwelling and passages in order, prior to the arrival of Professor Boyd Dawkins and other archæological friends.

After clearing out passage AA on the south side—the furthest explored portion in that direction reported by Mr Petrie—the passage marked BA was discovered. This passage is 3 feet high, and is built with a sloping roof. It reaches a cross entrance at C.

From this point an admirably built passage, leading in a northerly direction, was opened. This passage is 3 feet 9 inches in height, $3\frac{1}{2}$ feet in width, and 6 feet 4 inches in length, with a flat roof, and is built without any binding material. It takes a westerly direction at the spot marked D.

This passage is interesting, as it is the only one to be seen at Skara complete with its roof. All the other passages previously discovered

are open, though Mr Petrie believed that they also were roofed originally.

Just beyond this passage is a recess KEF, which opens into another habitation, not yet explored, at the spot marked E.

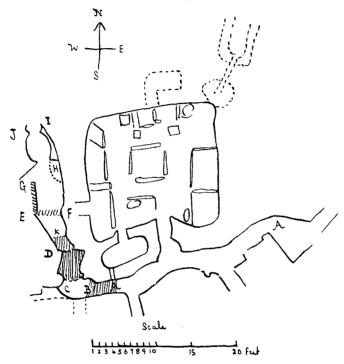


Fig. 1. Sketch Ground-plan of part of the Ancient Dwelling at Skara Brae, Skaill, Orkney.

A hearth was found in the corner at F, with an earthenware pot, and charred bones, too soft and broken to remove.

Across the hearth, between E and F, a stone is standing, 3 feet 10 inches in height; and between E and G a stone lies, 5 feet 5 inches long and 1 foot 4 inches high.

On reaching the floor of this habitation, quantities of clay appeared against the base of the wall. This proves Mr Petrie's view that, on opening the landward portion of the dwellings, clay would be found brought there by the Pictish people to plaster or bind their walls.

When excavating above the hearth a large collection of limpet shells, and beyond the hearth, at the point marked G, 120 astragali (ankle-bones) of oxen and eight of red deer, were found. These were not midden finds. Scarcely any other bones were found near the collection, which seems to show that they were preserved for a purpose. Astragali have been found elsewhere, and are generally supposed to have been used as an early form of dice. It is possible that the limpet shells and astragali were used for some gaming purpose, but it is curious that in an adjoining habitation bone cubes marked as dice were also discovered. These were reported and illustrated by Dr Wm. Traill (see *Proceedings* of the Society, April 1868).

A stone saw of old red sandstone (fig. 6), and the rib of a whale, broken at each end, and measuring 5 feet 4 inches, were found between E and G.

The built-out portion of the wall at H is of the nature of a buttress. At the point marked G a loose stone was found, on which was cut a single twig rune (fig. 2). A copy of this was submitted to Professor Magnus Olsen, who translated it "K C." Probably this was cut by

an idle Norseman when visiting Skara, in the same way that modern "Goths" initial stones in Orkney to this day.

There is no trace of a later occupation of the dwellings at Skara.

Another hearth was found between I and J, and above this hearth, in the wall, was found an incised ball of basaltic rock measuring $2\frac{1}{2}$ inches in diameter (fig. 3).

The late Mr Samuel Laing, writing on "The Age of the Brochs," in January 1867 (see *Proceedings* of the Society of Antiquaries), wrote with reference to the dwellings at Skara: "There is not the slightest trace of any pattern or ornament upon any of the articles of stone or

bone found at Skaill, or upon any of the numerous fragments of urns and pieces of pottery."

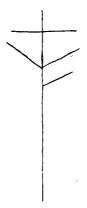


Fig. 2. Twig Rune cut on a loose stone at Skara, Skaill.

The incised ball found at Skara (fig. 3), which is the third found there, seems to be the only one of its kind found in Orkney, the other balls being carved.

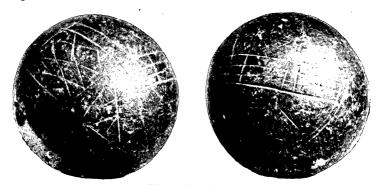


Fig. 3. Stone Ball incised with Rectilinear Pattern.

Dr Wm. Traill in 1868 reported the find of an ornamented bone at Skara, the incised lines on which are very similar to those on the

stone ball. Dr Traill noted the geometrical lines on the bone as being similar to some found in the Pict's House at Papa Westray.

"Notes on Small Ornamented Balls found in Scotland," by J. A. Smith, M.D., Proceedings of Society of Antiquaries, Scot., vol. xi., 1874, describes a stone ball in the Perth Museum as being covered with patterns of incised lines, crossing one another diagonally, and also showing a pattern of parallel lines covering only a part of its surface.

Dr Smith in 1874 compared the incisions on the ball in the Perth Museum to the ornamentation on the large thistle-like heads of the silver pins and brooches which were found at Skaill, within a short distance of Skara Brae, and remarked that considerations such as



Fig. 4. Bone Scoop found at Skara.

these inclined him to think that, instead of belonging to Stone or Bronze Ages, or any such indefinite or ancient period, it was much more likely that these stone balls might belong to the ancient, though comparatively historic, periods of the sculptured stones, of the silver brooches and Cufic and Anglo-Saxon coins. Dr Smith also considered that the two balls found at Skara told against any idea of their being relics of very great antiquity.

