In the beginning of August 1882, I set out on a rather lengthened visit to Orkney and Shetland. In these islands, as is well known, there is much to interest the student of archaeology.

In the Shetland Islands especially, besides the numerous remains of prehistoric times, you have in the rural homesteads and agriculture of the people, many things still remaining to remind you of what was probably the state of a great part of old Scotland in the olden time. The hamlets scattered over the more fertile and cultivated lands, generally along the shores of many of the pretty bays, the wicks and goes of the natives, the small single story thatched farmhouse, built of small stones and clay, and its adjoining group of attached or detached offices of much the same rude character; its byres and barn with its circular kiln, the quern and its table in some of the houses, and doors opposite to one another between which to winnow the grain. The different houses have their roofs covered with turf, or both turf and thatch, the thatch being carefully protected from being blown away by straw ropes, or simmons, as they are called, crossing one another over the whole roof, the ends of the ropes being tied round good-sized smooth uncut stones, which rest on the projecting
part of the house walls round the eaves. In other villages, where some little stream runs rapidly down to the sea, there is a series it may be of Norse mills, at no great distance from one another—the Norse mill being simply a small thatched building, devoted to a quern with its hopper and small self-supplying feed-box, suspended above it, and the quern turned by a small wooden wheel in the narrow mill race below, over which the mill is built; in some instances there is a double mill race through the one building, with a quern at each end of it—two mills, as it were, set end to end! Then as to land under tillage, it lies in running patches here and there among the grass pasture land on which the hamlet is built—some of the cattle and ponies being frequently seen tethered here and there over its surface, between the patches of grain. Then surrounding the hamlet and its tillage and home pasture ground, you have a dry stone dyke, enclosing the whole hamlet or series of hamlets, running it may be in a lengthened curve, to enclose the whole from one part of the sea-shore where their fishing boats are drawn up, and sweeping round to turn down to it again at the other boundary of the little township. The public road now cuts through this wall at one point or another, and has gates to open and shut as one passes through the boundary outside and beyond the boundary-wall. The moorland, the common or hill and high ground, with its cattle and sheep, ponies and geese, grazing in common at their sweet will, among the peat hags and mounds of cut peats which are to be seen in every direction. The same system doubtless of infield and outfield which prevailed at one time over the most of Scotland. On the bold headlands and rocky cliffs above the sea you have the remains of various Brochs, with the remains of outbuildings and ramparts more or less perfect, and in the valleys and moorlands you have other traces of prehistoric life and custom.

"Planty Grubs or Cruives."—A series of small oblong enclosures, some 10 or 12 feet long by 4 or 5 feet broad, with loose dry stone walls surrounding them, and showing no means of entrance, attracted my attention. They were to be seen of all ages, ruinous and disused and quite new, and in every direction over the unenclosed ground; and on inquiring what they
were, I learned they were "plany crubs" or "plany cruives," sheltered
seed-beds on the virgin soil of the common, in which their cabbage
plants were raised, and from which the plants were transplanted in due
course to their cottage gardens, it being a privilege of the tenant to put
whatever he thought best on the virgin soil of the common.

The Stone Implements, &c., from Shetland may be divided into the
ancient or prehistoric found on these old sites, and the modern ones still
more or less in use in different parts of the country.

Among the various stone implements and objects now exhibited and
presented to the Museum—for most of which we are indebted to the
courtesy and kindness of John Bruce, Esq., jun., of Sumburgh—we have
objects belonging to both of these classes.

Rude Stone Implements,—Mr John Bruce is the proprietor of Fair Isle,
and as various improvements have been going on for some time on the
island, building better villages, stone and lime and with slated roofs, and
enclosing small patches of ground as gardens, &c., many of the stones for
which were got out of the nearest mound—I asked Mr Bruce, should
anything showing man's handy-work be noticed, it should be laid aside
for our examination. On reaching Sumburgh, I found that Mr Bruce
had got sent from Fair Isle some things of interest of this class, and I
learned that a low mound of considerable size at Kennaby had been dug
into and various stone implements got. The most interesting of these
were the rude stone implements, somewhat varying in shape but still
reminding us somewhat of very rude stone celts. They were generally,
however, more of a flattened and cylindrical shape, tapering less towards
their extremities. We are now familiar with this class of stone implements
from the numbers in our Museum, brought to us and described by Dr A.
Mitchell, as found, generally in considerable numbers together, on the main-
land of Shetland. This then is a new locality, as here we have these
similar implements found in an ancient mound at Fair Isle, and I have
since learned a number of them have more recently been discovered also
in Orkney. There are seven of these stone implements, varying some-
what in character and size.
Stone Weight or Plummet.—In this mound at Kennaby a small stone cist was also discovered; it measured 2½ feet by 3½ feet, and lay S.E. and N.W. A carefully tapered and smoothed stone, with crossing grooves cut on it and pierced with a longitudinal hole near to its tapering top, perhaps a weight of some kind or plummet, was also discovered.

