SPECIAL MEETING.

MONDAY, 31*st December* 1866.

SIR JAMES Y. SIMPSON, BART., Vice-President, in the Chair.

The CHAIRMAN having introduced Professor George Stephens, of Copenhagen, to the meeting, explained that the learned Professor being now in Edinburgh for a short visit, he had kindly agreed to give an account to the society of the Old English Runic monuments known *in Great Britain* at the present time; and he need hardly add that such an account could not come from a greater authority than the author of the "Old English Runic Monuments," of which the first part had been recently published.

In the course of his interesting address, Professor Stephens described the Runic inscriptions on thirty-five monuments in Great Britain, from which it appeared that they had been found on crosses, coffin-lids, brooches, rings, and caskets. Among the crosses, Mr Stephens directed particular attention to that at Ruthwell, in Annandale, which he regarded as the most sumptuous in ornament, and the most interesting, from its inscriptions, of any in the world; and he implored

the Society to take some interest in the preservation of a monument so precious. Mr Stephens explained that the first part of his work contained the old northern Runic inscriptions in Scandinavia; and that the second, which was now well advanced, would contain all such inscriptions known *in Britain*, with careful and detailed drawings of the crosses, caskets, rings, and other objects on which the inscriptions were engraved. Some of the sheets of this part were exhibited, and excited general interest and admiration.

Mr STUART was sure that the meeting would express their cordial thanks to Professor Stephens for his interesting discourse. He trusted that it might make the Professor's great work better known among them, and that it would lead themselves to prize the venerable monuments still remaining in the land, on which Mr Stephens had lavished so much zeal and learning. With regard to the cross at Ruthwell, he had recently been corresponding with the minister of the parish on the subject of its better protection, and he trusted that ere long a suitable plan would be devised for this purpose.

Sir JAMES SIMPSON stated that Mr David Bryce, the architect, who was to be in the neighbourhood of Ruthwell on an early day, had promised to examine the monument, and report his opinion as to the steps which should be adopted. Sir James drew attention to Professor Stephens' magnificent work, and to the learning of the author, expressing his regret that it had not met with adequate encouragement, and that its production would go far to ruin the author, whose enthusiasm would allow no pecuniary consideration to come in the way.

Various suggestions were made on the subject, and a general desire expressed that the state of matters should be better known. The Chairman, in the meantime, recommended that all who could afford it should subscribe for copies of Mr Stephens' book, and that the subject of aid from the Society should be brought before the Council.

The thanks of the meeting were voted to Professor Stephens and to the Chairman.

MONDAY, 14*th January* 1867.

DAVID LAING, ESQ., LL.D., Vice-President, in the Chair.

The Right Hon. EARL PERCY was admitted a Fellow of the Society.

Mons. A. FURBY, B.A., George Street, was balloted for, and elected a Fellow, and

ARCHIVARY HERBST, Copenhagen, was elected a Corresponding Member.

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

(1.) By JAMES FARRER, Esq., Hon. Mem. S.A. Scot.

Portion of a Flat Bone of a Whale, measuring 6 inches in length, $2\frac{1}{4}$ inches in breadth, and 1 inch in thickness. It is perforated by two holes.

Six Stone Mullers or Pestles, measuring from 5 inches to $7\frac{1}{2}$ inches in length.

Three rude hollowed Stones or Cups, of irregular shapes : one measuring in greatest length $8\frac{1}{2}$ inches, another $6\frac{1}{2}$ inches, and the third 4 inches.

Two Circular Discs or Plates of Slate, measuring from 11 inches to $6\frac{1}{2}$ inches in diameter.

Two Flat Discs of Stone, 3 inches in diameter, perforated in the centre.

Curious Bronze Handle, measuring $3\frac{1}{2}$ inches in length, apparently turned on a lathe and finished by hand. (It is carefully figured in the woodcut, p. 103.)

All these articles were discovered in clearing out a "Burg" at Harray, Orkney. (See Communication, page 103.)

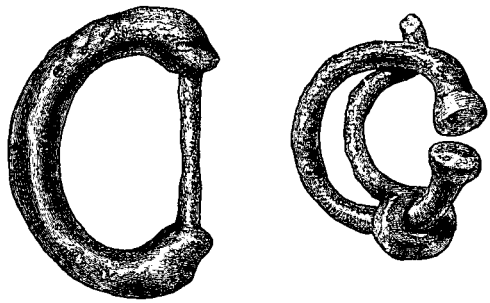
Rounded Implement of Sandstone, measuring 7 inches in length, $4\frac{1}{2}$ in breadth, and 3 inches in thickness. A groove is cut round its sides and edges. The stone resembles in shape a ship's "block;" and

Bone Pin, measuring 4 inches in length. Found in the "Knowe of Saverough," Orkney.

Small Penannular Brooch, 1 inch in diameter, with a Pin; and a

Bronze Buckle, 1½ inch in diameter, ornamented at each end with heads of animals. The tongue is awanting. (See annexed woodcuts.)

The Brooch and Buckle were found in Orkney.



Bronze Buckle and Brooch found in Orkney (full size).

(2.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Iron Cardinal Points of the Vane of St Mary's Church, South Leith.

(3.) By WILLIAM BROWN, Esq., of Linkwood.

Small Female Figure in lead, found in digging at Castlehill of Rothes.

(4.) By Mr DANIEL MACKENZIE, Alva.

Celt of close-grained dark-coloured Stone, measuring 5 inches in length and 2 inches across the face; from New Zealand.

Two Boars' Tusks from New Zealand.

(5.) By Mr ROBERT LEITH, Leven.

Wooden Club, with cleft extremity, and a small pattern cut on the back part of the head; it measures 3 feet 6 inches in length. From Navigator's Island, South Pacific Ocean.

(6.) By GEORGE SIM, Esq., Curator of Coins, S.A. Scot.

Denarius of Diadumenianus—Rev. Spes Publica.

Denarius of Barbia Orbiana.

(7.) By SAMUEL LAING, Esq., M.P., F.S.A. Scot.

Collection of Stone, Bone, and Bronze Implements, also portions of Human Skeletons and Animal Remains, found at Keiss, Caithness-shire, they are referred to in the subjoined notices of the different localities where

they were found, and are fully described in a work published by the Donor, entitled, "Pre-historic Remains of Caithness. By SAMUEL LAING, Esq., M.P., F.G.S. With Notes on the Human Remains. By THOMAS H. HUXLEY, Esq., F.R.S., Professor of Natural History, Royal School of Mines. London, 1866."

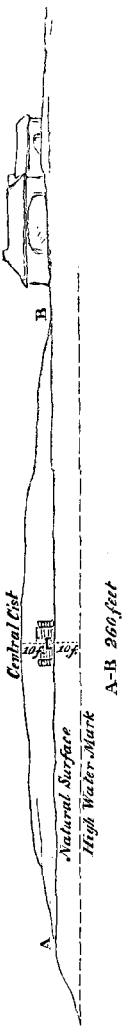


Fig. 1.—Transverse Section of Burial Mound.

The Society is indebted to Mr Laing for the accompanying plates and woodcuts.

The BURIAL MOUND is at a point where the sandy links end, and the sand of the sea shore changes into rock, and the first houses of Keiss begin, as seen in the section (fig. 1). There is a long, low, irregular mound of sand, overgrown with green turf (fig. 1, A to B), extending for about 300 yards parallel to the beach on its natural terrace, which is here composed of a raised beach of sand and shingle. The mound has probably continued for 400 or 500 yards farther north over the space now occupied by cottages, gardens, and farm-yards, as kists and skeletons are said to have been found up to the point where the cliff of boulder clay rises near the harbour. In this case the mound has been nearly half-a-mile long.

Its shape is so far obliterated that it is not easy to assign its precise breadth and height. The maximum breadth may be taken roughly at 80 or 90 yards, and the height at 10 feet above the natural soil or raised beach, which is itself about 10 feet above the level of the present high-water mark, as shown on the transverse section (fig. 1).

Mr Laing made sections across the mound, and discovered stone coffins at the points indicated on the longitudinal section (Plate V.*)

The coffins found were placed with wonderful regularity at about 15 feet apart, and in the central line of the mound. They were all of the same structure, consisting of walls of unhewn flag-stones from the beach, with no floor, but covered with large

flat stones. The kists lay generally north and south. They all contained human skeletons laid at full length, except one which was partially crumpled up. The heads in some cases were to the south, in others towards the north. Some of the skeletons found were those of females.

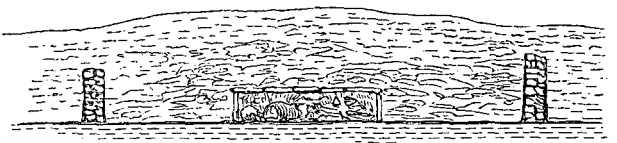


Fig. 2.—Section of Mound showing Wall and Kist.

Near the centre of the mound Mr Laing discovered a circular wall, 18 feet in inner diameter, about $2\frac{1}{2}$ feet high, and 9 inches to 1 foot

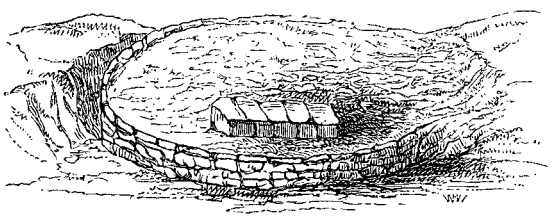


Fig. 3.—View showing Wall and Kist.

thick, which enclosed a cairn of stones (fig. 3). The stones near the centre were large, and disposed with some care. On removing the cairn,

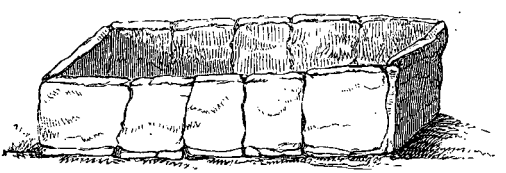


Fig. 4.—Stone Kist found in the Burial Mound.

a stone kist was found (fig. 4), which measured 6 feet 7 inches in length, 1 foot 10 inches in width, and 1 foot 10 inches in depth. It contained

a male skeleton, which lay on the right side, with the head to the south. In the kist various artificially-formed stones were found, which are figured in Plate VI. 1 to 11. Twelve stones were found about the position of

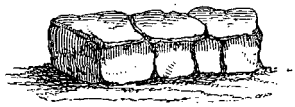


Fig. 5.—Kist found in the Burial Mound.

the left hand. The stone shown in Plate VI. No. 8, was found under

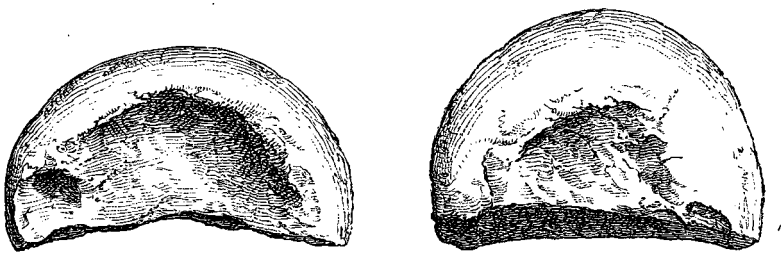


Fig. 6.—Half actual size.

the head, also a smooth oval beach stone. Five stones were found in the

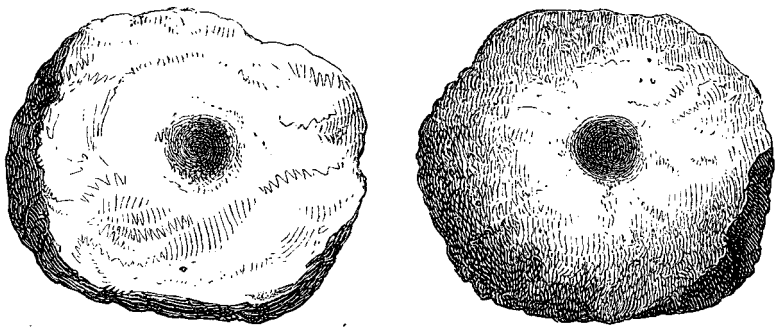


Fig. 7.—One-sixth actual size.

cairn covering the kist, including a sandstone block 13 inches in diameter,

with two circular holes about 2 inches deep on opposite sides, but not pierced through (fig. 7); a thin plate, 18 inches by 14 inches, rudely chipped to an oval or circular form; a similar round plate, about 7 inches by 6 inches; a broken wrought circular stone, with a circular hole in the centre not pierced through; a small granite stone from the beach, $2\frac{1}{2}$ inches by $1\frac{3}{4}$ inches; now preserved in the Museum.