These comparisons are very interesting, and seem to me to confirm the view apparently taken by Professor Boyd Dawkins, that the rude remains of Skara do not necessarily imply a remote antiquity.

Between E and G the scapula of an ox, used as a spade or shovel, a bone scoop or spoon (fig. 4), and several bone pins or awls were found.

A broken hammer head or mace of hornblende schist with quartz was given to me recently, found at Skara. The late Mr Samuel Laing mentioned in his paper on "The Age of the Brochs," in 1867,

that the number of split pebbles adapted for knives or scrapers was so great as almost to lead to the supposition that there must have been a manufactory of these articles at Skara. I discovered so many whilst digging as almost to make me think that I had struck the habitation of the Master Cutler of the people.

Mr Petrie wrote in 1867 that it was premature to fix an age for the ruins and relics discovered at Skara, before the whole of the remaining buildings had been thoroughly explored, but hoped that discoveries in middens and buildings in the district would help to point out the age of the people who built and lived there.

We were most fortunate in having the eminent archæologist, Professor Boyd Dawkins, the author of *Early Man in Britain*, with us during most of our excavating work.

I have not mentioned the innumerable bones that were dug up, as these will be referred to by Professor Boyd Dawkins in the accompanying report, which he has kindly sent to me, with permission to publish it together with these notes on our excavation work.

List of Finds presented to the National Museum of Antiquities of Scotland.

An incised ball of basaltic rock.

Stone saw.

A bone scoop.

Scapula of an ox, used as a shovel.

Hammer-head (broken), perforated.

Notes on the Exploration of Skara Brae during August 1913, by Hon. Professor Boyd Dawkins, D.Sc., F.R.S., F.S.A.

The specimens discovered in the course of the further excavations carried on by Mr W. Balfour Stewart, in the autumn of 1913, consist of implements, ornaments, and the remains of the animals left behind in the chambers and passages, and scattered through the refuse-

heap, mainly formed of limpets and periwinkles, intermingled with blown sand.

The Implements.—The most abundant implements are pebbles of hard sandstone from the adjacent heaps, split so as to offer a cutting edge, in many cases chipped by use, and similar to those used for preparing skins by the native tribes of North America, who prefer



Fig. 5. Professor Boyd Dawkins examining the articles found, which are stored in a recess of the ancient building.

them to iron tools. They probably here were also used for collecting the limpets off the rocks, as well as for various other purposes.

There were also pebbles, some burnt, that had been used as potboilers, and circular discs of slate, which were probably pot-covers.

One thin piece of slate, 10 inches long (fig. 6), had the natural edge at the junction of the joint with the cleavage plane regularly notched so as to form a saw. It presents no sign of wear, and in its present

friable state could not be used for sawing. I am not aware that similar articles have been discovered elsewhere. There were also bone awls for making holes in skins. Two shoulder-blades (scapulæ) of the small domestic ox (Bos longifrons), with the spine removed, much worn by use, had been made into spades or shovels. They present a strong resemblance to those found in the Neolithic flintmines of Cissbury, near Worthing, in Sussex, along with picks made of the antlers of red deer. Two imperfect basins, hollowed out of the vertebra of a whale, were also met with, similar to those found elsewhere in Picts' houses and brochs, and preserved in the National



Fig. 6. Stone Saw, 10 inches long, found at Skara.

Museum of Antiquities of Scotland. A bone, carefully ground and hollowed, may have been used for a spoon or marrow scoop (fig. 4).

Pottery.—The few fragments of pottery, coarse and hand-made, dark inside and red at the outer surface, belong to flat-bottomed cooking pots of the same type as those in the Museum at Skaill. They are without ornament, and have been very imperfectly fired.

Stone Mace-heads.—The polished stone ball (fig. 3) found hidden in the wall close to a hearth is of peculiar interest because it is the third found in Skara Brae, the two others having been discovered in the digging of Mr Watt. Both of these are adorned with knobs. This is unique in bearing groups of lines roughly scratched upon its surface, and forming a geometrical pattern. Similar polished stone balls have been met with in Orkney and elsewhere, and some are ornamented with various designs, among which we may note the spirals of the Bronze Age (Catalogue of National Museum, pp. 63–64), and the flamboyant spirals (Cat., p. 65) of the Prehistoric Iron Age.

They are probably the heads of life-preservers or of maces attached to a more or less flexible handle with thongs or with a covering of leather, cut so as to show the stone inside. The fragment of polished stone hammer, with a large perforation for the handle, and without traces of wear, is undoubtedly a mace-head used, like the above, in battle. It is of a Bronze Age type found in Orkney and in Britain and Ireland.

Bone Pins and Beads.—Bone pins, and a large polished bead made from the tooth of a whale, show that the inhabitants of Skara Brae were not without personal ornaments. The latter are amply represented in the collection made by Mr Watt from Skara Brae.

