

CHAPTER IX.

ABODES OF THE LIVING—SOCIAL LIFE.



HAVING in previous chapters discussed the mechanical skill of the prehistoric inhabitants of Scotland, as manifested in their stone and bronze industries, and expatiated on the strong evidence in support of the theory that they were greatly influenced in all their actions by religious principles, we now proceed to the consideration of the general phenomena of their domestic and social life. The first and paramount element in the attainment of domestic comfort is the dwelling-place, more especially in a country where the climate necessitates bodily clothing, shelter from a frequently inclement sky, and often a supply of artificial warmth. And on this point, also, I have to premise that the evidential materials within the Scottish area are so scanty and fragmentary that they have to be supplemented by foreign gleanings.

It was when dealing with the topographical modifications of the country due to changes in the relative level of sea and land that we caught the first glimpse of our prehistoric forefathers. We saw them hovering about the Carse of Stirling, when that stretch of now richly cultivated soil was the bed of

a land-locked bay of no mean magnitude ; at one time attacking and hashing up the carcasses of a number of stranded whales with instruments rudely fashioned of deer-horn, and at another feasting around extemporised hearths on the shore, on various edible molluscs which they had transported thither during the ebb-tide of the now vanished sea. Then again we had a peep of an interesting group of Troglodytes in a cave situated at the foot of a cliff in the present town of Oban, then washed by the Atlantic waves, but now over a hundred yards from the shore. From this place of abode these early colonists plied their avocations both by sea and land, culling from the products of each the ingredients of a substantial and varied meal. The accumulation of shells and broken bones in the form of a refuse-heap suggests a long sojourn in the cave, while the harpoons, bone chisels, and stone implements sufficiently attest the character and occupation of their owners.

An inspection of the organic remains shows that they possessed some of the ordinary domestic animals, such as the dog, ox, and pig ; and thus they combined with a pastoral occupation that of hunting and fishing. The absence of the sheep and horse from the fauna in this early period suggests that these animals were a later addition to the domestic animals of the neighbourhood.

We also noted some further evidence of the presence of an industrious population at this period (*i.e.*, when the 25-foot raised beach was being still laved by the tidal waves) in the canoes, stone implements, and camping-ground exposed in these ancient sea-margins along the shores of the Firths of Tay, Forth, Clyde, and Solway, localities now more or less inland. But with the exception of the Oban cave, and one or two rock-shelters, there is no reliable evidence to show what means they adopted to shelter themselves from the vicissitudes of a variable climate. *The remains of pit-*

dwelling and hut-circles, so frequently chronicled by archæologists, afford few data for determining either the nature of these structures or the age to which they belonged, although it is quite probable that some of them may date to the incoming into Scotland of the earliest races.

At Spiennes, near the town of Mons, Belgium, may be seen, thickly scattered over a plateau of 50 or 60 acres, a large number of circular pits, 2 to 3 feet in diameter and 25 to 38 feet in depth.¹ The chalk formation in this locality lies underneath quaternary and tertiary deposits, and these pits had been excavated by the Neolithic people for the purpose of extracting the flint nodules which it contains in great abundance. From the bottom of the shafts galleries were driven in all directions, until the whole district became actually riddled with subterranean passages. The shafts are now either fallen in or filled up with *débris*; but a few of them were cleared, and thus some interesting relics have come to light. The walls of the underground passages showed the marks of the flint and horn picks by means of which the chalk was excavated. In the vicinity of these pits MM. le Baron A. de Loë and E. de Munck have discovered the remains of flint-factories and dwelling-huts.² These sites were in the form of circular depressions, 2 to 5 paces in diameter, but of no great depth. In the huts were found beds of charcoal, various kinds of implements of stone, horn, and bone, broken bones, land-shells, and other remains of food-refuse. The factories were distinguished from the huts merely by the quantity of flint-refuse and tools which they contained. The hammer-stones were round balls of hard sandstone—this substance being apparently preferable to a flint nodule. Flint-mining on similar methods has also been carried on in Britain,

¹ Congrès International, &c., 1872, p. 279.

² *Ibid.*, 1889, p. 569.

as at Grime's Graves, near Brandon,¹ and at Cissbury Camp, near Worthing.²

Foundations of dwelling-huts of a still earlier period have been discovered in several localities in Europe. The most important station of this kind is that at Campigny, near the picturesque village of Blangy (Seine Inférieure), France. The sites of these dwellings were circular pits, excavated in quaternary gravels, and measuring a few yards in diameter and about 4 feet in depth, which in the course of time became filled up with *débris* and so preserved their contents. The industrial remains collected consist of hearths, remains of stone industry, and fragments of a coarse pottery. The pottery shows various kinds of vessels, some with perforated handles or ears, and others rudely ornamented with cross lines in quadrilateral spaces. Among the stone relics are small axes (*tranchets*), precisely similiar to those found in the Danish Kjökkenmöddings, knife-flakes, scrapers, &c., but no polished objects. It would thus appear that the invention of pottery preceded that of the art of polishing the edges of cutting implements. There are also a few large flat sandstones showing marks of rubbing, as well as the smaller hand-rubbers, which are supposed to have been used for grinding grain and seeds. The number of hearths indicates communal life and a social organisation of some kind. As to the actual covering of these sites, or the kind of hut which these people constructed, there is no evidence. Campigny is chronologically on the same horizon as the rock-shelter of Mas-d'Azil, and to French archæologists it has supplied a name to the period of transition between Palæolithic and Neolithic times.³

Nor is the evidence to be gathered from collateral sources of a very precise character. Even as regards the actual habitations

¹ Eth. Soc. Journ., vol. ii.

² Archæologia, vol. xlii.

³ See 'Revue Mensuelle,' 1889, pp. 366-408.

or huts of the lake-dwellers the details are meagre and fragmentary. The indications from this source consist of portions of clay-mouldings, hearth-stones, and a few special commodities of domestic life picked up on the sites of the lacustrine settlements. The faggot castings in clay suggest that the huts were made of small timbers and plastered over with puddled clay. Such impressions have been found on many stations; and it may be noted that they vary greatly in size, some showing merely a kind of wicker-work and others timbers of large dimensions. The clay-castings found on the Glastonbury lake-village are generally of the former character.