In another kist were found various stone implements, an oblong stone hammer or pestle (Plate VII. Nos. 1 to 10), a piece of quartz, and a small deer horn, hollowed out apparently to serve as a handle, as figured on Plate VII. Nos. 7, 8. In another grave was found a heart-shaped water-worn stone, showing marks at the smaller end of having been used (Plate VII. No. 6), and some limpet shells.

The CHURCHYARD MOUND is about half a mile north of the burial mounds, and a section of it is shown in the annexed woodcut (fig. 8).

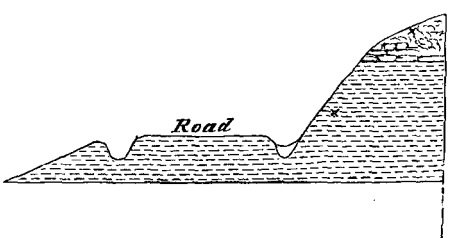


Fig. 8.—Section of the Churchyard Mound.

In this mound was found a great mass of shells, at least five feet in depth, resting on the natural soil, and covering an area of several hundred square yards; this again was covered by the foundations of a massive building, which in its turn has all but disappeared, the whole having been converted into a low and shapeless green mound, affording excellent pasture. Nothing remained of the building but the massive pavement or floor of large flat stones. The foundations are superimposed on the shell mound; and it is evident that the refuse heaps could not have accumulated about the building, but must have existed before it. The shell mound is composed of periwinkle and other shells, and a considerable number of animal bones and teeth, almost all of them being chipped up into small fragments.

The relics found in the heap consisted of chipped flints, rude stone and bone implements, and pottery, bone pins, &c., as shown in the annexed woodcut (Fig. 9, Nos. 1 to 6).

In the centre of the section (fig. 8), at the point marked ×, was found a human tooth, with a small portion of the jaw. Wood ashes and charcoal

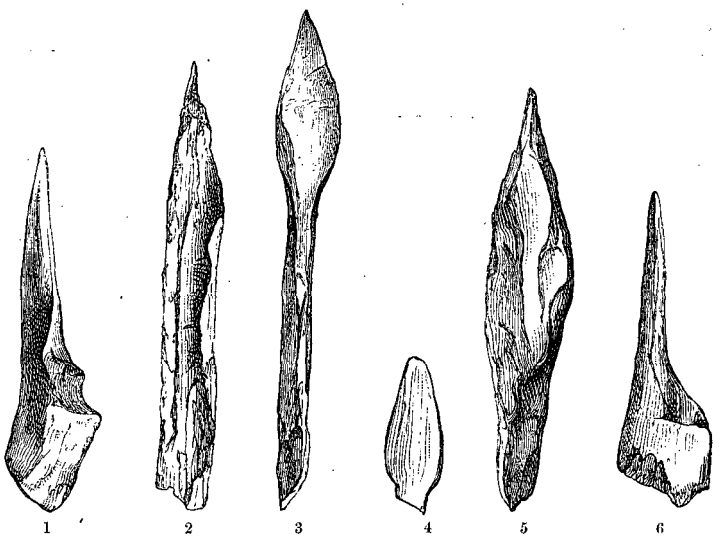


Fig. 9.—(1 to 6)—Bone Implements found at the Churchyard Mound. (Half the natural size.)

were common in the mound. The animal bones were generally chipped. Few fish bones were found. The stone implements were oval beach stones, which had apparently been used as hammers or pestles. A rude stone mortar, and round water-worn pebbles about the size of an apple, portions of pottery of the rudest description all in small fragments, were also found.

The human bones found in the burial mound, and now presented to the Museum, included the crania and pelves of two males and five females, and are figured in the accompanying Plates XI. to XXVI. Nos. 1 to 43. (They are described at page 54.)

The HARBOUR MOUND is a large green mound a little to the north of the harbour at Keiss, and is about half a mile from the burial mound.

Immediately adjoining it is a smaller mound, and some traces of ancient dwellings. The mound is shown in the annexed woodcut (fig. 10).

The mound consisted of a very irregular grassy hillock, with some loose stones lying about, and showing faint traces of a low outer wall or rampart. On excavating, a great portion of cyclopean building and a shell-midden was disclosed, with floors or pavements at different levels.

It is clear that this building had been a "burg."

A portion of this building remaining consisted of various circular walls,

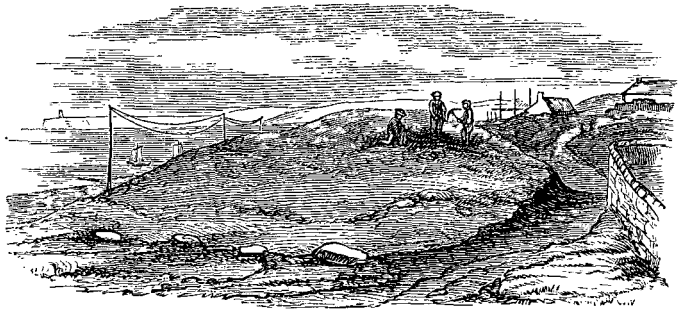


Fig. 10.—Harbour Mound, Keiss.

and was in some parts 12 feet in height. The inner circle was 24 feet in diameter; the thickness of the inner wall, 2 feet; passage between the inner and second wall, 3 feet; thickness of second wall, 4 feet; space between second and outer wall, from 4 feet to 15 feet; thickness of outer wall, $1\frac{1}{2}$ to 2 feet. (The woodcut, fig. 11, shows the ground-plan of the building, and cross sections of the mound.)

The mound indicated successive occupation and adaptation of the older parts of the building by newer inhabitants. The primitive part of the structure seemed to be the second or middle circular wall, which was by far the most massively built, and went down to a lower pavement of large flags resting on a layer of flat beach stones, laid on the natural rock. The space for five feet above this level was filled up with a midden or accumulation of shells, bones, ashes, &c. (See section, fig. 11, C.) Then came a second pavement of large flag stones, on a level with which are the

foundations of the two others, or an inner and outer, circular walls. Above this was another midden, 1½ foot deep (fig. 11, B), and then an upper pavement forming the floor of the inner circle. This, again, was covered by a midden of its own, mixed with a mass of stones and rubbish which had

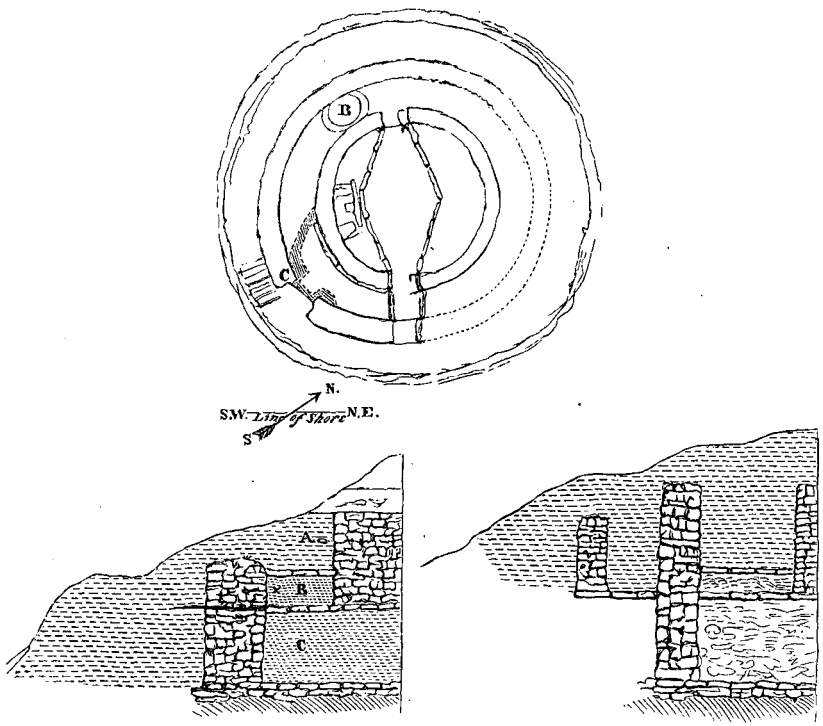


Fig. 11.—Ground Plan, and Sections of the Harbour Mound, Keiss.

fallen in and choked up the building. (Section, fig. 11, A.) There were thus three distinct middens, separated by superimposed pavements.

The building clearly showed proof of successive occupation. The doorways of the inner and second circular walls do not correspond. (Plate VIII. No. 1.) The former has two entrances, as shown on the ground

plan, nearly opposite to each other. The other has one very massive doorway only. On coming up to this doorway, in exploring the passage between the two circular walls, it presented the appearance of a fire-place and chimney; both were rudely constructed. (Plate VIII. No. 2.)

On removing these the solid massive doorway of the second wall appeared, which had obviously been converted from the entrance of a strong fort, into a chimney. (Plate VIII. No. 3.)

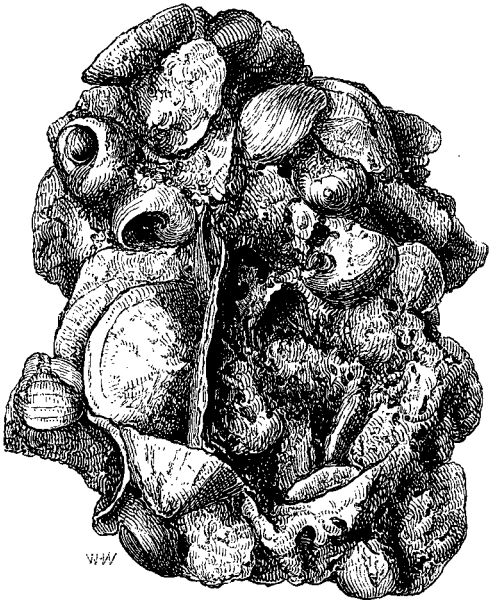


Fig. 12.—Mass of Limpet Shells found in the Harbour Mound.