Stone Vessels.—A portion of the side of a large vessel of steatite was found, and Mr Bruce also had an oblong stone vessel from Fair Isle. A portion of a stone cup found at Gillie, Fair Isle, was also stated by Mr Lawrence to have been found in a cist, with a stone standing upright at each end, and rough slabs at each side about 3 or 4 feet long by about 1½ feet wide. There was also in the same cist a large urn of soapstone, which was broken, but a portion of which was sent by Mr Bruce and has just been referred to. Outside the cist were two pounding stones with abraded extremities. The mound had the appearance of a primitive dwelling or Pict's house, as there were the remains of circular walls, but no appearance of any burnt stones. A portion of another stone cup was found in another mound cut through in the formation of a road near the north harbour of Fair Isle. Another portion, apparently of this same cup, was found some time ago at the same place, and was given to Sheriff Thoms when he visited Fair Isle a year ago. He presented it at the time to our Museum, and the side pieces are now reunited. Unfortunately there is still another small portion wanting to complete the stone cup.

Whorls of Steatite.—Mr Bruce also sends three whorls of steatite, found in the ruins of old houses at Fair Isle, where they have long been out of use. The steatite of which they are formed seems like that of Shetland mainland, and not like the Fair Isle steatite, of which Mr Bruce sends us a specimen.

Primitive Hand-Loom.—A simple and ingenious hand-loom for weaving garters. An old style of primitive loom is still in use at Fair Isle. One is included in the donation, and I understand only another is now left in the Island, although, of course, when wood or wreck-wood can be got, it is not difficult to make another. The garters are not made for sale outside the island, but are used by the people themselves. They display, however, the peculiar Fair Isle style and variety of colouring and patterns,
and a little examination will show how simply the varied patterns are obtained, the different coloured threads of the wrap being lifted at different places by the loops of thread attached to them, as the crossing of the small stick or shuttle filled with white thread requires to form the patterns of the woof.

"Collies" or Iron Cruises.—They are formed of two iron oblong cups, running out in front into a pointed extremity, where the wick is projected and lighted, the one cup being hooked over the other, and the lower one in this way catching any drops of oil that might fall from the upper cup. The iron handle rises generally from the lower cup or shell, and to it is attached a movable iron plate, generally terminating in a double extremity or hook, by which the lamp may be hung on a nail or other projecting point; and a flattened and pointed extremity, by which the lamp may be fastened to a rough stone wall by being pushed between the insterstices of the stones and so made fast.

The iron cruises, or "Collies," as they are styled in Shetland, are now rapidly becoming things of the past, it being very rare to see any of them in use. Where still used, they are generally taken to the Norse mill or to the outhouses, the simpler classes of paraffin lamps having almost completely occupied their place, so they are now almost a thing of the past. Mr Bruce sends two "Collies"; one was formerly in use at old Sumburgh House, the other was still in use at Fair Isle. I was fortunate enough to see one prepared for use, with wick and oil in the upper cup, at Burraland in Sandwick, Shetland, which I purchased and got away with me when on a visit to the adjoining interesting Broch.

Another was sent from a grateful patient from Sandwick point, through Dr Stewart of Dunrossness. It, however, was of copper, supplied by some vessel wrecked on the coast, as I believe it was stated to have been originally brought from Fair Isle.

Stone Window Frame.—Mr Bruce also sends at my request the stone frame of a window, now also becoming somewhat of a rarity. I saw it lying on the top of the wall of a ruined homestead, not far from Boddam, on the hillside above. The house, a but and a ben, had no windows
made in the walls, and you entered through a roofless byre, also without windows, to get to the door of it. This kind of window is laid resting on the top of the wall, sloping up into the bottom of the thatched roof—a much more simple arrangement than leaving window spaces in the unskilled building of the rough stone and clay walls of which the houses were built, of course by the occupiers themselves. Most of the cottages now have small windows in the wall, and often the older stone window frame is still used at the cave, like a skylight, to give additional light to the fireside, or wherever it is wanted.