One important piece of evidence as to the kind of abodes constructed by the lake-dwellers of the Stone Age settlement of Schussenried, in the Federsee, came to light some years ago. This settlement had none of the signs of having been destroyed by fire, and it is supposed that its inhabitants voluntarily abandoned it on account of the growth of the surrounding peat. In this case it is probable that the huts would be allowed to fall into natural decay, but before this happened there was a chance that some part of the buildings would be overtaken by the moss, and so become, as it were, hermetically sealed up. That something like this actually occurred is now proved by the discovery of the foundations and portions of the walls of a cottage deeply buried in the moss. As soon as the discovery became known Mr Frank, the investigator of the settlement, had the ruins uncovered, and before the crumbling materials disappeared there was a plan of the building taken, which by his courtesy I had an opportunity of inspecting. The structure was of an oblong rectangular form, about 33 feet long and 23 feet wide, and was divided by a partition into two chambers. On the south side there was a door, a little over 3 feet wide, which opened into one of the chambers. The other, or inner chamber, was

somewhat larger, and had no communication with the outside, except through the former by means of a door in the partition. There were no relics found in this chamber, but in the outer there was a mass of stones which showed signs of having been a fireplace. The walls were constructed of split stems set upright, and their crevices plastered over with clay. The flooring in both chambers was composed of four layers of closely laid timbers separated by as many layers of clay. These repeated floorings may have been necessary from the gradual rise of the surrounding peat which ultimately drove the inhabitants away.

From the remains of the Scottish and Irish crannogs we also gather some reliable evidence as to the kind of dwellings that were in use during the early Iron Age. These were constructed of upright timbers placed side by side, the interstices being filled in with clay, like that at Schussenried, so that they may be regarded, to some extent, as direct survivals of structures previously in use. The Lochlee crannog had five distinct hearths superimposed one above the other, indicating successive, but intermittent, occupation. On the original platform, and at the same level as the lowest hearth, were the stumps of a wooden wall forming a rectangular enclosure 39 feet square. This enclosure was divided near its middle by a partition, and on the south side of the southern compartment were portions of two stout posts which had evidently formed a doorway. In front of this door and on the left side there was an immense refuse-heap, and a little beyond it, the remains of a gangway which stretched to the original shore of the lake.

Another crannog exposed in the bed of a drained loch in Argyllshire contained the wooden foundations of a circular dwelling-house which clearly showed the method of construction. In the centre of the artificial island there was the

stump of a huge oak pile, and around it a series of flat horizontal beams, firmly fixed to the surface of the island and all pointing towards the centre. At the outer end of each beam there was a square-cut hole, apparently for receiving the end of an upright post. The distance between these holes and the centre was 8 or 9 feet, and that between the beams, at their outer extremities, 5 or 6 feet. That the uprights which stood in these holes had been connected with the central pile was obvious, but whether they converged towards it like the ribs of an umbrella, or rose perpendicularly to meet cross rafters, there was no evidence to show.

As early as 1833 Captain Mudge, R.N., described a wooden hut¹ which had been exposed in the bog of Drumkilin, county Donegal. It consisted of a rectangularly shaped framework of oak beams, mortised at the corners, and measuring 12 feet square by 9 feet in height. It was open on one side, and about half-way up there was a horizontal flooring which divided it into an upper and a lower compartment. The base of the hut rested on a substratum of brushwood, a fact which subsequently led to the conjecture that it was the site of a crannog; and peat to the extent of 16 feet in depth had accumulated above its roof.

Remains of wooden structures, having some resemblance to the Drumkilin hut, were discovered in 1880, in the Coal-bog, county Fermanagh, also on the site of a supposed crannog. Here, at a depth of 21 feet below the surface of the peat, an artificial mound was encountered, and upon it there was a wooden framework formed of rough beams with rudely executed mortises. This framework measured 11 feet 10 inches in length and 6 feet 3 inches in breadth, and associated with it were some stone implements and other objects of an archaic character.

¹ *Archæologia*, vol. xxvi.

As to the materials which covered the roofs of these early huts we have but scanty data for forming an opinion. From discoveries made at Niederwyl, Mr Messikommer came to the conclusion that the roofs of the huts in that station had been covered with layers of straw and rushes. That thatch of some sort was generally used in proto-historic times in western Europe finds some corroboration in the statements of classical writers. Strabo asserts that the Belgæ lived "in great houses, arched, constructed of planks and wicker, and covered with a heavy thatched roof" (Book iv. chap. 4).

Owing to the perishable nature of the constructive materials of these wooden houses, we could not expect to find many traces of them now, except under such rare conditions as are occasionally supplied by lake-dwellings and peat-bogs. The supposition that wooden houses preceded the ordinary stone buildings in Scotland is also strengthened by the fact that the latter have been found only on the later crannogs.

Beehive Huts.

There is, however, a method of building huts with dry stones which claims a high antiquity, it being actually proved to have been practised in Ireland before the introduction of Christianity. This is the beehive hut (fig. 211), which consists of a circular or oval building constructed of uncemented stones, and so arranged that each layer overlaps the one beneath it, till the opening becomes so small, at the apex, as to be closed in by one stone. Although these structures were comparatively rude within the British Isles, yet the architectural principle involved is capable of great development both in gracefulness of form and perfection of structure. The finest, and probably the oldest, examples known are the famous tombs of Mycenæ, especially that called the "Treasury of Atreus."

In the simple form beehive houses appear to have been planned and laid out without any regard to symmetry, so that, when partially covered with earth or stones, an operation which was almost essential for the stability of the roof, they looked like a group of tumuli or cairns. These unicellular structures were not capable of attaining large dimensions, but by connecting them by means of passages, a many-roomed dwelling-house could be readily constructed.



Fig. 211.—*Clochan-na-Carraige, North Island, Aran.*

Another method by which the dwelling could be enlarged disclosed no small amount of skill and architectural ingenuity. Thus, by surrounding a circular chamber with a gallery, leaving just the thickness of a wall between them, and having this wall interrupted by passages at regular intervals all round, a spacious compact building could be constructed. A specimen of this kind was discovered by Captain Thomas in South Uist, and is thus described by him: "On a small,

flattish terrace, where the hill sloped steeply, an area had been cleared by digging away the bank, so that the wall of the house, for nearly half its circumference, was the side of the hill faced with stone; while the other side of the house, for it was almost gone, was built up from the ground. The interior of the house was circular and 28 feet in diameter. Within the area were pillars, or rather piers, formed of blocks of dry-stone masonry, raised distinct from the wall, and radiating from the centre of the house. These piers were about 4 feet high, 4 feet 6 inches long, and $1\frac{1}{2}$ foot to 2 feet broad; and there was a passage of from 1 foot to 2 feet in width between the wall and them. There were five piers remaining, and five more would complete the suite. These piers were evidently intended to lessen the space to be covered by overlapping; for while the breadth of the house is 28 feet, the central dome or beehive had, by this means, only 15 feet to span."¹

This remarkable house had attached to it a subterranean gallery or hypogeum, 14 feet long, which terminated in an underground beehive chamber of considerable size, as shown on the accompanying plan and sections (fig. 212).