Just outside this doorway was a massive stone staircase of eleven steps, leading down to the level of the second pavement.

The relics found in the lower middens (Plate IX. Nos. 1 to 9) were exceedingly rude, while those found in the upper middens were much finer. The skulls, teeth, bones, &c. of animals, chiefly in fragments, were in great abundance. Large deer horns were abundant towards the top, several of them bear marks of cutting; also a mass of limpet shells,

cemented together by oxide of iron, which is figured in the annexed wood-cut (fig. 12).

Those found in the mound itself consisted of ruder stone implements, chipped flints, rude implements of bone, coarse pottery; an implement shaped like a pair of modern sugar-tongs, formed partly of bronze and

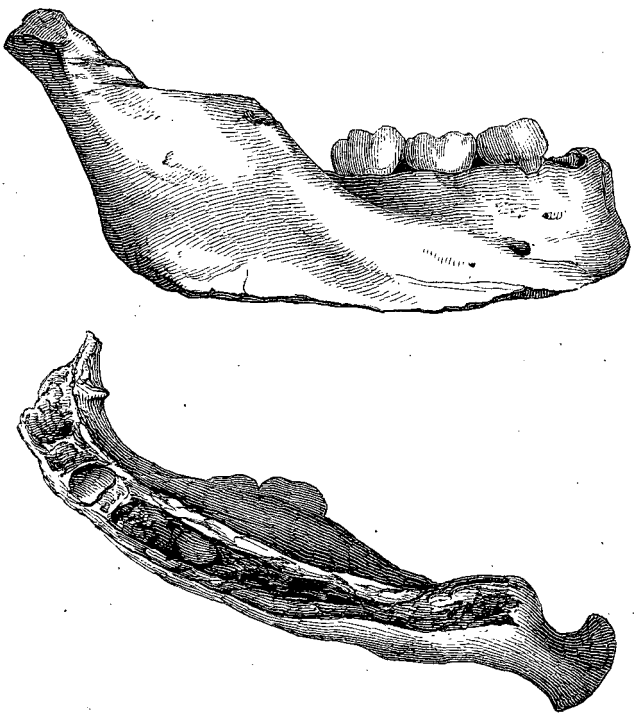


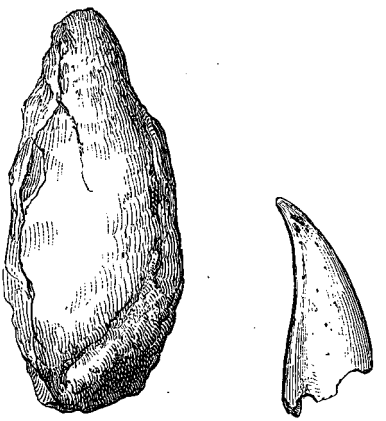
Fig. 13.—Child's Jaw found in the Harbour Mound, actual size.

partly of iron, as shown in Plate IX. No. 5; an iron object, apparently the two blades of a pair of scissors rusted together, found at the spot marked A in the section (fig. 11) along with portions of pottery. The iron implement may be a relic of the last occupants of the dwellings by whom the chimney and fire-place were constructed. In the secondary midden B, at the spot

marked × on the section (fig. 11), in a mass of limpet shells and animal bones, all in fragments, was found a portion of the lower jaw of a child. It is figured in the annexed woodcut (fig. 13). No trace of any other human

Fig. 14.—Birkle Hills.

bones were found along with it. A fragment of a human jaw was also found in another shell midden. The finding of these fragments of human bones mixed up with bones of animals is curious and suggestive.



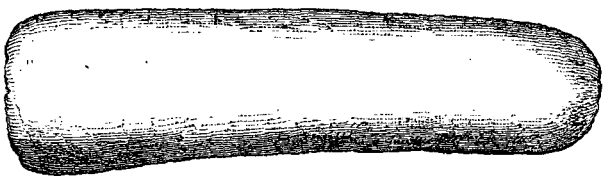
One-half natural size. One third natural size.

Fig. 15.—Implements found in a Kist at the Birkle Hills.

In the sandy links near Westerburn are two large mounds, popularly known as the "Birkle Hills." They stand amidst the hillocks of blown sand, about 200 yards from the sea-shore, on the raised beach of

sand and flat shingle stones. A view of the hills is shown in the woodcut (fig. 14).

The surface of both mounds is of sand covered with small stones from the adjacent raised beach, with limpet and other shells, animal bones, &c. Cairns of stones remain on the summit and round the base of both hills. In the smaller mound several kists were found. In one of them



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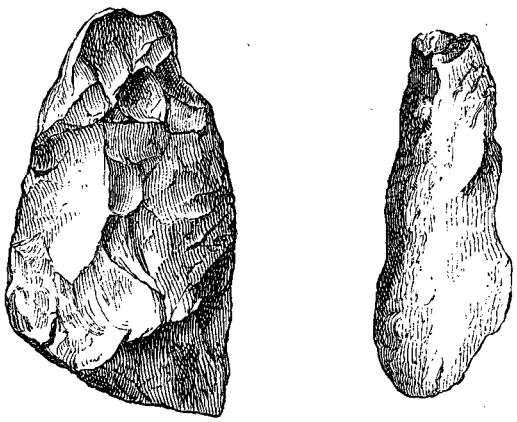


One-half actual size. One-half actual size

Fig. 16.—Stone Implements found in the Birkle Hills.

rude implements were discovered similar to those found in the centre kist of the burial mound. Three of these are figured in the woodcut (fig. 16).

There were also found implements of quartz and sandstone, and a stone hammer or pestle, showing at each end evidence of having been used. (See woodcut, fig. 16.)

The smaller mound was completely covered with shells and bones of animals, &c., and in digging, masses of shell middens were disclosed. The action of fire was also everywhere apparent, and several of the cairns seemed to be the remains of small circular fire-places or ovens.

The only complete structure disclosed was at the top of the small mound, as shown in the accompanying ground plan and section.

A massive stone closed the entrance next the sea. From this a passage, enclosed on each side by upright flagstones, about 2 feet long by 1½ deep, descended by a gentle decline for 6 feet. It then became horizontal for about 8 feet, widening out from 3 to 5 feet, and taking a turn from nearly north-west to west, in which direction a similar ascending passage emerged on the west side of the mound. (See plan and section, figs. 17 and 18.) There was no trace of a roof, but the pavement was carefully

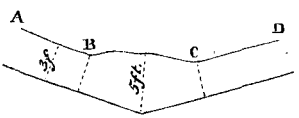


Fig. 17.—Birkle Hill, Ground Plan, Small Mound.

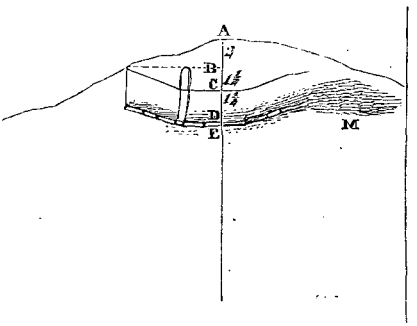
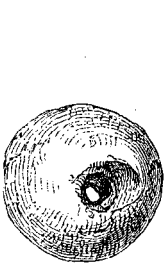


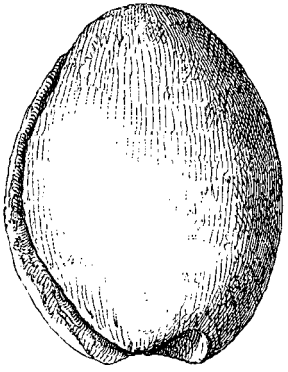
Fig. 18.—Birkle Hill, Section of Small Mound.

fitted. The floor was covered to the depth of 9 inches with shells, animal bones, charcoal, &c. The flags had been laid upon refuse of the same kind a few inches in depth. Considerable signs of fire were observed. Outside was a considerable midden of shells, bones, &c., in which was found two whorls or buttons, one of bone the other of stone, some pieces of flint which have been artificially chipped, a broken piece of sandstone, 6 inches by 4, resembling a ship's block, having a deep groove running round it, with a notch at one end. (See the annexed

woodcuts, fig. 19, 2.) A similar stone was found by Mr Petrie near a Pict's house at Grain, Kirkwall; and another, found by Mr Farrer at the "Knowe" of Saverough, is now in the Museum of the Society. A similar grooved block is figured among the objects from the lake habitations of Italy, in the translation of Gastaldi's work, published by the Anthropological Society of London, plate i. fig. 2. Stone hammers were found, and in the upper stratum a small, well-formed bone pin, with a regular head, being the only skilfully wrought bone found amongst the remains. No trace of pottery was found. The annexed woodcuts show the whorl, the sandstone block, and the bone pin.



1. One-third actual size



2. One-third natural size.

3. Full size.

Fig. 19.—1. Bone Whorl; 2. Sandstone Grooved Block; 3. Bone Pin found at the Birkle Hills.

The MOORLAND MOUND is about three miles inland from Keiss, in the midst of an expanse of heather. It is a green spot, with some grey stones scattered over it, which contains the remains of ancient dwellings. The dwelling explored was nearly square, with an entrance passage. The walls were made of large flags set on edge; there was no trace of any roof, but the floor was paved with flat stones, over which were from a few inches to a foot of shells, bones, ashes, &c. Along the wall on each side of the principal room was a row of square boulder stones, forming a bench or bed. The inner end was divided by two large upright flagstones into

three compartments. The fire-place had been on the stone floor near the passage or doorway. (See woodcuts, figs. 20 and 21.)

On clearing out the floor of the building fragments of pottery (one having a coarse blue glaze), a sandstone hammer or oval beach stone showing marks at both ends of having been used, two small stone whorls, smooth

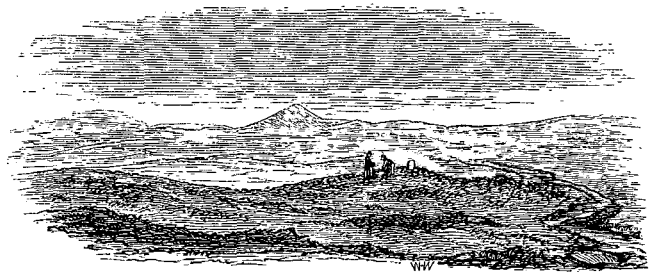


Fig. 20.—Moorland Mound.

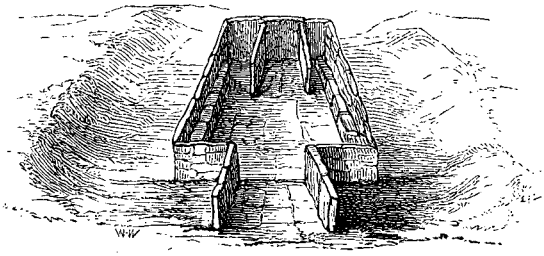


Fig. 21.—Ancient Dwellings, Moorland Mound.

round pebbles, and piece of porphyry polished on one side, were discovered.

