

The Orkneys in early Celtic times : two lectures / by James M. MacBeath.

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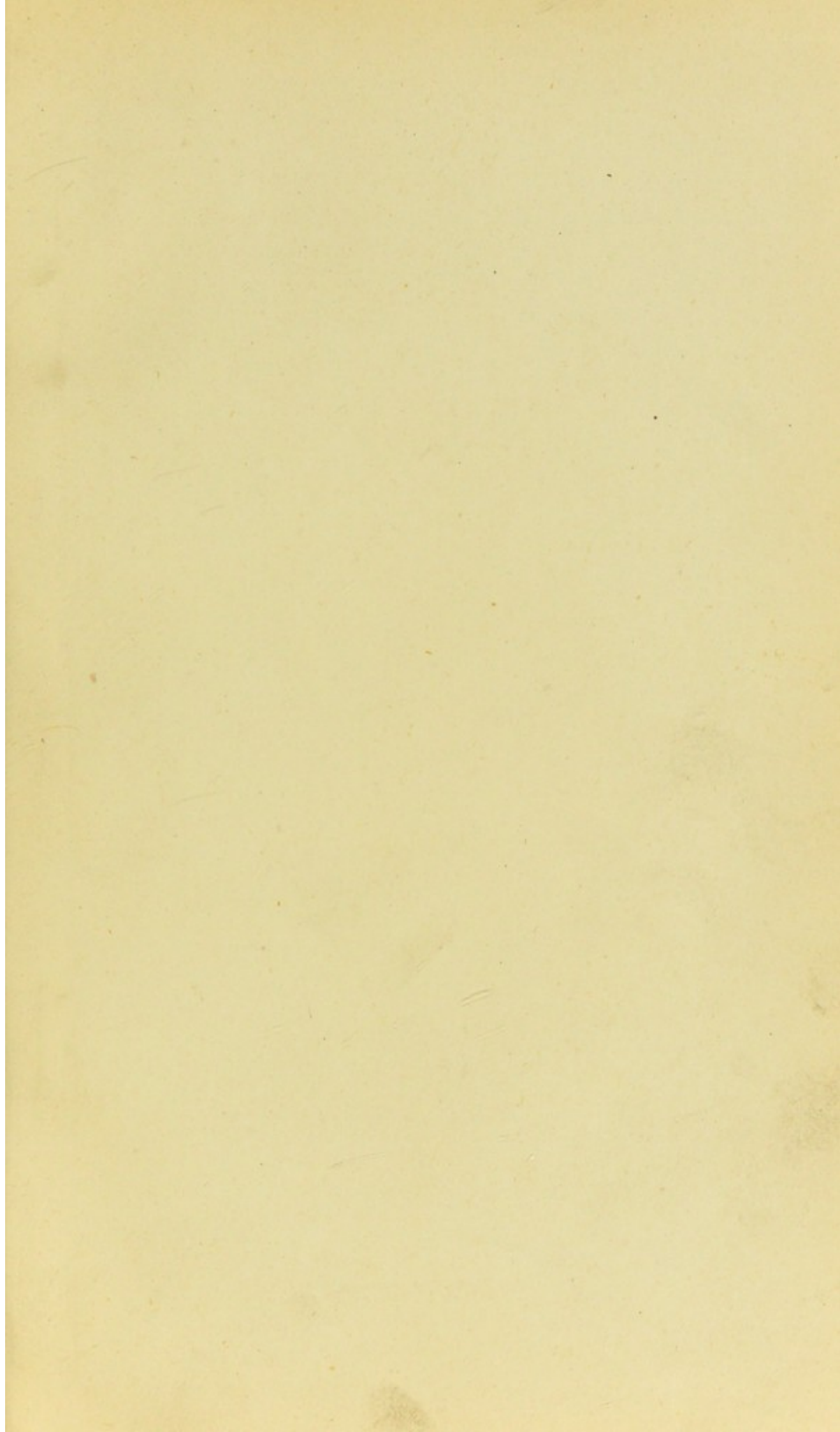