From the investigations of Captain Thomas² it would appear that beehive houses continued to be built and used down almost to the present day in the islands of Harris, Lewis, and St Kilda. Sir Arthur Mitchell, who has devoted a chapter to these primitive structures in his most interesting book, 'The Past in the Present,' thus writes: "When I had seen more of them, I came to the same conclusion as Captain Thomas, namely, that they represent an old form of dwelling which is now dying out. No other conclusion, in fact, is possible. The time of the building of some of them has been well ascertained; one, for instance, was built by a

¹ Proc. Soc. A. Scot., vol. vii. p. 166.

² Ibid., vol. iii. p. 127, and vol. vii. p. 153.

person who was alive in 1858, and there are people living who were born in them. They have at one time been very common. Captain Thomas saw fifty or sixty in what he properly calls a limited area. They are not confined to Harris and the Lewis, but I believe are also found in the other islands of the Outer Hebrides, and they probably ex-

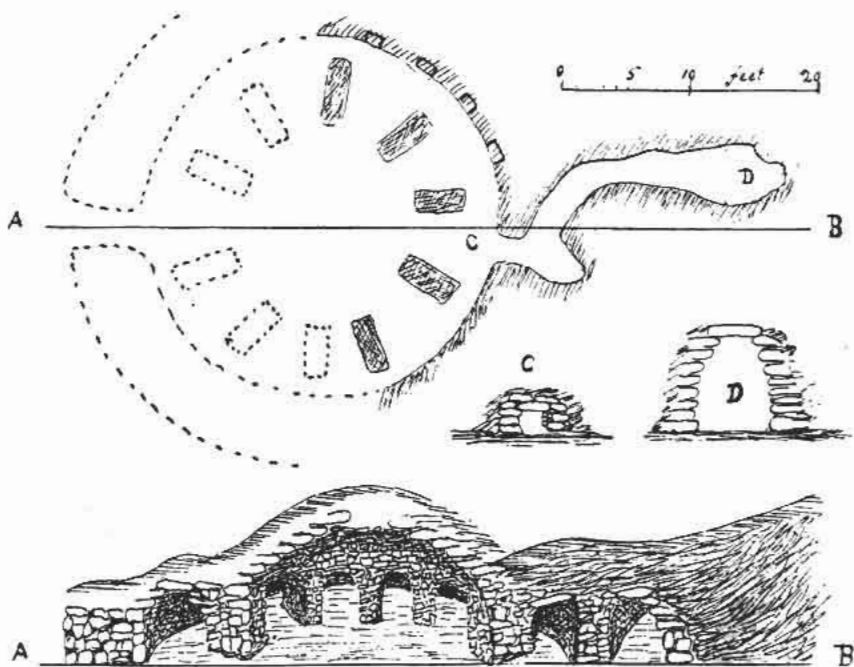


Fig. 212.—Ground-plan and section of beehive house (restored) on line A B, Huishinish, South Uist.

isted at no very distant time in Skye, in Mull, and in some of the west parishes of the mainland. Not more, however, than from twenty to thirty are now inhabited."¹

In Ireland beehive huts, or cloghauns as they are there generally called, are very abundant, especially in stony districts, such as the Aran Isles and county Kerry. In June 1897 I had an opportunity, under the guidance of the

¹ *Op. cit.*, p. 63.

Royal Society of Antiquaries of Ireland, of visiting the ruins of the "ancient city of Fahan," certainly one of the most extraordinary archaic remains I have ever seen. Proceeding westwards from the coastguard station on the slope of Mount Eagle, overlooking Dingle Bay, we reached Fahan, where may be seen "forts with three, four, two, and one huts, a group of seven huts and twelve detached cloghauns, a church, and four gallauns." Immediately to the south of this is the famous fort of Dunbeg, occupying a projecting headland, three-fourths of which require no defence, as it terminates in a precipitous cliff. On the landside it is protected by a massive stone wall and three earthen ramparts which stretch across the entire neck of the headland. There is a gate in the wall with a guard-chamber on each side, and in the court inside are the remains of a large beehive hut. The other forts on the slope of the hill consist of stone walls, 10 to 14 feet or more in thickness, enclosing groups of beehive huts. Some of these huts contained souterrains entered by trap-like doors from the floor.

One of the most interesting of these forts, *Caher-Fada-an-Doruís* (the long fort of the doors), had been recently cleared out, and showed a triple-celled dwelling, the central one (the largest) measuring 18 feet in diameter. It was connected with the other two beehive huts by passages 8 feet in length. The entrance or outer door faced south-east, and communicated with the central chamber by an oblique passage, from which a flight of stone steps (in ruins) ran spirally to the roof. Another fort was a double-chambered cloghaun, which showed a small window—the only one in the Fahan group.

Two theories have been held as to the date of this remarkable settlement: (1) that it was a primitive pagan city, probably of the period of the Firbolgs (Du Noyer); and (2)

that it was the abode of Christian monks (O'Curry). Mr Stewart Macalister, in his recent monograph on the subject,¹ comes to the conclusion that it existed both in pagan and Christian times: "The clochán period of the settlement," he writes, "probably extends from a little before the introduction of Christianity into Corkaguiney, down to a comparatively recent date in the middle ages. The modern inhabitants are for the most part successors, not descendants, of the older stock; who probably died out, or else were gradually dispersed by political and religious troubles, or by the need of seeking other surroundings, more fertile if less sublime."

Remains of beehive huts are frequently found in the great stone forts on the west coast of Ireland, as, for example, the Black Fort and Dun Conor, in Aranmore. I have also observed similar hut-remains in a fort near Cahirciveen, which in construction is analogous to Staigue Fort in the same neighbourhood.

There can be no doubt, therefore, that beehive huts were erected by the pagan inhabitants of Ireland prior to the introduction of Christianity, and that the Christians merely adopted, in the construction of their cells, the architectural methods they found already in use. Fig. 211 illustrates a perfect specimen of a solitary cloghaun in the north island of Aran. It is called Clochan-na-Carraige, and measures 19 feet by 7½ feet and 8 feet in height. It is on this primitive type of building that the early church architecture, both in Ireland and Scotland, was founded. The series of monastic buildings on Skellig Michael—church, square, oratory, and beehive cells—present, even now, a striking example of the early Christian "Cashel." The oratory of Gallerus (fig. 213) illustrates the first stage in the development of the beehive

¹ Trans. R. I. Acad., vol. xxxi. part vii. p. 334.

structure into the subsequent church architecture of the Christian period.