Of course the opening cut in the pavement-like stone is filled up with a small pane of glass.

Circular Carved Discs of Stone.—Mr Bruce sends two circular discs of stone (figs. 1 and 2), with curious patterns carved on their surface. These measure 2\(\frac{3}{4}\) inches in diameter. They were stated to have been found in

![Fig. 1. Carved Disc of Sandstone—Obverse and Reverse (2\(\frac{3}{4}\) inches diameter).](image)

the ruins of what is considered the confused stone remains of a Broch, with various grassy ramparts still surrounding it, on a headland overlooking the sea on the rocky point of Scatness, across the bay, to the west of Sumburgh Head.

It is difficult to say what these roundels could have been used for; they perhaps suggest a resemblance to tablemen more than to anything else.
Stone Sinkers still in use.—For comparison with the numbers of large rough stones, more or less hand-worked, found in Brochs, &c., Mr Bruce, at my request, sent to us several stone sinkers still used by fishermen at their long lines; some of these have perforations towards their narrower extremity, through which a loop of rope is passed by which it is made fast to the stone to prevent friction, and by which it may be fastened to the lines. The specialty here is, that the hole is so pierced through the stone, that the rope may not rub on the sea bottom. They show the modern style of making holes through stones, for comparison with the older pierced stones.

Mr Bruce's brother, Mr George Bruce, Sandlodge, in Sandwick parish, where extensive fishing is carried on, was also good enough to get for me specimens of stone sinkers of the more usual class. These, however, have grooves cut round them, by which the rope may be fixed to them, and its loop fastened to the line. In these cases the groove and the line is not taken across the bottom of the stone, where it might be rubbed through on a rough sea bottom; the whole rope is also of the slightest character, so that should the sinker get jammed among rocks at the deep sea bottom, by forcible pulling at the line, the rope of the sinker would give way, and the sinker only be lost, and the long line come up all safe. There are heavy sinkers for the ends of the long lines, but at intervals between the hook lines hanging from the main fishing line there are other sinkers fixed in a loop of the hook line; hence they are called "bighters," being fastened in a loop or bight of the line. These are generally much smaller stones, with a single groove cut round their centre, to which the rope is fixed which attaches them to these drop lines.
A large sinker is put at one end of the line (called a cappie or steckie), then at every 4 fathoms a "toomie" line is fastened, 3/4 of a fathom, with a hook at its extremity; at every 120 fathoms there is a line with the small sinker, the brighter instead of a hook, tied to the line with a running noose or bight. The boats in the south of Shetland carry three sinkers each like those sent, one at each end and one in the middle of the line. In the north of Shetland longer lines are used and more sinkers are required. Here a boat carries 6 pachirs for a line:—

- 40 fathoms 1 bought.
- 9 boughts 1 pachir.
- 6 pachirs 1 line = 4320 yards.

This will give somewhat of an idea of the extent of the lines of the Shetland fishermen. The sinkers with grooves are much more common than the perforated, being probably more easily made, and more shapely to handle. The perforated one first sent was not a good one; it was clearly a bit of Morayshire stone left over from building his new house, Mr Bruce says. The two last sent are more typical ones. No. 1 is an ordinary water-worn stone, with a perpendicular hole through it; the other, No. 2, is a work of art; it is more pointed in shape, and has a hole cut through horizontally, the object being that the line may not touch the bottom, and so be likely to be cut, and for the same reason the grooved sinkers have no groove cut across the bottom of the stone. The fishermen have a sort of personal affection for their sinkers. Mr Bruce says the man who gave him No. 2 said he lost it shortly after he had made it, and many years afterwards it was thrown up by the sea, and he found it again, and he seemed much elated over its recovery, as of an old friend. Heavier sinkers are used for the long lines at the far off deep sea or Haaf fishing, and smaller and lighter stones on the shorter and lighter lines used for the inshore fishing. Buoys are occasionally used, made of the skin of a dog or whole or half a sheep—the two extremities being left at one end, and a wooden board across the other. When a buoy is used, it is fastened to the end of the line by a buoy line of 40 fathoms or more in length.
Fair Isle.—On the 25th of August, I had the pleasure of forming one of a large party which Mr Bruce took in a steamer to spend the day at Fair Isle. Luckily the weather was very favourable, and so the dreaded Sumburgh “roost” was passed without much difficulty, and we were fortunate enough, from the smooth sea, to be able to be landed on the island in the boats, at the south harbour, where the people were all gathered to meet us and give us a welcome. With Mr Bruce and Mr Lawrence, the official head of the island, I made a run over and saw most of the places of interest. At Kennaby, for all the little homesteads are named, I saw the mound where the various stones were got, and was fortunate enough to pick up one of the curious rudely-manufactured stones still lying close by. I saw also the two portions of the fine grain rubber in a newly-erected dry stone dyke, and got them sent by Mr Bruce.