The following is a list of the FAUNA of which remains have been found in the shell middens at Keiss :—

Mollusca.—Limpet (*Patella vulgaris*), Periwinkle (*Littorina litorea*), Lesser Periwinkle (*Littorina nontridia*), Whelk (*Buccinum undatum*), Cockle (*Cardium*), Scallop (*Pecten majus*), Lesser Scallop (*Pecten Argus.*)

Annulosa.—Lobster (*Serpula.*)

Fish.—Cod (*Morrhua vulgata*).

Birds.—Great Auk (*Alca impennis*, fig. 23), Lesser Auk (*Alca tarda*), Cormorant (*Philacrocorax carbo*), Shag (*Philacrocorax graculus*), Solan Goose (*Sula bassana*).

The bones of the great auk, which is now extinct in Europe, having but lately died out in Iceland, but said still to survive in Greenland, are frequently found in the Danish Kjökkenmöddings.

Mammalia.—Ox (*Bos longifrons*), Horse (*Equus caballus fossilis* (?), Red Deer (*Cervus elephas*), Goat (*Capra hircus*), Hog (*Sus scrofa*), Dog (*Canis familiaris* or *familiaris fossilis*), Fox (*Canis vulpes*), Rabbit (*Lepus cuniculus*), perhaps recent.

Cetacea.—Grampus (*Delphinus orca*) or small whale, Dolphin (*Delphinus dolphis*) or some other small cetacean.

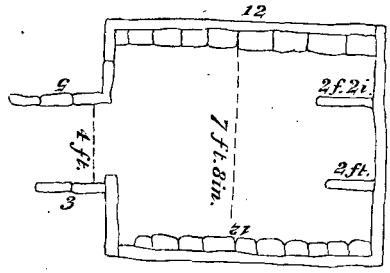


Fig. 22.—Ground Plan of Dwelling, Moorland Mound.

The fauna corresponds with that of the Danish middens in its general character, and contains just such an assemblage of animals as are commonly found in quaternary deposits. The dog appears to have been the only animal that was domesticated, from the circumstance of a jaw having been found in a kist along with human remains. A portion of red deer horn found was of unusually large size. It measures 5 inches in length and is 3 inches in diameter at the root or lower part. (See woodcut, fig. 24.)

Plate X., Nos 1 to 20, shows various stone and bone implements, whorls, &c., found in the shell middens at Keiss.

Human Remains.—The remains of seven human bodies were found in the course of the explorations at the Burial Mound, Keiss; two were

males, and five were females, and are minutely described by Professor Huxley in the "Pre-historic Remains of Caithness." The skulls and

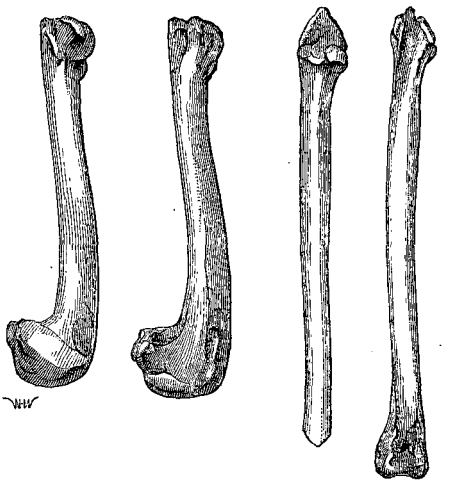


Fig. 23.—Bones of the Great Auk found at Keiss, one-half natural size.

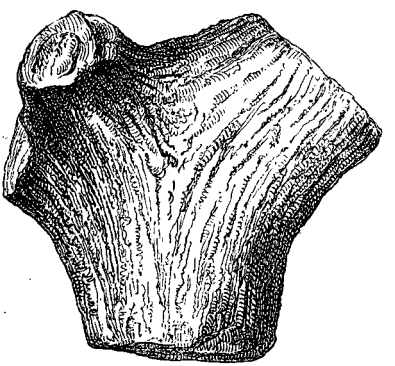


Fig. 24.—Portion of Red Deer Horn found at Keiss, one-third actual size.

pelves are now presented to the Museum, and the following notes have been taken from Professor Huxley's descriptions :—

"Of the males:

	Cephalic index.	
No. 7 is (?) in. high; is sub-brachycephalic	(0·78)	and has an ordinary pelvis.
No. 8 is 67–8 in. high; is orthocephalic	(0·76)	and has an ordinary pelvis.
	Mean 0.77	(or sub-brachycephalic).

Of the females:

No. 2 is 61 in. high; is sub-brachycephalic	(0·78)	and has an aberrant pelvis.
No. 1 is 58-9 in. high; is mecocephalic	(0·73)	and has a pelvis of less remarkable character, though slightly modified in the same direction.
No. 3 is 61 in. high; is orthocephalic	(0·76)	and no pelvis is preserved.
No. 5 is (?) in. high; is orthocephalic	(0·75)	and is devoid of pelvis.
No. 9* is 61–2 in. high; is mecistocephalic	(0·70)	has a pelvis nearly resembling that of No. 2.
	Mean 0·744	(or orthocephalic).

"Thus the males are, the one somewhat above, and the other probably about, the average stature; while the females are short, none exceeding five feet two or three inches in height.

"The males are, in the mean, shorter headed than the females, in accordance with the usual rule.

"Both the males have ordinary pelves; while it is a most remarkable circumstance that all the female pelves which are preserved differ from the ordinary female pelvis, in the circumstances that the conjugate diameter of the brim, or the antero-posterior diameter of the cavity, or both, are unusually great. In two of the three this aberration goes so far, that the conjugate diameter nearly equals, or even exceeds, the transverse.

"None of the skulls exhibit paramastoid or pneumatic processes of the occipital bone; in none does the squamosal meet the frontal, so as to exclude the parietal from junction with the alisphenoid. None exhibit a persistent infraorbital suture, or a second lachrymal; or that separation of the lachrymal from the *os planum* of the ethmoid by the junction of the frontal with the maxillary, which I have met with in some rare cases in

* This skull is now in the possession of William Turner, M.B., Professor of Anatomy in the University of Edinburgh.

the human skull, and which is a curious pithecoid variation, observed in the gorilla and the chimpanzee, but not in the orang. In all, the occiput forms a distinct projection above the superior curved line and *spina occipitalis*. There is no excessive development of the supraciliary ridges. Only the faintest traces of the premaxillo-maxillary suture are to be seen in any of the skulls.

"Taking the seven skulls as a whole, it will be observed that three are orthocephalic; two are sub-brachycephalic; one is mecocephalic; and one mecistocephalic. None of the skulls come within the proper brachycephalic group. Nevertheless there are very marked and obvious differences between No. 7 and Nos. 1 and 9.

"The two male skulls, Nos. 7 and 8, offer clear differences, which are even more apparent when the skulls themselves are placed side by side, than they seem to be in the figures. Of the five female skulls, Nos. 2 and 3 present resemblances to the male skulls; but Nos. 5 and 1 differ widely both from one another and from the male skulls. From some camera lucida sketches of No. 9, with which Mr Turner has kindly favoured me, I judge that No. 9 resembled No. 1 more than any other skull in the collection.

"Four forms—two male and two female—are distinguishable in this small collection of crania from Keiss.

"Firstly. That characterised by its spacious and broad calvaria, with moderate nasal depression, wide and well-developed forehead, somewhat flat occiput, macrognathous and orthognathous face (No. 7).

"Secondly. That characterised by a calvaria narrower in proportion to its length, especially in the frontal region, with a strong nasal depression, a narrower and more retreating forehead, a very prominent occipital protuberance or *probole*, well-marked parietal protuberances, and a macrognathous and more prognathous face (No. 8).

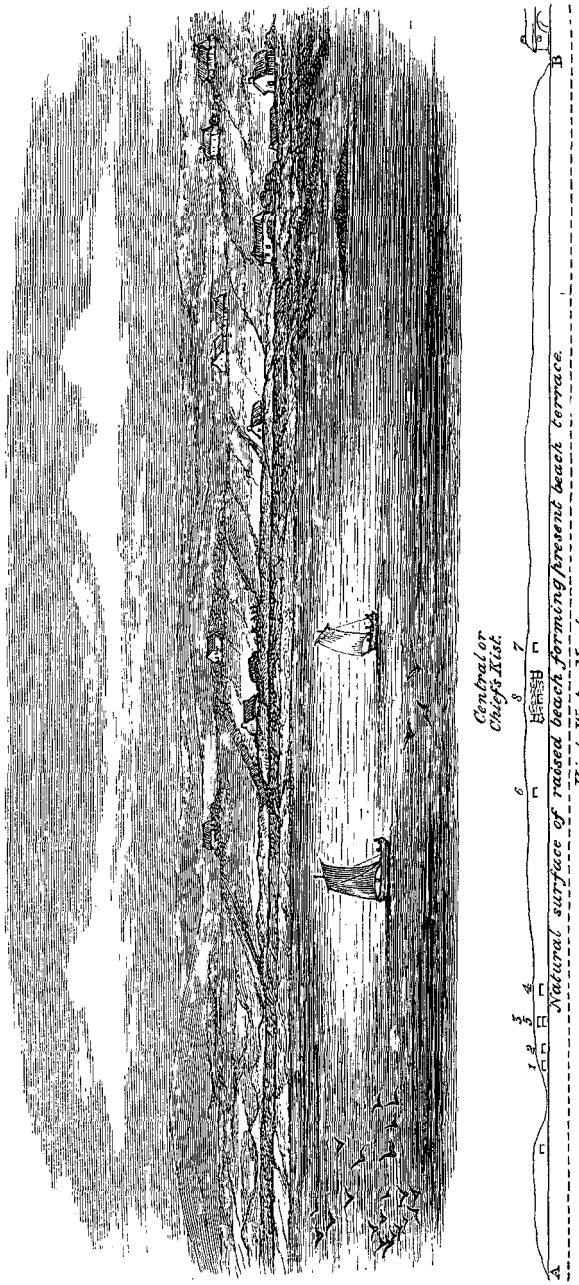
"Thirdly. That characterised by a long narrow calvaria, with a pentagonal contour of the *norma occipitalis*, with a slight nasal depression, a low and retreating forehead, a moderately prominent occiput, and with jaws which, though not large, are exceedingly prognathous (No. 1).