On Eilean-na-Noimh (Island of Saints), one of the Garve-

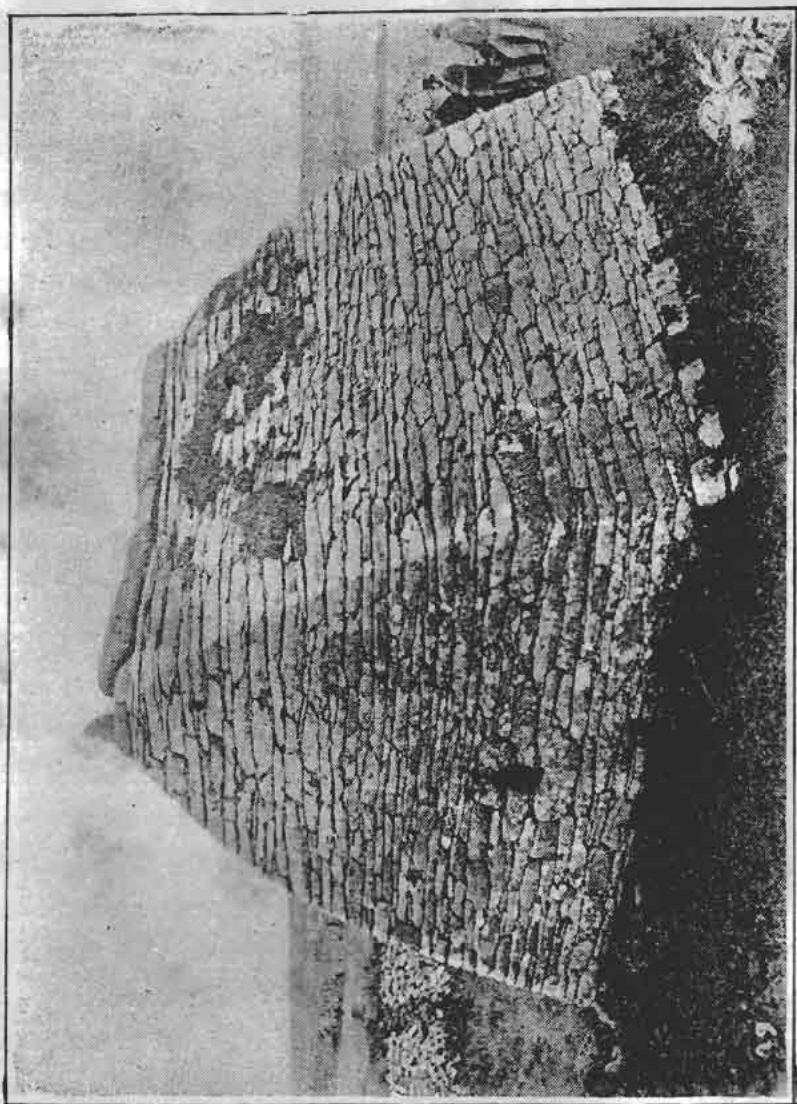


Fig. 213.—Oratory of Gallarus, from north-east.

loch Isles, on the west coast of Argyllshire, there are two ruined beehive cells associated with a small church ; but such remains are by no means numerous in Scotland.

Picts' Houses, Earth-houses, "Weems," &c.

The comparative remoteness of North Britain and its associated islands renders these regions peculiarly favourable for the preservation of antiquities. The disturbing elements imported into the more southerly parts of Britain, in consequence of progressive waves of foreign civilisation, took a long time to reach these distant lands and islands. Hence we sometimes meet with the essential elements of an archaic civilisation surviving in these parts to a much later period than they did elsewhere. Of such survivals the so-called "Picts' houses" afford excellent illustrations. Dr Traill, in discoursing on these remains, thus writes: "The usual form of these buildings is that of a rectangular central chamber, with various passages leading into smaller chambers or cells; their shape, however, is variable, and one form in particular deserves some attention, as it differs so widely from the ordinary *chambered tumuli* that it appears to belong to a different period, and possibly may have been constructed by a different race. I allude to the circular towers, or 'brochs,' as they are commonly termed, the most characteristic example of which is the well-known tower of Mousa, in Shetland. . . . It has not yet been satisfactorily decided which of these very dissimilar types of architecture is the oldest. Both kinds are built of rough stone, without the aid of mortar or lime, and both seem to have been partially banked up on the outside with earth and turf, apparently with the object of excluding wind and rain. On this point, however, opinions differ; it is not always easy to determine how much of the earth and *débris* that surrounds these buildings is artificial, or how much is the effect of natural accumulation. In the case of Skerrabrae, however, we can speak with tolerable certainty, as enough of

the outer wall is exposed to show us that earth had been heaped against the wall to the height of 6 or 8 feet, and the sloping bank thus formed had been coated over with a thin crust of clay. There was no clay on the wall itself, or between the stones of it, but only on the surface of the sloping embankment, and the deposit of earth above that, consisting of broken shells and vegetable mould, is, I believe, chiefly the result of drifting sand, with successive growths of vegetation on the top of it. It is remarkable that bones and horns of red-deer are generally found in both kinds of houses, and this circumstance is, I think, important in trying to arrive at some approximate date as to the age of these buildings; for, while we have undoubted evidence that these islands were formerly covered with forests abounding in deer and other wild animals, yet the writings of Cæsar, Diodorus Siculus, Solinus, and others, lead us to believe that at a time prior to the Christian era the forests had entirely disappeared, and we may justly conclude that the deer also had then ceased to exist. Assuming, therefore, as an established fact, that these early races of men were contemporaneous with the deer, we cannot bring them nearer to our own times than 2000 years; indeed, when we see how many links are wanting in the chain that connects them with our earliest recorded history, it is far more probable that we must assign to them an older date by some centuries."¹

One of the most instructive of the former class of dwellings is that at Skerrabrae, referred to in the above quotation. It is situated on the south side of the bay of Skail, in Orkney, and consists of a series of underground chambers connected by long winding passages. I visited these ruins during the summer of 1896, and had the good fortune to have them explained to me by Mr Watt, who for many years has taken

¹ Proc. Soc. A. Scot., vol. vii. pp. 427, 428.

a great interest in everything pertaining to this singular place. The explorations conducted by him from time to time have been so extensive that the exposed ruins look almost like a small village; nor was Mr Watt, even then, certain that its full extent had been exposed. Through his courtesy I had also an opportunity of examining the relics which for the most part are preserved at his private residence. Mr George Petrie, who first gave publicity to the existence of this remarkable dwelling, thus records its discovery: "About fifteen or sixteen years ago, the drift-sand, which had accumulated to a great height at a place called *Skara*, on the south side of the bay above named, was undermined and swept away by the wild waves of the Atlantic, and an immense 'kitchen-midden,' apparently of great antiquity, was exposed to view. It was at some points 15 or 16 feet high, and consisted chiefly of ashes thickly studded with bones, shells, pieces of horns of the ox and deer, and fragments of charred wood. The discovery was communicated to me by Mr William Watt, Skail, who showed me various bone and stone implements which he had picked out of the mound, and informed me of the existence of the ruins of buildings at the same place. . . . Mr Watt, afterwards, from time to time, collected a variety of stone and bone relics from the mound, and ascertained that a great mass of ruins lay buried there. He also came upon a stone kist or box containing about two dozen large oyster-shells, all perforated in the middle with a hole about an inch in diameter."¹

These structures, as now exposed, consist of four or five groups of chambers and cells, placed on both sides of a common gallery or passage which runs nearly parallel to the shore-line. The entrance to each group is by a secondary passage branching off to right or left from the main gallery.