Twig Runes and Cross.—The discovery of a twig rune (fig. 2) on a slab of sandstone by Mr W. Balfour Stewart adds a new fact to the history of the group of habitations, because it proves that they were visited, if not occupied, by the Saxon or Norwegian settlers who have left their runes incised on the stone circle of Stennis, and in the interior of Maes Howe, and elsewhere in the Orkneys. The twig runes of Maes Howe were made in the twelfth century, and, according to Mr Collingwood, there were tree runes slightly differing from them in use by the Angles in Yorkshire in the eighth century. Skara Brae is therefore brought by this discovery into touch with history.

This is further proved by a stone mould in the Museum at Skaill (fig. 7). The mould is that of a rude equal-armed cross of the early Christian Celtic type, abundant in Ireland and Scotland, and occurring also in England and Wales, which shows that Skara was frequented after the introduction of Christianity into the Orkneys by the missionaries of St Columba, in the last quarter of the sixth century.¹

¹ St Columba, the great apostle of the Northern Picts, converted Brude, King of the Picts and overlord of the Orkneys, in 565, while on a visit to him at his fort near Inverness. He told Brude, in the presence of the chief of the Orkneys, to take care of the brethren—"Should they happen, after many wanderings, to come to the Orcadian Islands, do thou carefully instruct this chief, whose hostages are in thy hands that no evil befall them (the brethren) within his dominions."—Stokes, Ireland and the Celtic Church, 6th ed., 1907, p. 121.

In my opinion, this fixes the date of the introduction of Christianity into the Orkneys, among a people partly Picts, and partly of Nor-





Fig. 7. Stone Mould from Skara, obverse and reverse.

wegian, and probably also of Saxon stock. With regard to the latter element in the population, the statement of Claudian, that Theodosius VOL. XLVIII.

in 369 made the Orkneys reek with Saxon blood, leaves no doubt that they were then one of the bases from which the Saxons attacked the British Isles. This is also confirmed by the testimony of the placenames in the topography of the islands. They are, with few exceptions, Saxon or Norwegian, and we miss those of the Goidel and Brython, so abundant in Scotland.

The Animal Remains.—The numerous bones and teeth of mammalia met with in the huts and in the surrounding refuse-heap belong mostly to the small shorthorn ox (Bos longifrons), the ancestor of the Highland cattle and of all the small existing European breeds, to the horned sheep and the red deer.

The whales are represented by a rib and two vertebræ. There was also the skull of an otter. Bones of wild duck and geese are the only remains of birds that have been identified. To this last we may add the domestic hog, the horse, and the common fox, represented in the collection from Skara Brae in the National Museum at Edinburgh.

The short-horned ox was the principal domestic animal. It is of the small type usually found in peat-bogs, submarine forests, and in association with implements of the Neolithic, Bronze, and Prehistoric Ages, throughout Europe and Asia Minor. In the British Isles it is met with in Roman refuse-heaps, but there, as we might expect, it is slightly larger.

The horned sheep is remarkable for its slender, deer-like legs, and belongs to the group of the Highland and St Kilda breeds. It is closely allied to a breed possessed by the Romano-British farmers at Woodcuts, a village explored by General Pitt-Rivers, on the Downs of Wiltshire.

The red deer bones and antlers are, as might be expected from their restricted range, smaller than those of Scotland. They were probably indigenous in the islands, then better provided with cover than they are now. They may, however, have been obtained from the mainland in hunting expeditions, such as those of Ronald and Harold, Earls of Orkney, to Caithness at the close of the eleventh century. They must, however, have been exterminated as the population increased and the cover for them diminished in the bare, wind-swept islands. It is doubtful whether the otter or the fox were used for food.

The inhabitants of Skara Brae lived mainly on their flocks and herds and on venison, varied by a diet of limpets and periwinkles, and an occasional mussel or oyster.

Although the sea abounded in fish, apparently fish formed a small part of their food. The few fragments of whales may have been derived from a stranded individual, and the same holds good of the tooth of walrus in the National Museum. The whole suite of specimens from Skara Brae, which I have examined at Skaill and in Edinburgh, falls in line with those from the other group of huts and brochs in the Shetlands, the Orkneys, and generally in Scotland.

The polished stone axes previously found, and the polished stone mace-head recently found, point to the Neolithic and Bronze Ages that are amply represented in the Orkneys in the collection of Mr J. W. Cursiter. The cross implies that Skara Brae was frequented after the introduction of Christianity, and the Runic inscription that it was also frequented after the settlement of the islands by the Low Germanic tribes, Saxons and Norwegians. The rough stone implements made of split pebbles, so abundant, do not necessarily imply a remote Neolithic antiquity, and may be the result of the enjoyment of the simple, ascetic life led by a Christian community established by the missionaries of St Columba.

It is hoped that Mr W. Balfour Stewart will complete the exploration, and furnish materials for telling the whole story of Skara Brae, and throwing light on a very obscure portion of the history of the Orkneys.