"Fourthly. That characterised by an elongated oval thin calvaria, with a rounded contour of the *norma occipitalis*, with a slight nasal depression, moderately well-formed forehead, prominent occiput, ill-marked

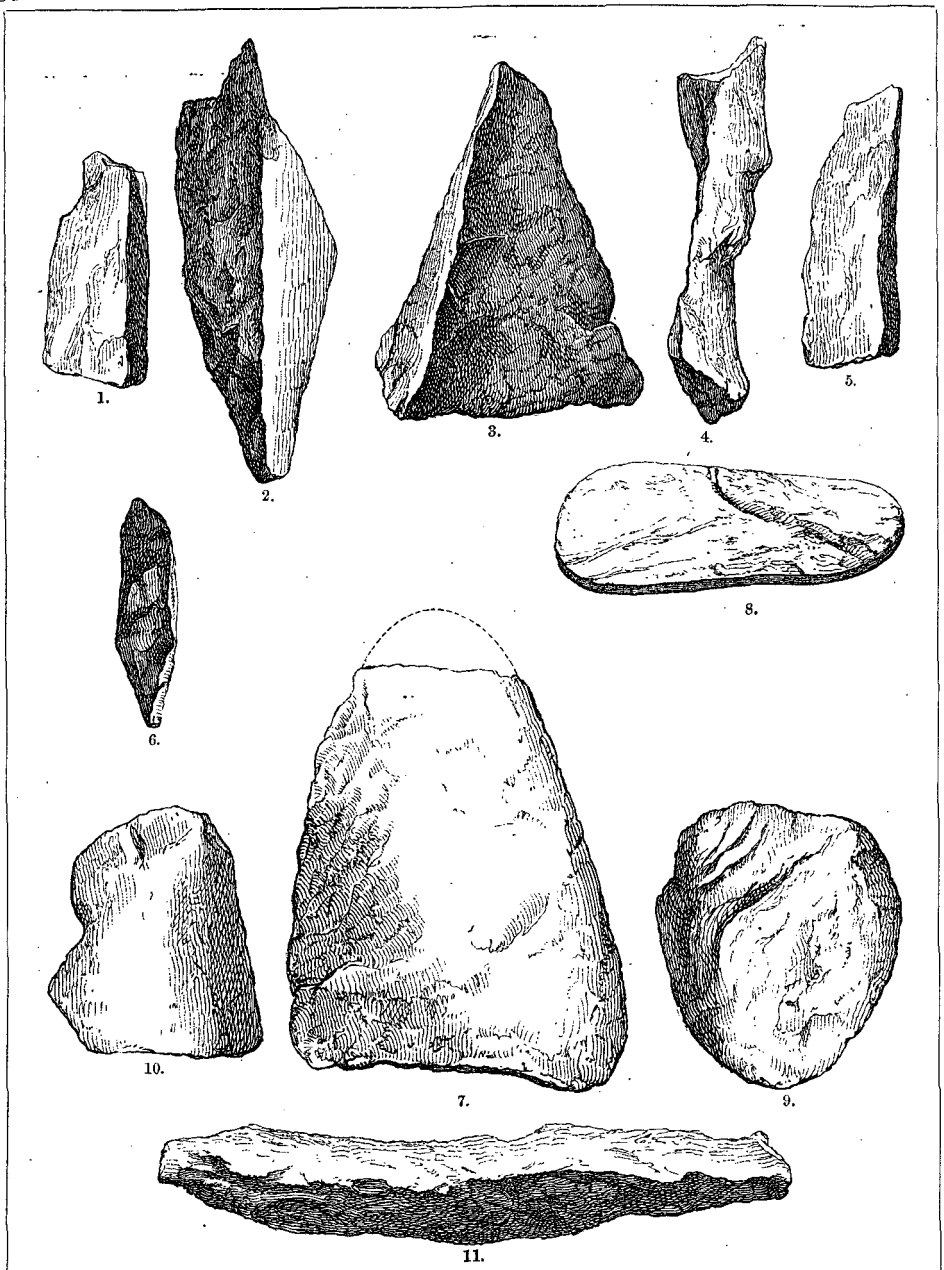
parietal protuberances, and small and but slightly prognathous jaws (No. 5)."

The different skulls and pelves are figured in Plates XI. to XXVI.

The following Communications were read :—

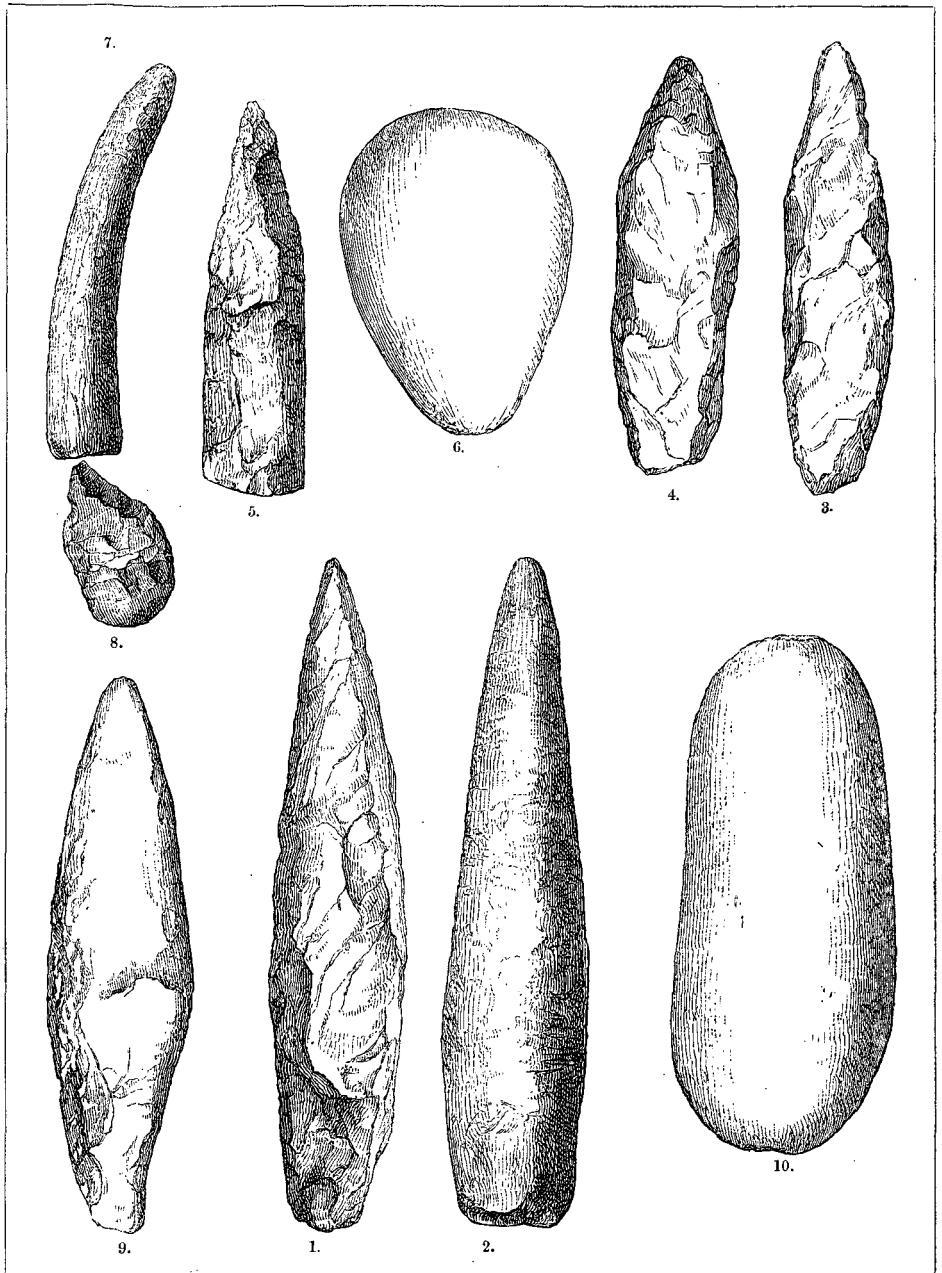


VIEW OF THE BURIAL MOUND, KEISS, AND SECTION SHOWING THE RELATIVE POSITION OF THE KISTS NOS. 1 TO 8.



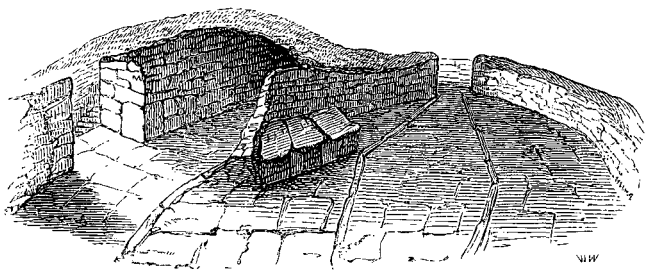
STONE IMPLEMENTS FOUND IN A KIST IN THE CENTRE OF THE BURIAL MOUND, KEISS.

They are figured half the natural size, except No. 3, which is a fourth of the actual size.

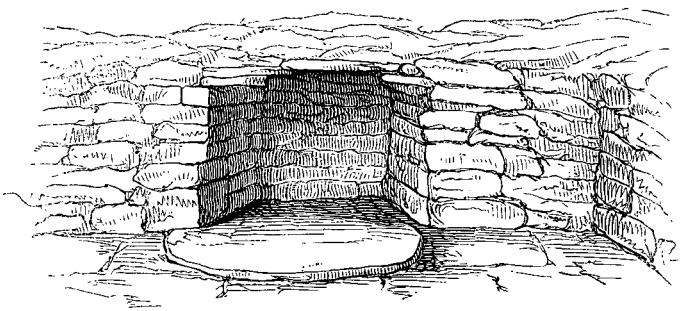


STONE IMPLEMENTS FOUND IN KISTS IN THE BURIAL MOUND, KEISS.

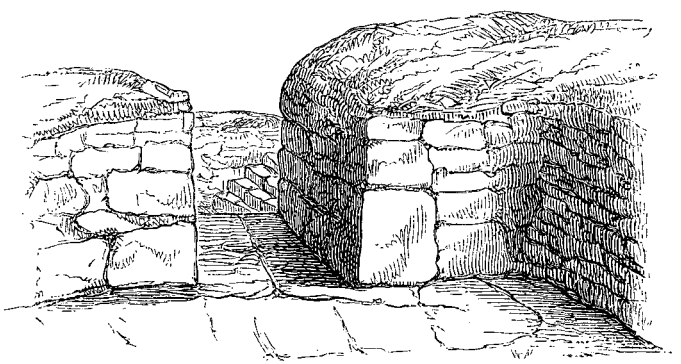
Nos. 1, 2, 3, 4 are natural size, 5 and 6 one-third, and 7 half natural size.



1.