¹ Proc. Soc. A. Scot., vol. vii. pp. 201, 202.

When discovered, all these chambers and passages were filled with sand and stones fallen from the roof, so that the labour of clearing them out was very great.

The first chamber, that on the left of the main entrance, was approached through a passage 12 feet long, $2\frac{1}{2}$ feet wide at outer end, but widening to $3\frac{3}{4}$ feet at inner end, and $3\frac{1}{2}$ feet high. "About 8 feet from the entrance two jambs project slightly into the passage, and on the inner side of these, in the side walls, were bar holes, and extending across the passage with its ends in these holes a long stone was found, which had evidently been used as a bar to support or barricade a door." When the sand had been cleared out the chamber was found to measure 11 feet wide and about 21 feet long, transversely to the line of the entrance passage. The walls were built of dry-stone masonry, 5 or 6 feet of which still remained. The floor was flagged and marked out into compartments by stones set on edge, varying in height from a few inches to $2\frac{1}{2}$ feet. The hearth occupied the centre, and was clearly defined by stones placed rectangularly, and the space so enclosed contained ashes and burnt bones. On one side of the wall there was a small cell, 4 feet in diameter and 4 feet in height, the entrance to which was 2 feet 7 inches high and very narrow.

It would occupy too much space to describe the details of all the chambers, passages, and recesses. They were, however, all built on the same general plan. The roofs converged on the beehive principle, and there were also flags set on end which probably formed supporting pillars. In one place some large portions of whale ribs were found which, Mr Watt thought, had been used for this purpose.

Mr Petrie describes the following curious discovery in one of the chambers: "Beneath this wall a very thick rude clay urn was found. This discovery naturally suggests the ques-

tion, When and why came the urn to be placed there? I am not sufficiently acquainted with the circumstances in which it was found to enable me to form any decided opinion as to the time when it was deposited on the spot in which it was discovered ; but I think that it has been buried there either by the original occupiers of the building, or by those who at a later date seemed to have appropriated the dwelling, and made alterations and additions, including, apparently, the rude wall beneath which the urn was found.”¹

With regard to a human skeleton reported to have been found in the sand inside one of the chambers, and about 3 feet above the fireplace, the same authority says: “The skull of the skeleton found in the chamber L is of a type with which I am familiar. The forehead is rather low and receding, and the nasal bones are very high. In the last respect it closely resembles other skulls which I have obtained from ancient graves in Orkney, but the notch at the root of the nose is deeper than any of the skulls I have hitherto met.”

Among the relics collected during a prolonged series of investigations the following may be noted: A few polished stone celts ; stone cups, mortars, and one large stone with a cavity which might have been used for rubbing or pounding grain ; a round stone ball ornamented with knobs, and another shaped like a ship's block ; a few large vessels made of whale-vertebræ, and a small piece of whalebone fashioned into a rude idol ; a large assortment of pins, beads (over 1000), and a variety of implements made of bone, including pointers such as might have been used as daggers ; also a few pronged implements of bone or red-deer horn precisely similar to those from the Mondsee, in Austria ;² several implements made by

¹ Proc. Soc. A. Scot., vol. vii. p. 206.

² Lake-Dwellings of Europe, fig. 39, Nos. 9 and 12.

perforating the articulating ends of the leg-bone of the sheep; a few teeth perforated and probably used as ornaments; some knives and cleavers of clay-slate; a few stone vessels containing red and white pigments, &c.

Although not a trace of either bronze or iron has yet come to light, we should be disposed, judging from the character of these relics, to regard them as belonging to the Early Iron Age.

The underground buildings known as "eirde houses," weems, and sometimes as Picts' houses, have a wide distribution in Scotland, especially in the counties bordering on its eastern shore, and attain their greatest development in the district stretching between the Tay and the Moray Firth. They are generally met with as single chambers concealed below the level of the surface, but sometimes they occur in groups, as on the muir at Kildrummy, in Aberdeenshire, where nearly fifty have been discovered, extending over an area of less than a couple of square miles. They are long, low, narrow galleries, always more or less curved, and gradually expanding, both laterally and vertically, till, towards the inner extremity, they may measure as much as 10 or 12 feet in width and 6 or 7 in height. They are most frequently built of undressed dry stones, with convergent walls bearing heavy lintels; but occasionally the walls are made with flags set on end. The narrow entrance, probably concealed by a stone door, slopes down to the floor level of the chamber, but before reaching the latter there is sometimes a second door, often placed at the point where the direction is changed. Sometimes a passage branches off from one side of the gallery and leads to another chamber, usually of a circular or oval shape. These chambers are frequently roofed in a dome fashion, on the beehive principle, much in the same manner as those constructed in the walls of the brochs and in the chambered cairns. Though all built on a uniform plan, they vary greatly

in dimensions, that at Tealing, Forfarshire, measuring 80 feet in length, 5 feet 8 inches in height, 2 feet 6 inches in width at entrance, and 8 feet 6 inches next the inner end; while the corresponding measurements of one at Kinord are only 21 feet, 1½ foot, 3 feet, and 2½ feet.

The structure at Tealing is described under the name of a "Pict's house" by Mr Andrew Jervise,¹ and is remarkable, not only for its size, but for the quantity and variety of relics found in it. A rough undressed boulder on the north side of the doorway was sculptured with cup-marks, and a cup with five concentric rings and a gutter-channel. Among the relics found scattered throughout the *débris* were the following: A piece of Samian ware, a bracelet, bronze rings, coarse pottery, ten querns (some broken), a number of whorls, stone cups, and an article made of iron slightly mixed with brass. On the surface, close to the entrance to the underground chamber, there was a macadamised circular space, 6 feet in diameter, with much ashes, probably a hearth or cooking-place.