At Gillie, apparently, there was another somewhat similar low mound, which might, like the other, have been what we are in the habit of calling a Pict’s house; and here also, among the rubbish, I picked up a pestle stone, marked with abrasions at its extremities. These I have the pleasure of presenting to the Museum.

We ascended the central valley of the island above the little scattered hamlet, towards an upper house, the homestead of settlers, and here saw the remains of a much larger mound, which had been partially cut through, and seemed mostly formed of a smaller class of stones. Near this house was a perforated oval boulder of sandstone, which is also sent to us by Mr Bruce, and a coarse grain rubber was also noticed.

A most interesting day was spent looking at the natural beauties of the bold cliff scenery surrounding the island, as well as the many archaeological objects of interest, and our steamer then took the large party all safely back to their homes on the mainland of Shetland.

The thanks of the Society are due to Mr John and Mr George Bruce, but especially to John Bruce, Esq. of Fair Isle, and younger of Sumburgh, for his great kindness in collecting for us and sending to us every Shetland object of interest that has come in his way, or that I could suggest as in any way likely to be of interest to the students of Archaeology.
ARThUR MITCHELL, M.D., LL.D., Vice-President, in the Chair.

A Ballot having been taken, the following Gentlemen were duly elected Fellows:—

Hon. HEW HAMILTON DALRYMple, Oxenfoord Castle.
ALEXANDER A. FERGUSON, 11 Grosvenor Terrace, Glasgovy.
R. G. WOBRIE GORDON, Grenadier Guards.
WILLIAM FORBES LeITH, Stonyhurst College, Blackburn, Lancashire.
DAVID LUMSDEN of Fincastle, Perth.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors:—

(1.) By the TRUSTEES of the late JAMES NEISH of the Laws, F.S.A.
Scot.

Collection of Objects found in the course of the excavation of the fortified Hill of the Laws, near Dundee, as described by Mr Neish in the Proceedings, vol. iii. p. 440, consisting of—

A small Stone Cup formed of an ovally triangular pebble, 3 inches by 2½ inches, the hollow 1⅜ inch diameter, and 1 inch in depth.

Four perforated Whorls of sandstone, from 2½ to 1½ inches diameter.

Disc of sandstone, 2⅛ inches diameter, with indented hollows on both sides.

Five flat circular Discs of sandstone, from 3½ inches to 1¾ inches diameter.

Two Flint Chips, a fragment of Hæmatite, two fragments of Rock Crystal, and a flattish oval Pebble of concretionary origin, 2⅞ inches diameter.

Two portions of Vitrified Sandstone, with impressions of charcoal.
DONATIONS TO THE MUSEUM.

Small oval Disc of sandstone, 1 inch in length by \( \frac{3}{4} \) inch in breadth, and less than \( \frac{1}{4} \) inch in thickness, with an irregular hollow in one of its flat surfaces.

A small Cowrie.

Double-edged Comb of bone (fig. 1), 3\( \frac{3}{4} \) inches in length by 1\( \frac{1}{2} \) inches in width.

Implement of Bone, 4 inches in length, with a flattened projection in the middle pierced by a small hole.

Teeth of the Horse and Pig; Horn of a Roebeck.

Portion of a Needle of iron, 1\( \frac{1}{2} \) inches in length, retaining the eye, a small round hole perforated in the slightly flattened and bulging end of the needle.

A small circular Buckle of iron, 1 inch in diameter.

Pin of iron (fig. 2), with open circular head carried on a slight projection at right angles to the upper part of the pin, similar to a pin of bronze found in the Broch of Bowermadden, in Caithness. A clay mould for another bronze pin of this form was found in the Broch of Lingrow, Orkney.

Two large Axes-Heads of iron; one Head of an Adze or Hoe; portion of an iron Sword-Blade, single-edged; and portions of several other Implements of iron.

Copper Disc, apparently a coin beaten flat, partly perforated in the centre, and notched round the circumference.
Pin of a Bronze Fibula (fig. 3) of an early Iron Age form, beautifully patinated, $3\frac{1}{2}$ inches in length.

Fig. 3. Pin of Bronze Fibula, found at the Laws (actual size).