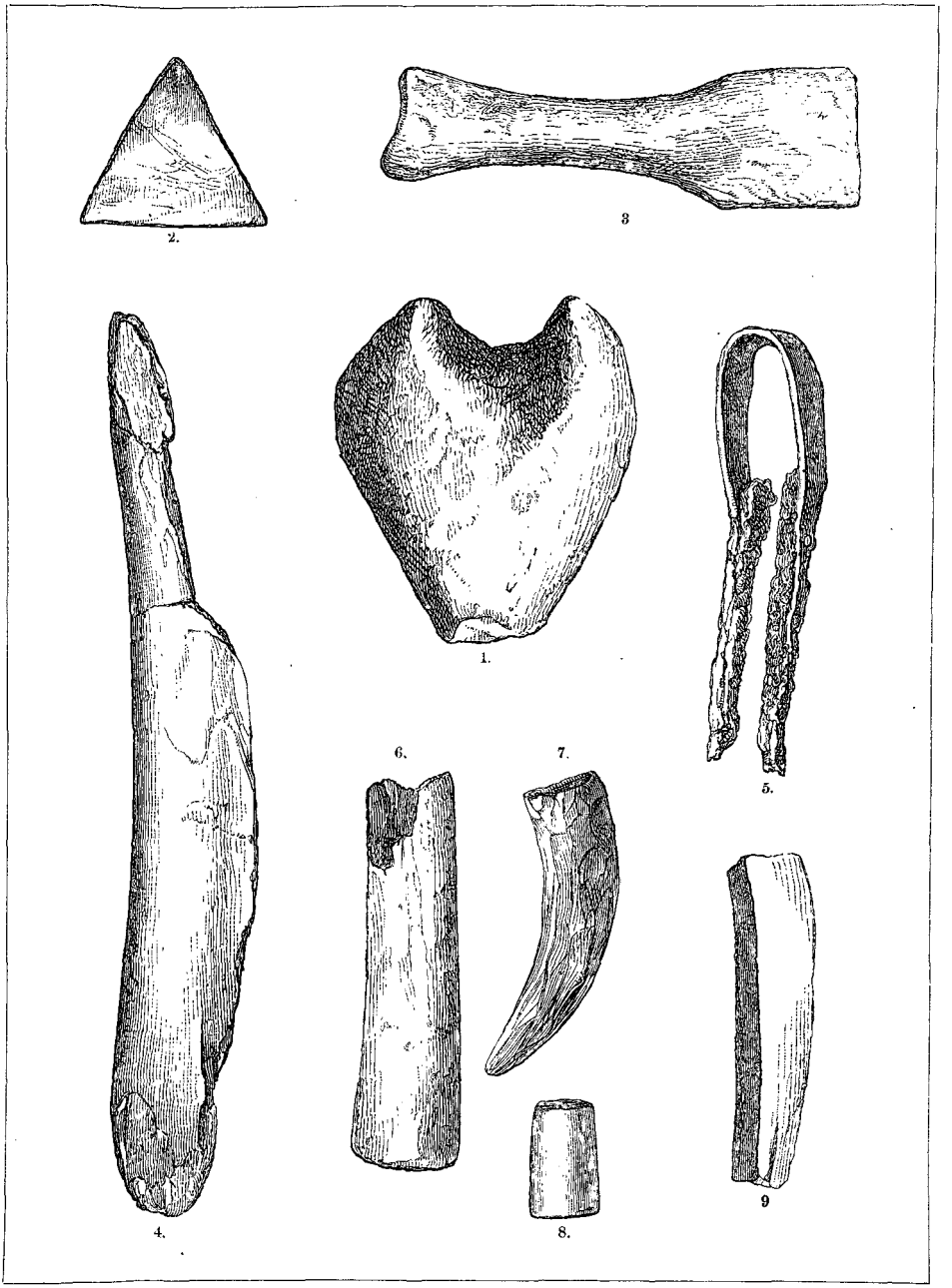


2.



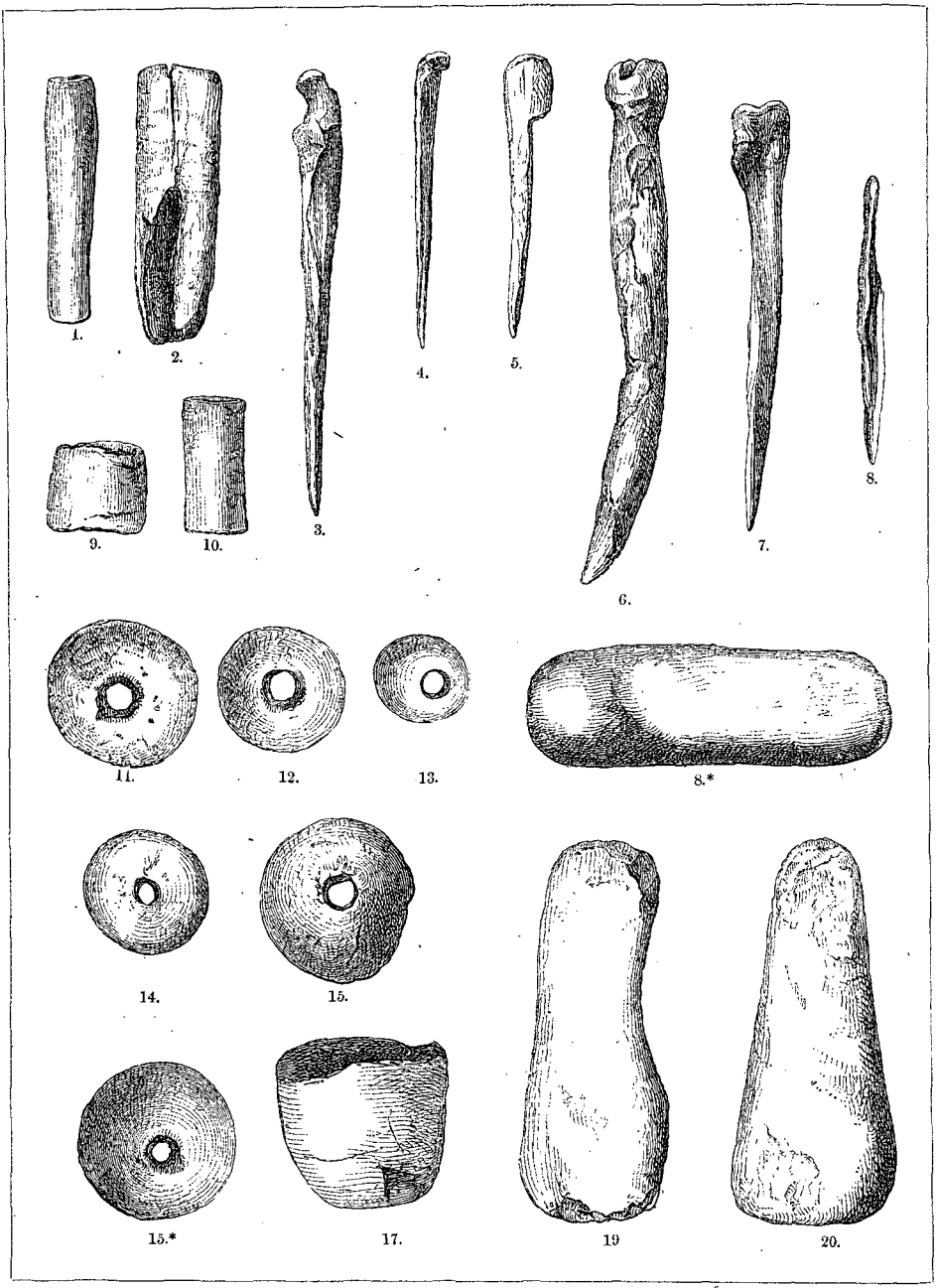
3.

REMAINS OF BUILDINGS FOUND IN THE HARBOUR MOUND, KEISS.



BONE AND STONE IMPLEMENTS, ALSO BRONZE AND IRON TONGS, FOUND IN THE HARBOUR MOUND.

No. 1 is one-fourth, all the others half the actual size.



BONE PINS, WHORLS, AND STONE IMPLEMENTS FOUND IN THE SHELL MIDDEN AT KEISS.

Nos. 1 to 16 half, 17 to 20 one-third actual size.

The Skull No. 7.

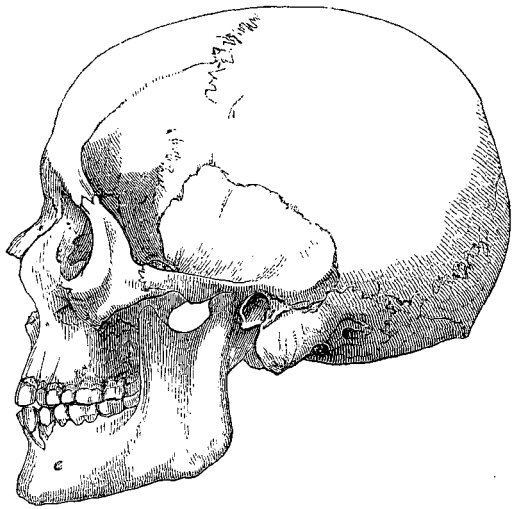


Fig. 1.

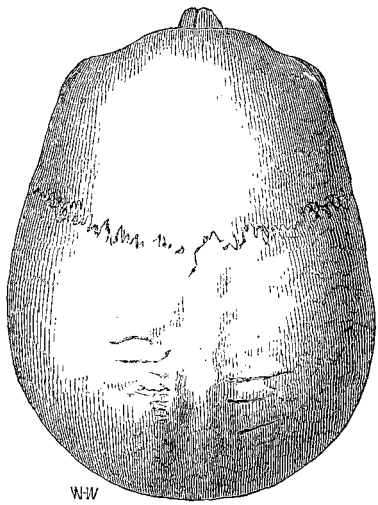


Fig. 2.

Fig. 1.—Norma lateralis, Fig. 2.—Norma verticalis.

*** *In the lateral, front, and back views of this and all other skulls figured,* Mr Busk's *method of placing the* skull has been adopted. A plane traversing the auditory meatuses and the junction of the coronal and sagittal sutures is vertical. In the "norma verticalis" the centre of such a plane is traversed by the line of sight. All the drawings are reduced to one-third of the natural size of the skulls.

SKULL FOUND AT KEISS, ORKNEY.

The Skull No. 7.

Fig. 3.

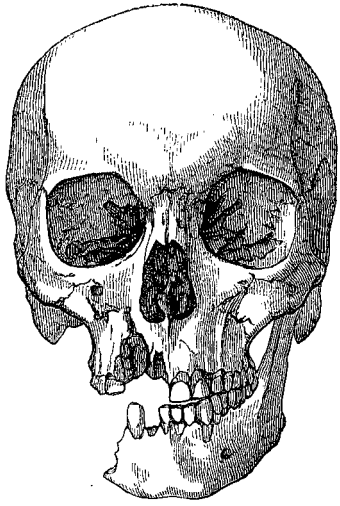


Fig. 4.

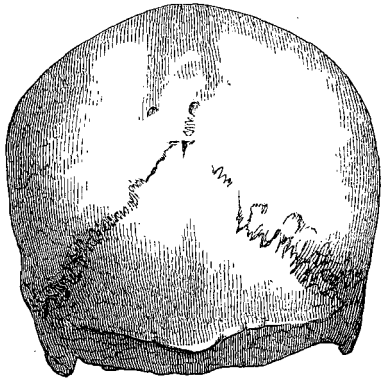


Fig. 5.

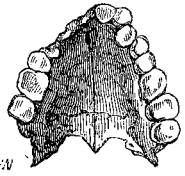


Fig 3.—Norma frontalis. Fig. 4.—Norma occipitalis. Fig. 5.—The Palate.

SKULL FOUND AT KEISS, ORKNEY.

Pelvis of No. 7.

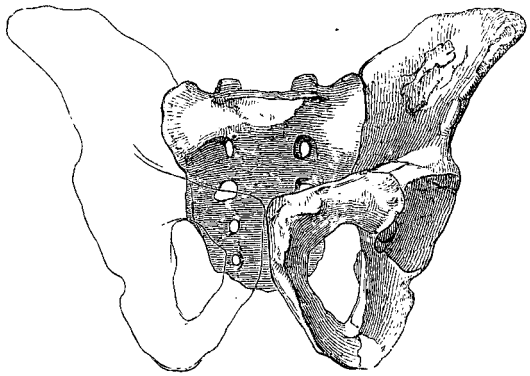


Fig. 6.