It is the general opinion of archæologists that these subterranean chambers were associated with surface habitations, whose structural materials have disappeared through natural decay and changes due to the cultivation of the land. Striking evidence of such an association was observed in 1859, at Cairn Conan,² near Arbroath, Forfarshire. Here an underground structure (see plan and sections, fig. 214) presented the peculiarity of having, in addition to the usual long curved gallery, a circular beehive chamber attached to it by a low passage, and to which there was also a second entrance. About six or seven paces north of the underground gallery a circular space, 20 feet in diameter, and rudely paved with flagstones, was detected a few inches

¹ Proc. Soc. A. Scot., vol. x. p. 287.

² Ibid., vol. iii. p. 465, and vol. iv. p. 492.

beneath the surface soil. This, upon examination, was recognised as the site of a habitation of which, however, nothing then remained except the floor, and a few relics which its occupants had left behind them. These relics are important in supplying some clue to the age of the structures; for there seems to be no doubt that both the surface and underground remains were parts of the same homestead. Among them were the upper stone of a quern, two whorls

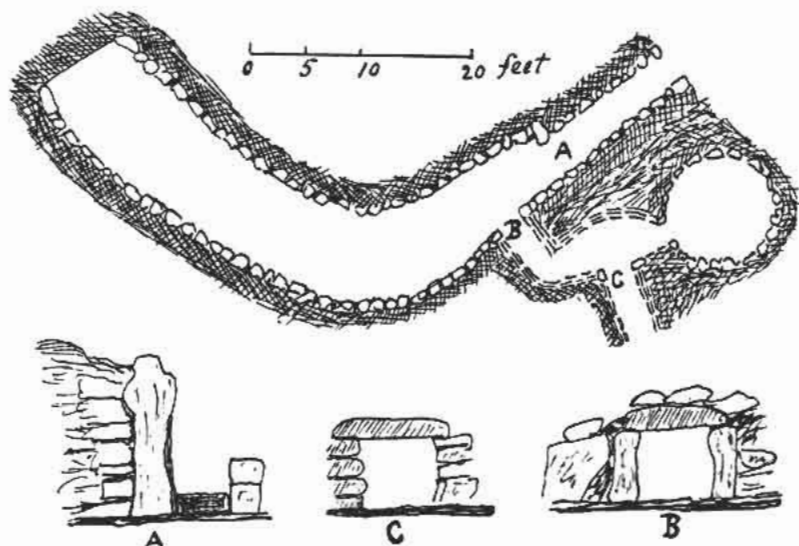


Fig. 214.—Ground-plan and sections of earth-house at West Grange of Conan, Forfarshire.

of lead, a portion of a bronze ring, some rudely hollowed stones, and fragments of iron cutting implements. Those from the underground chambers comprised fragments of various kinds of pottery, some wheel-made, a bronze needle, part of a quern, horses' teeth, calcined bones, and a large spiral bracelet of the snake-like pattern—all of which point to Romano-British times.

Another interesting feature of this settlement was that, a few yards to the north-west of the underground chamber, a cluster of six full-length coffins, composed of rude stone slabs with

stone covers, was discovered at no great depth in the soil. Some of the graves contained skulls and other portions of decayed bodies and a few coloured pebbles, but the only manufactured object was a portion of a ring of cannel coal. These graves were considered to have been the family burial-ground of the people who inhabited the adjacent dwellings.

Dr Stuart describes the "eirde" houses at Kildrummy as having been discovered "by the occurrence near the entrance of low foundations, which seem to have supported the frail summer- or daylight-houses of the early population." A similar association of surface and underground dwellings has been observed in several places elsewhere, as at Strathdonan, in Sutherlandshire, where two "eirde" houses were near a group of hut circles.

Earth-houses occur in the Scottish area singly or in groups of half-a-dozen or so, but rarely in such numbers as at Kildrummy. At Airlie, in Forfarshire, a group of five has been noted, but only one of them has been explored. Among its *débris* were found a bronze pin, charred wood, querns, and a piece of sandstone containing a cup-like hollow. An iron padlock was among the contents of one at Alvey, in Invernessshire. So far, therefore, as relics give indications of the age of these structures, they must be classified as belonging chiefly to the Early Iron Age. That many of them were utilised in post-Roman times is placed beyond doubt by the discovery of red Samian ware, as in those at Tealing and Fithie in Forfarshire, and Pitcur, near Coupar-Angus. Moreover, the investigation of one at Crichton Mains, Mid-Lothian,¹ has revealed the fact that its walls contain stones dressed with diagonal and diamond markings, after the manner of Roman workmanship.

With regard to their distribution it may be observed that none have been found in Galloway, and only one in Berwick-

¹ Proc. Soc. A. Scot., vol. viii. p. 105.

shire—viz., that near Broomhouse described by D. Milne Home, Esq.¹ This earth-house is interesting as showing the peculiar curved shape so commonly met with in Scottish examples (fig. 215).

In Ireland underground chambers, generally known as “souterrains” or “coves,” are to be found all over the country. In structure, and in the occurrence of side-cham-

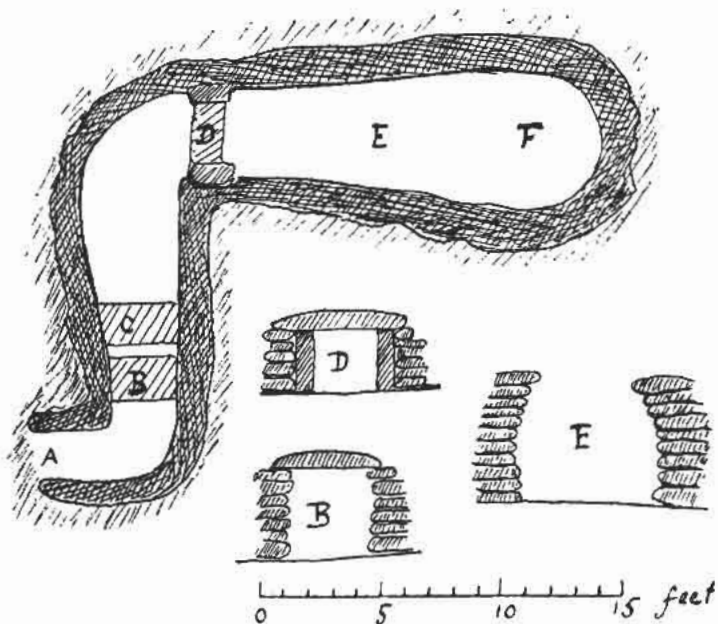


Fig. 215.—Ground-plan and sections of earth-house near Broomhouse, Berwickshire.

bers opening from the main passage at irregular distances, they are very similar to the Scottish examples, the only slight difference between them being in the extent of curvature of the main gallery, which appears to be less pronounced in the Irish souterrains. Although usually isolated, they sometimes occur in connection with the earthen forts or raths; differing in this respect also from the Scottish examples, among which only one instance is known inside a

¹ Proc. Soc. A. Scot., vol. viii. p. 20.

fort—viz., that in the ancient fort known as Macbeth's Castle, on Dunsinane Hill. In the valley of Glenshesk, county Antrim, there is a good specimen of the souterrain locally called "Gobar Saer's Cave." It is situated on the hillside, about a mile and a half south of Ballycastle, and consists of two chambers, measuring respectively 31 and 24 feet in length.¹

The only other locality in which subterranean dwellings, of the type now under consideration, are found is Cornwall—a district abounding in ancient British remains, such as beehive houses, dolmens, menhirs, stone circles, forts, &c. A stay of a few days at Penzance enabled me to visit a number of these interesting remains with no other assistance than the 'Official Guide to Penzance.' The antiquarian notes in this little volume, being by Mr W. C. Borlase, are thoroughly to be depended on.