Spiral Ring of four twists of bronze wire (fig. 4), the opening of the coil being an inch in diameter; one of the terminations of the ring shaped in the likeness of an animal’s head, the other broken.

Two bottles of charred Grain, apparently wheat and barley.

Flat circular Band or Ring of thin brass, 1 inch in width and $3\frac{1}{2}$ inches diameter, with stamped borders, and an open circular pattern along the middle of the band, also stamped.

(2.) By J. M. Douie, Bengal Civil Service.

Bronze Dagger, cast in one piece, $7\frac{1}{2}$ inches in total length, the handle $3\frac{3}{4}$ inches in length, the blade 2 inches in width and $\frac{3}{8}$ inch thick in the centre at its junction with the hilt, the upper part of hilt on the top of the pommel ornamented with sunk spaces, which appear to have been filled with enamel. The weapon, so far as is at present known, is unique, no instance of a bronze dagger having hitherto been recorded from India, and no example of a dagger of this special form and character having been anywhere met with. Mr Douie furnishes the following notice of the circumstances in which the dagger (fig. 5) was found:

“A few years ago I spent some time in Fort Munro (also called Sandemanabad), a place in the Suleman Hills about 20 or 30 miles
beyond the British border. It lies nearly due west of the town of Deraghazi Khan, which is the headquarters of one of our Punjaub frontier districts. The hills to the west of Deraghazi Khan are occupied by various tribes of Biloches. There is some reason to believe that they were once inhabited by tribes of Jat origin, similar to those which are now found in the south-west of the Punjaub. The knife was brought to me by a hill Biloq, who said he had found it in the waste land. He probably found it under some bush on one of the hillsides.”

(3.) By H. Rivett-Carnac, C.I.E., F.S.A. Scot.

Collection of Stone Implements, &c., from the Banda district, North-Western Provinces of India, comprising—

Four polished Stone Celts of diorite, varying from 6 inches to 4½ inches in length, somewhat triangular in shape and pointed at the butt.

One Celt of basalt, roughly chipped and partially polished, 5½ inches in length.

Five Cores of chert, from 1½ inches to 1 inch in length.

Twenty Flakes and Chips of chert. (See the subsequent communication by H. Rivett-Carnac.)


Polished Celt of felsone, from Greenlaw, Berwickshire. It measures 8½ inches in length and 2½ inches across the cutting face, is oval in the cross-section, tapering to the butt, the sides ground flat. It has been apparently little used, as the marks of the grinding are still visible over the whole surface.

Forty Flint Arrow-Heads, four Flint Saws, and one slender Tool of Flint, from Glenluce.
Three small Whetstones and two Stones with indented hollows on their opposite sides, from Glenluce.

Portion of Antler of Red Deer, 17 inches in length, consisting of the upper part of the beam and two terminal tines.

Horn of the left side of an Elk, brought up with the first mentioned antler in a salmon net in the estuary of the River Cree. (See the subsequent communication by Dr John Alexander Smith.)

(5.) By David Philip, through Hew Morrison, F.S.A. Scot., Brechin.

Axe-Head of iron, 8 inches in length, found under 5 feet of peat at Hunthill, parish of Lethnot, Forfarshire.

(6.) By Patrick Dudgeon of Cargen, F.S.A. Scot.

Rude Implement of sandstone, pointed, 11 inches in length, from Unst, Shetland.

(7.) By J. Romilly Allen, F.S.A. Scot.

Chinese Wooden Lock, from Foo-Chow. (See the subsequent communication on Chinese Wooden Locks, by Mr Allen.)

(8.) By John J. Stitt, F.S.A. Scot., Dalkeith.

Twenty Proclamations, &c., of the reigns of James VI., Charles I., the Commonwealth, Charles II., William and Mary, and George II., saved from the fire of the Tower of London.

(9.) By George Sim, Curator of Coins.

Ezochielas Spanheimii Dissertationes de prestantia, et usu Numismatum, 4to Elzevirii. Amsterdam, 1671.

(10.) By the Edinburgh Naturalists' Field Club.

DONATIONS TO THE MUSEUM.

(11.) By the Society of Antiquaries of Bonn.


(12.) By the Smithsonian Institution, Washington, United States.


(13.) By the Royal Library, Dresden.

Die Bildwerke der Königlichen Antikensammlung zu Dresden. Von Dr Hermann Hetterer.
Das Königliche Museum der Gypsabgusse zu Dresden.

(14.) By the Royal Library, Copenhagen.


The following Communications were read :—