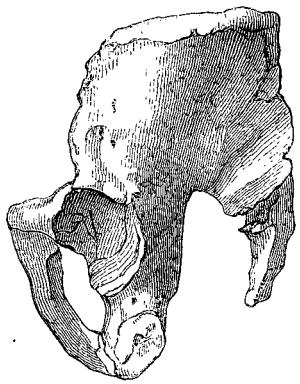


Fig. 7.

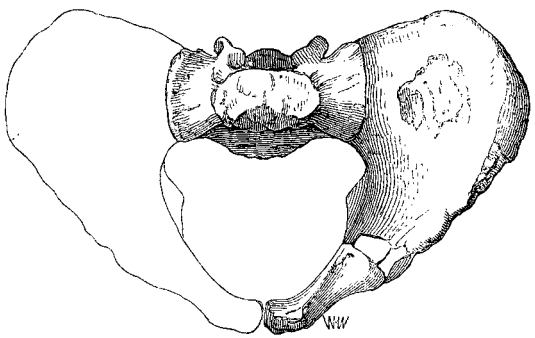


Fig. 8.

Fig. 6.—Front view. Fig. 7.—Side View.
Fig. 8.—View perpendicular to the plane of the brim.

*** In these and all the other figures of pelves, the front and side views are taken from the pelvis in such a position that the body of the ischium is vertical. The figures are one-fourth of the natural size.

FOUND AT KEISS, ORKNEY.

The Skull No. 8.

Fig. 9.

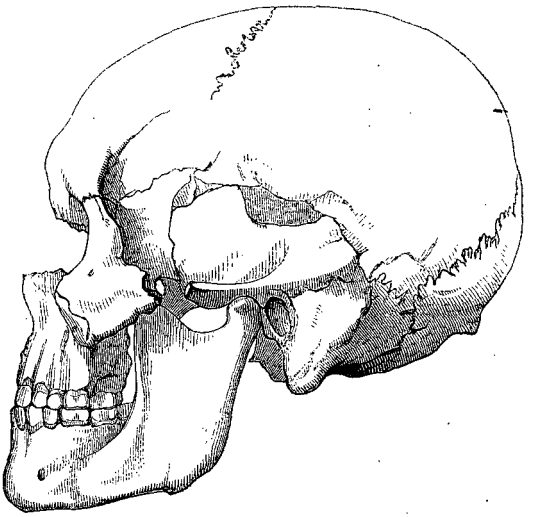


Fig. 10.

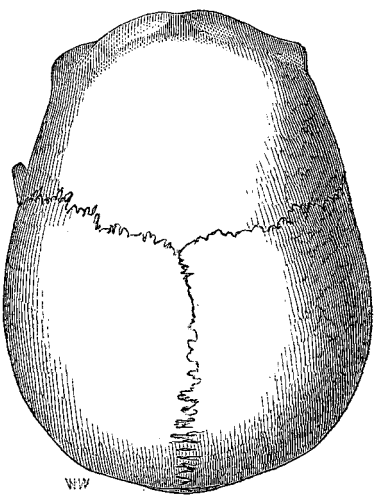


Fig. 9.—Norma lateralis.

Fig. 10.—Norma verticalis.

SKULL FOUND AT KEISS, ORKNEY.

The Skull No. 8.

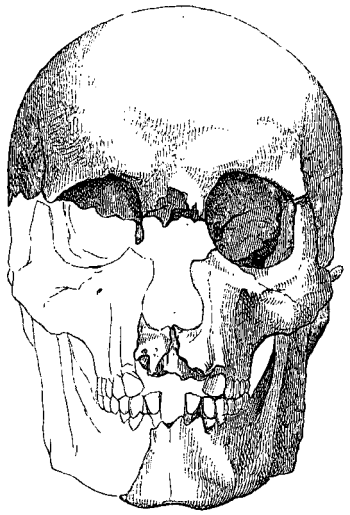


Fig. 11.

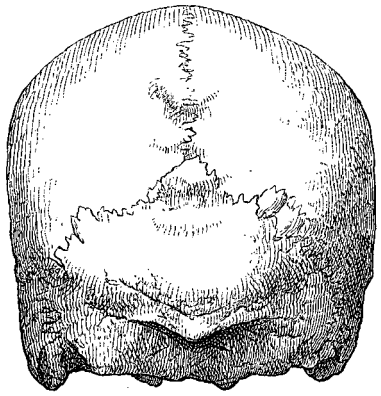


Fig. 12.

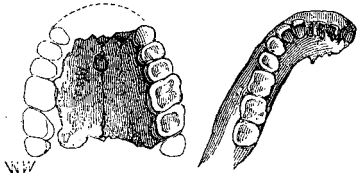


Fig. 13.

Fig. 11.—Norma frontalis. Fig 12.—Norma occipitalis.
Fig. 13.—Palate and part of the Lower Jaw.

SKULL FOUND AT KEISS, ORKNEY.

Pelvis of No. 8.

Fig. 14.

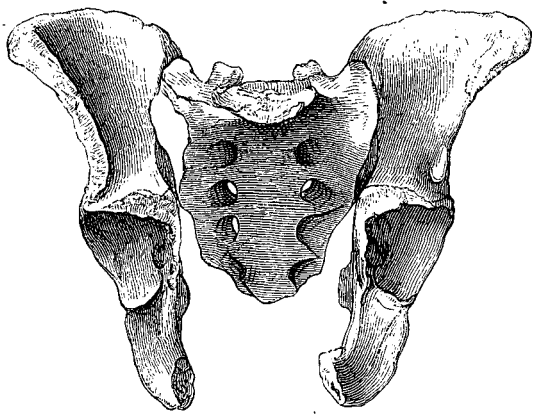


Fig. 15.

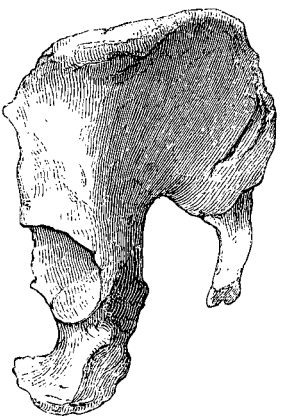


Fig. 16.

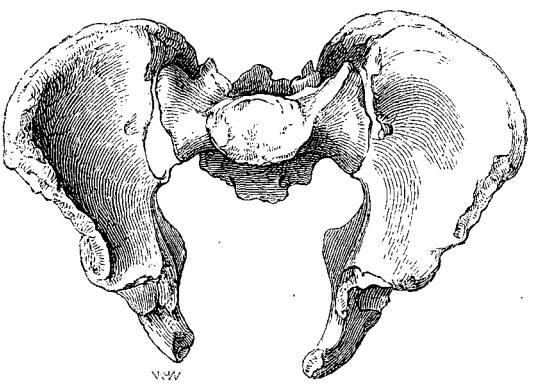


Fig. 14.—Front View. Fig. 15.—Side View.
Fig. 16.—View perpendicular to the plane of the Brim.

FOUND AT KEISS, ORKNEY.

The Skull No. 2.

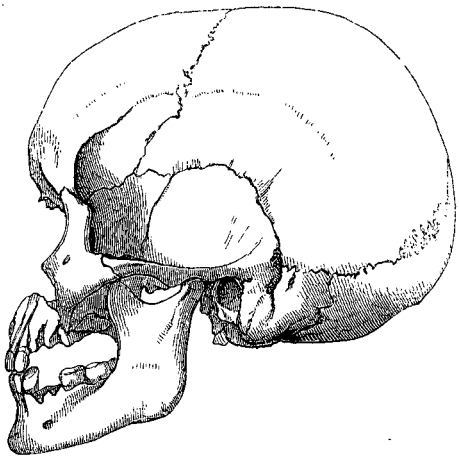


Fig. 17.

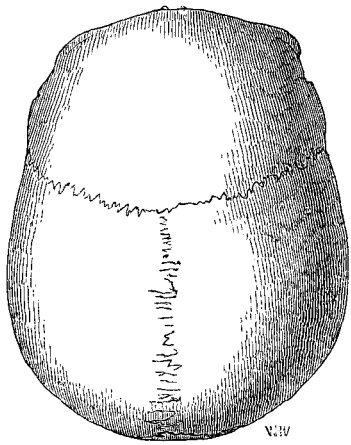


Fig. 18.

Fig. 17.—Norma lateralis.

Fig. 18.—Norma verticalis.

SKULL FOUND AT KEISS, ORKNEY.

The Skull No. 2.

Fig. 19.

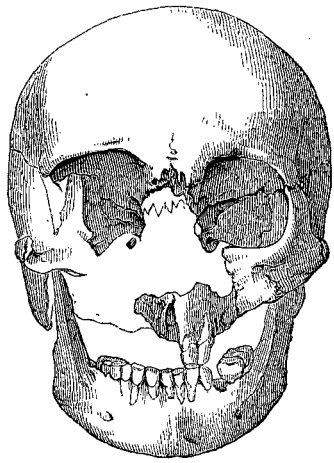


Fig. 20.

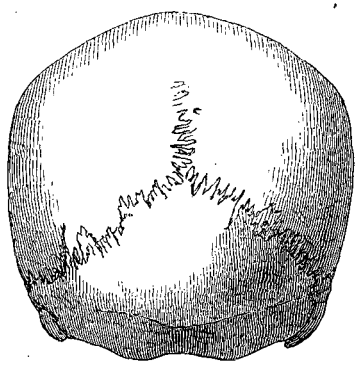


Fig. 21.

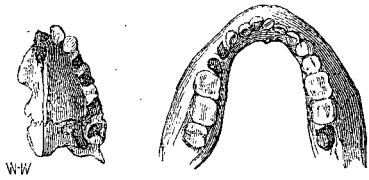


Fig. 19.—Norma frontalis. 20.—Norma occipitalis.
Fig. 21.—Palate and Horizontal Rami of the Lower Jaw.

SKULL FOUND AT KEISS ORKNEY.

Pelvis of No. 2.

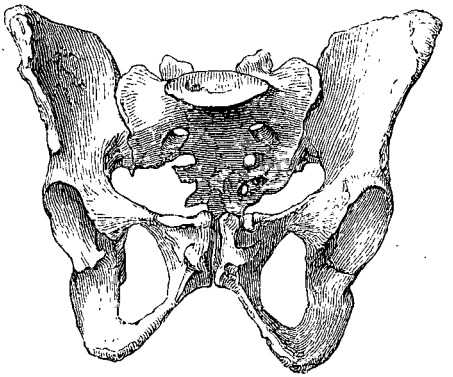


Fig. 22.

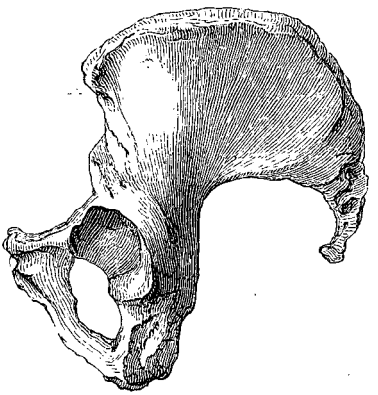


Fig. 23.