One excursion was in a north-west direction, occupying a circular journey of about fifteen miles. Following the Morvah road, we first came to "Lanyon Cromlech," a free standing dolmen with a cover-stone, 17 feet long by nearly 9 feet broad, and resting on three pillars 5 feet in height. But this was not its original height, as in the year 1815 the cover-stone fell and was broken, as well as one of its supports. The cover in its damaged condition was subsequently replaced, and the other two pillars were cut down to the same level as the broken one. In its original condition it is said that a man on horse-back could ride under the cover-stone.

Turning to the left, we reached Chûn, where there is a group of remarkable antiquities, including a hill-castle, a dolmen, and an ancient British village. Chûn Castle is of an oval shape, 180 feet long by 170 feet broad, and differs from the ordinary hill-forts of the neighbourhood in being entirely built of stones in their rough state, but without any

¹ Guide to Belfast, by the B. Nat. Field Club, p. 212.

cement. It consists of two concentric ditches alternating with two walls. The inner wall is 20 feet thick, and before it was plundered of its stones in the last century "it was at least 10 feet in height." The entrance is on the west side, and the two gate-posts, each 5 feet in height, still remain. These are placed at the inner margin of the wall at a distance of only 6 feet, but this interval gradually widens to 12 feet at the outer margin of the wall. It is noteworthy that the corresponding gateway in the outer wall is not opposite to the former, but twelve paces to the south of it. The central area is partially occupied with ruins of dry-stone buildings which appear to have been divided into structural compartments. Chûn Castle is regarded by antiquaries as a connecting-link between the ancient British fort and the Norman castle.

The dolmen, whose stones are covered with a thick coating of lichens, stands in solitary grandeur about 250 yards to the west of the castle, and consists of a large cover supported on four pillar stones, enclosing a chamber 7 feet in height. A tumulus of earth and stones formerly covered these megaliths, and it was surrounded by a ring of stones set on edge.

A quarter of a mile to the east of the ruined castle is the site of the ancient British village of Bosullo, which appears to have been connected with the former by a paved way.

About a mile to the south there are the ruins of another ancient hut-village on the slopes of a hill at Bodinar, in which, "within the memory of man," there were beehive huts to be seen, but they are all now in ruins. However, I had the satisfaction of seeing one of the Cornwall beehive huts at Bosporthenis, now the only remaining specimen of a large British settlement. This consists of two chambers, one circular and the other rectangular. The former is 13 feet in diameter, and has no less than three small doors. The

roof has unfortunately collapsed, but enough of the wall remains to show the converging system on which the dome was constructed. Connected with the beehive chamber by a low square door there is another chamber 9 feet long by 4 feet broad, which is regarded as a later appendage to the former.

The ancient British village of Chysauster, situated in the vicinity of the hill-fortress of Castle-an-dinas, has been partly cleared out, and in the course of these operations evidence of tin-smelting and fragments of Romano-British pottery were discovered. But without dwelling further on these ancient British remains, we must pass on to notice the characteristics of the subterranean dwellings which are associated with these villages.

A good specimen of them is the "Fogou" at Boleit, on the lower Buryan road, near the ruins of the ancient manor-house of Trewoof. It consists of a subterranean gallery 40 feet long, from which another chamber, at present about 13 feet long, branches off, but whose full dimensions have not been ascertained. The convergent walls are of unhewn stones and covered with large granite slabs.

Another and still more interesting specimen is at Chapel Euny, parish of Sancreed, about four and a half miles from Penzance. Its main features consist of a gallery 60 feet in length, 6 feet wide, and from 6 to 7 feet high. At one end it gives access to the surface by a small trap-door closed by a stone, with holes in the sides apparently for barring it, and at the other there is a low passage 10 feet long which leads to a beehive chamber 16 feet in diameter. The floors of the gallery and chamber were paved with flagstones and provided with drains beneath the pavement. During the excavation of these underground structures evidence of tin-smelting and various relics were found, among the latter

being whetstones, hammer-stones, various kinds of pottery, an iron spear-head, a "pot-hook," and a piece of red Samian ware. On the surface above these chambers there are the remains of a British hut-village—thus showing, like all the other examples in this district, a relationship between the surface and underground dwellings.

These subterranean dwellings, like their Irish analogues, do not manifest so strongly the single or, sometimes, double curvatures which are so constantly met with in the Scottish examples; but in all other respects they are so similar over the three special areas of their development, that they can hardly be accounted for except on the supposition of a unity of origin. The almost trivial differences manifested in their plan of construction can be readily explained by their geographical isolation, consequent on the occupation of Central Britain by foreign immigrants, and their continued occupancy after the old British associations became permanently broken up by the Roman occupation.

Outside the British Isles the beehive underground dwellings seem to be unknown, although the statement of Tacitus suggests the prevalence of such hiding-places among the Germans. In discussing the manners and customs of this people (chap. 16), he writes as follows: "They also dig subterraneous caves, and cover them over with a great quantity of dung. These they use as winter-retreats and granaries; for they preserve a moderate temperature; and upon an invasion, when the open country is plundered, these recesses remain unviolated, either because the enemy is ignorant of them, or because he will not trouble himself with the search."

The special purposes thus assigned by Tacitus to underground retreats among the Germans, whatever may have been their mode of construction, are precisely those indicated by

the results of the latest archæological investigations of the "eirde" houses, "souterrains," and "fogous" of the British Isles.

Indications of Social and Industrial Life.