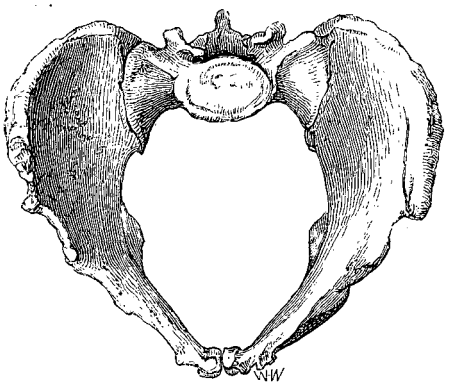


Fig. 24.

Figs. 22, 23, 24.—Three views corresponding with those given in Figs. 6, 7, 8.

FOUND AT KEISS ORKNEY.

The Skull No. 1.

Fig. 25.

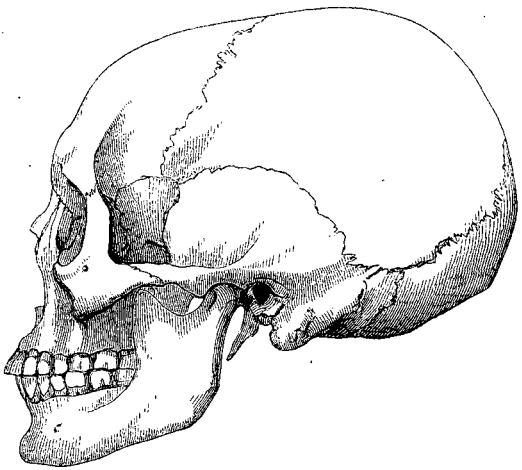


Fig. 26.

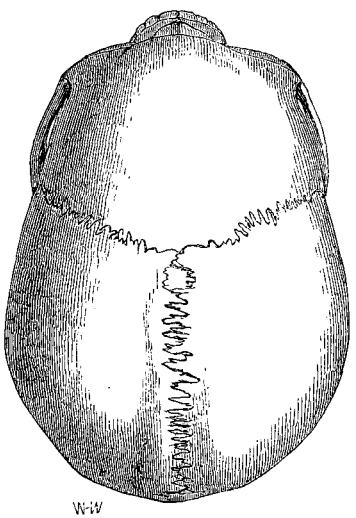


Fig. 25.—Norma lateralis.

Fig. 26.—Norma verticalis.

SKULL FOUND AT KEISS, ORKNEY.

The Skull No. 1.

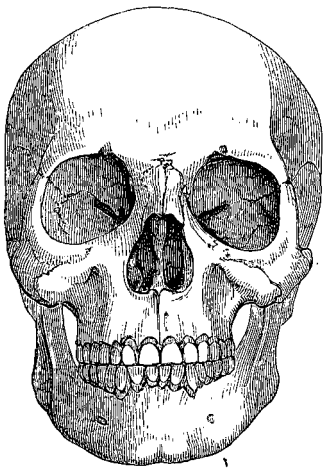


Fig. 27.

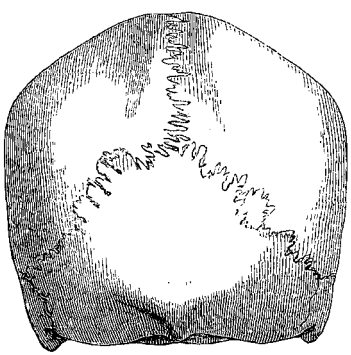


Fig. 28.

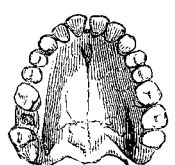


Fig. 29.

Fig. 30.

Fig. 27.—Norma frontalis. Fig. 28.—Norma occipitalis. Fig. 29.—Palate.
Fig. 30.—The right clavicle.

SKULL FOUND AT KEISS, ORKNEY.

Pelvis of No. 1.

Fig. 31.

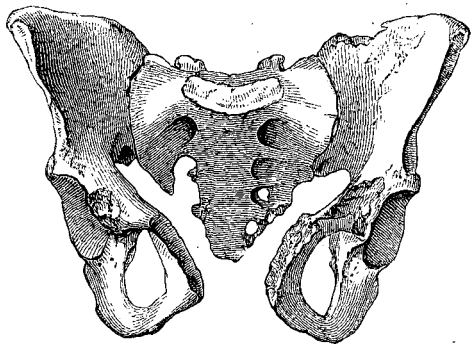


Fig. 32.

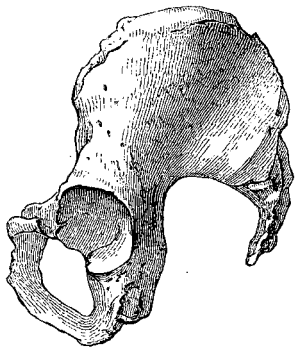
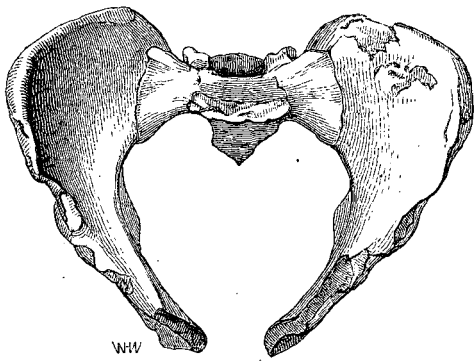


Fig. 33.



Figs. 31, 32, 33.—Three views corresponding with those given in Figs. 6, 7, 8.

FOUND AT KEISS, ORKNEY.

The Skull No. 3.

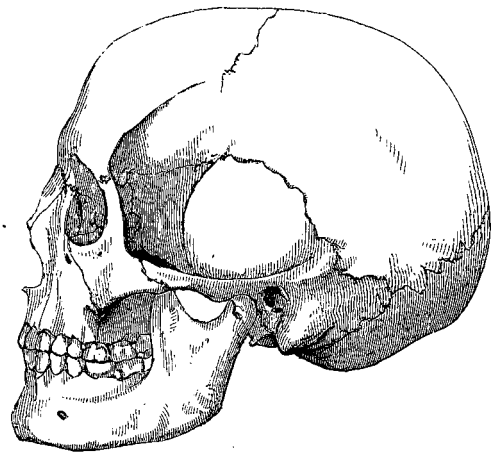


Fig. 34

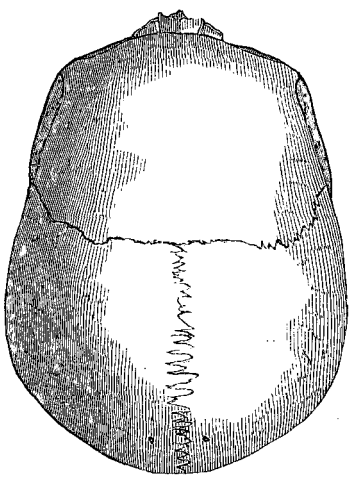


Fig. 35.

Fig. 34.—Norma lateralis.

Fig. 35.—Norma verticalis.

The Skull No. 3.

Fig. 36.

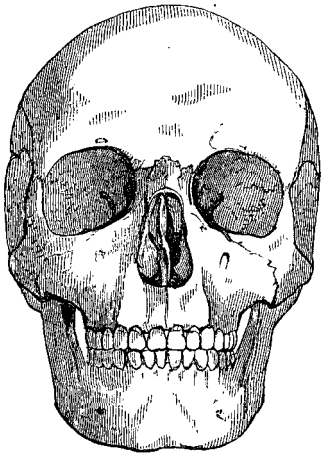


Fig. 37.

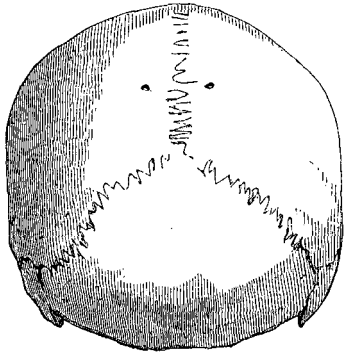


Fig. 38.

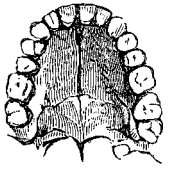


Fig. 36.—Norma frontalis. Fig. 37.—Norma occipitalis. Fig. 38.—The Palate

SKULL FOUND AT KEISS, CAITHNESS.

The Skull No. 5.

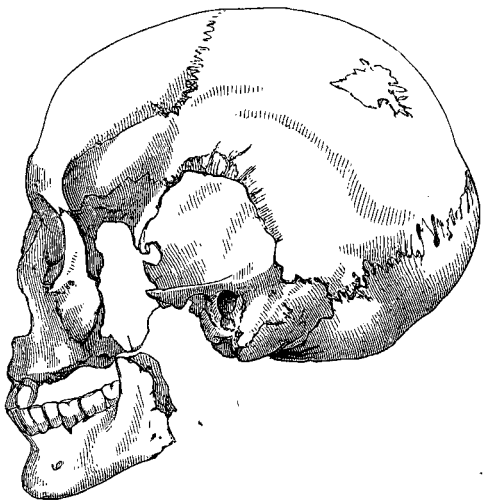


Fig. 39

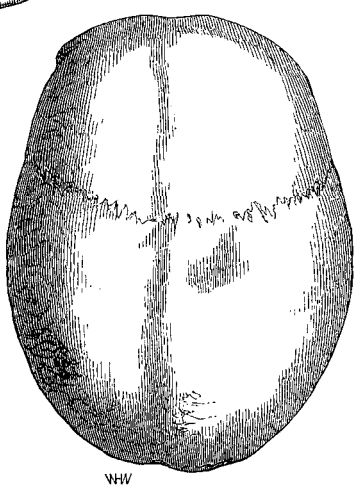


Fig. 40

Fig. 39.—Norma lateralis. Fig. 40.—Norma verticalis.

The right half of this skull happens to be more perfect than the left. In the Norma lateralis, therefore, the right half of the skull has been drawn and not reversed, so that it comes out as the left half, and can be compared with the corresponding aspects of the other skulls. The other views of this skull have been taken in the same way.

The Skull No. 5.

Fig. 41.

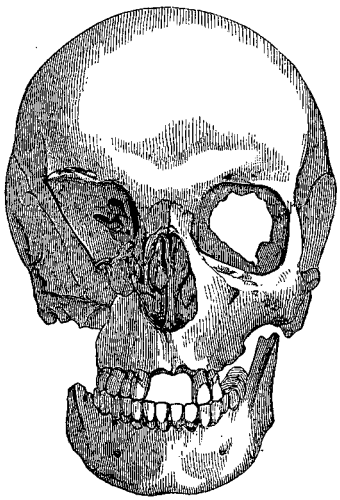


Fig. 42.

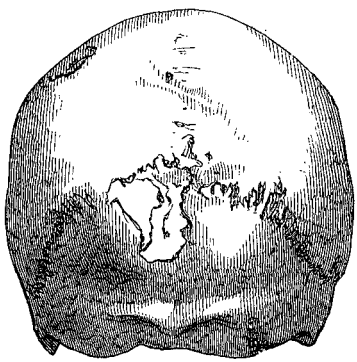
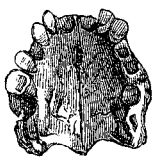


Fig. 43.



W.W

Fig. 41.—Norma frontalis. Fig. 42.—Norma occipitalis. Fig. 43.—The Palate.

SKULL FOUND AT KEISS, CAITHNESS.