The unequal distribution of the raw material used in the manufacture of stone implements, contrasted with the widespread use of the latter, suggests that a system of trading or barter was prevalent amongst the prehistoric people of Scotland. This view is supported by the occasional discovery of the remains of flint factories—anvils, hammers, fabricators, cores, splinters, chips, and other broken and disused materials. Remains of this character have been usually found on the indurated subsoil of sand-dunes, such as those at Culbin, Glenluce, and Irvine, and in localities where flint nodules abound in the natural gravels. At Skelmuir, already referred to, a remarkable hoard, consisting of thirty-four flints worked roughly to a leaf shape, was found concealed under a flat stone. They were evidently a consignment of unfinished goods possessing a certain commercial value, and it is possible that they were laid aside in concealment till such time as the warrior or huntsman had leisure to give them the final finishing touches; or, what is more probable, they might have been intended for transport to a locality where there was no natural supply of flint. Hoards of bronze objects, which are by no means uncommon, point to the same conclusion.

The principle of the division of labour, here dimly shadowed, is more forcibly indicated by the disposition and localisation of some of the materials found on the sites of lake-dwellings. From the uniformity with which grain, quantities of apple-cores, bundles of flax, yarn, cloth, &c., were found strictly confined to separate areas at Wangen, Mr Löhle came to

the conclusion that the different trades had been kept apart. At one of the stations in the Lake of Geneva, near the present town of that name, Dr Gosse fished up stone moulds together with a number of crucibles, ingots of bronze and tin, scoriæ, and other materials of the founder's art—all within an area of 100 square yards. Other researches have proved a still wider generalisation, and it is probable that not only were the special trades kept apart in each village, but that some villages had already established a monopoly of certain industries. It is only on such a supposition that the extraordinary number of implements and chips of jade found at Maurach, and the equally striking predominance of flint refuse at Wallhausen, can be explained.

The late Mr Radimsky came to a similar conclusion with regard to the inhabitants of the Neolithic station of Butmir, in Bosnia. On dividing the seventeen different kinds of stone used in the manufacture of implements into two groups, according as they were, or were not, found in the vicinity of Butmir, he observed that all came under the first category, with the exception of the perforated hammers and two objects of gabbro, and that not a splinter or core of the foreign material of which the latter had been made had been detected on the station. Hence he inferred that the Butmirians manufactured the objects made from the rocks readily accessible to them, and imported, ready made, those represented by raw materials found only at a distance.¹

But, indeed, the manipulative skill necessary to carry on these stone industries is suggestive of some kind of division of labour among the prehistoric folk, as the art could only be acquired by long experience and careful training.

I have already adduced evidence to show that the early immigrants into North Britain were hunters and pastoral

¹ Rambles and Studies in Bosnia, p. 107.

farmers, who probably paid no attention to the cultivation of the land. It was only as the population increased, and permanent communities gradually took root in the glens and straths, that agriculture became the mainstay of their subsistence. From the investigations of Canon Greenwell it is proved that during the Early Bronze Age the people of the wolds of Yorkshire were possessed of domestic animals, cultivated grain, and manufactured cloth, pottery, and implements. But it was probably several centuries later before people, with an equivalent civilisation, brought the primeval forests and marshes of Scotland under cultivation. The testimony of classical authors might also be adduced in support of this view. Cæsar (Book v. chap. xiv) categorically states that most of the inland inhabitants of Britain did not sow corn, but lived on milk and flesh, and were clad with skins. The speech which Tacitus puts into the mouth of Galgacus on the eve of the battle of Mons Graupius contains the following: "For we have neither cultivated lands, nor mines, nor harbours, which can induce them to preserve us for our labours." In a sentence, however, almost immediately preceding this, the Caledonian chief is made to refer to the land and its yearly produce—apparently corn. Thus it would seem as if the inhabitants occupying the greater part of the country to the north of the Firths of Forth and Clyde were a purely pastoral people in the first century of the Christian era.

That the prehistoric people of Scotland were in the habit of using canoes on the lakes and firths which so abound in and around the country, is amply attested by the facts already recorded in chapter iii. Another kind of boat used by them was the *currach* (Celt. *curach*), or coracle, the invention of which must also be relegated to the remotest time of which we have any historical knowledge. It was made of a slender

frame of wood, or basket-work, and covered with skins. Adamnan, in his *Life of St Columba*, describes long voyages made in skiffs of this description; and they are referred to by several of the classical authors. Pliny,¹ writing of the inven-



Fig. 216.—*Currach or coracle used on the Boyne, Ireland.* (From photograph by R. Welch.)

tion of ships, says: "Even at the present day they are made in the British ocean of wicker-work covered with hides." Currachs still continue to be used on many parts of the Irish coast—one recently seen at work on the river Boyne being here figured (fig. 216). Those now constructed by the people

¹ Nat. Hist., book vii. chap. 57.

of the Aran Isles, in the bay of Galway, are like ordinary row-boats, and covered with tarpauling instead of skins. Coracles are reported to have been employed on the river Spey at the end of last century.

But however far our gaze can penetrate the prehistoric arcana in search of evidence to elucidate the social life of our Scottish predecessors in the ages of stone and bronze, the story elicited is but an imperfect and fragmentary record. No structural habitation or building of these times, with the exception of the tomb, has ever been discovered, to my knowledge, within the Scottish area; so that in formulating general deductions we are largely dependent on the stray objects made of the more durable materials which have been gathered from the dustbins of time. Scarcely a particle of clothing—be it skin or woven stuff—has reached us across the long waste of forgotten ages, and yet the jet button, the bone or bronze pin, and other objects used for fastening the dress, unmistakably tell us that the prehistoric inhabitants of Scotland were not destitute of that essential commodity of life. On the other hand, if we judge of their social condition by that of their contemporaries, the lake-dwellers of the Stone - Age settlement at Robenhausen, who, by a mere coincidence of natural conditions, have bequeathed to us a great variety of woollen fabrics, plaited mattings of bast, and other fibrous materials, and a whole series of domestic utensils made of wood, we may legitimately infer that they were equally well equipped for the struggle of existence. In Scottish archæology the grave and its contents supply the most valuable evidential materials at our disposal. Here we find many objects which the hands of loving friends laid beside the body of the deceased—indicating by this very act social and religious traits which would do honour to the highest phases of modern civilisation. Mental conditions

disclosing taste, refinement, and culture, are also traceable in the personal ornaments the people wore; and as to their skilled efficiency in handicraft manipulations, we have already seen that the evidence in support of this is overwhelming.

That the people of Scotland, from the earliest times, were governed by laws emanating from some central authority is suggested by various circumstances, as—the honour paid to persons of distinction on their demise, by the construction of tombs intended for perpetuity; the persistence of the same religious obsequies for many centuries; the indications of commercial intercourse with distant lands; the adoption of the principle of the division of labour in the prosecution of many of their industries; and the distribution of forts, camps, and other military remains throughout the country,—all of which, in my opinion, disclose a system of social organisation which contained within it the germs and main elements which are still paramount in European civilisation.