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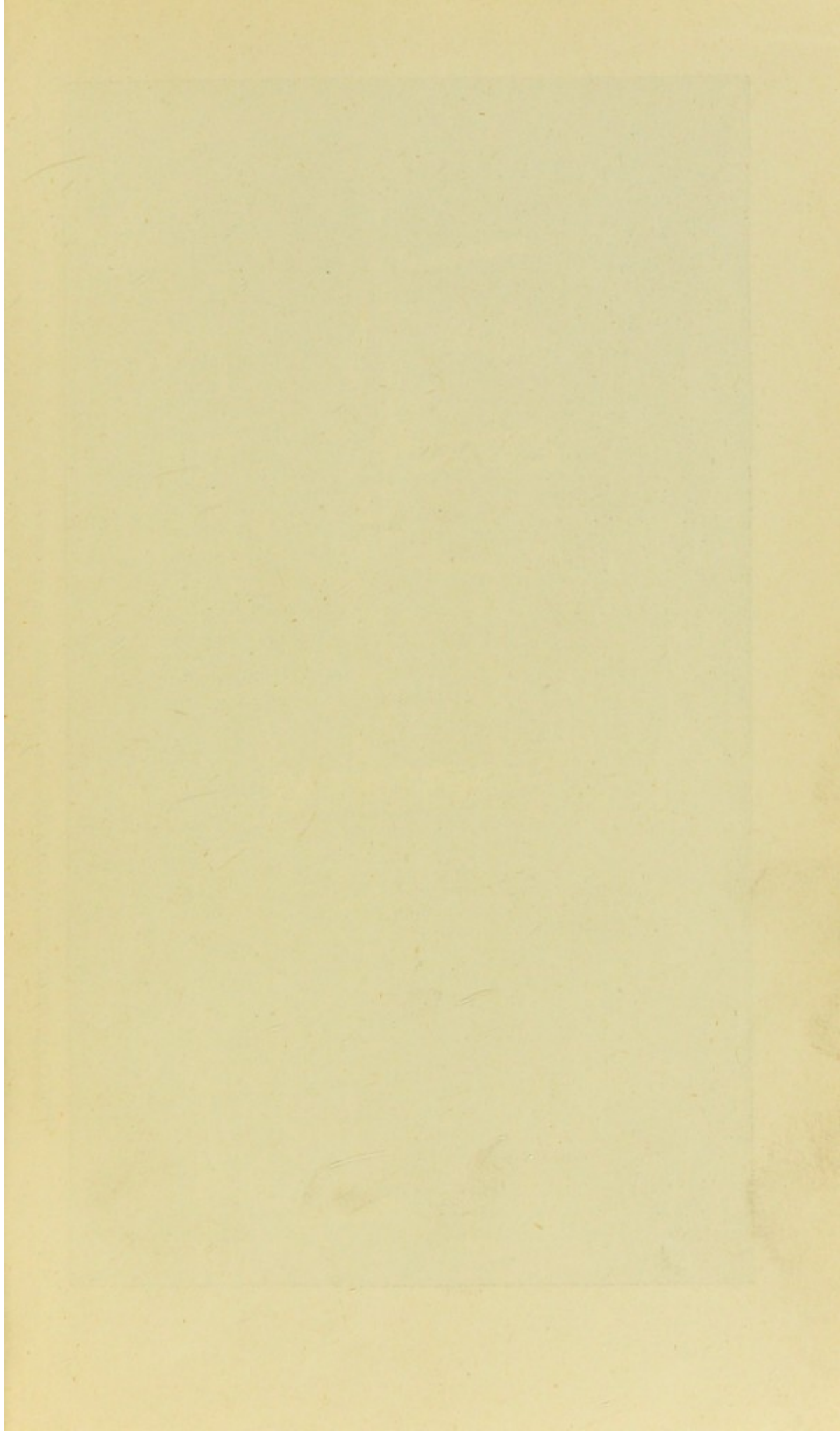
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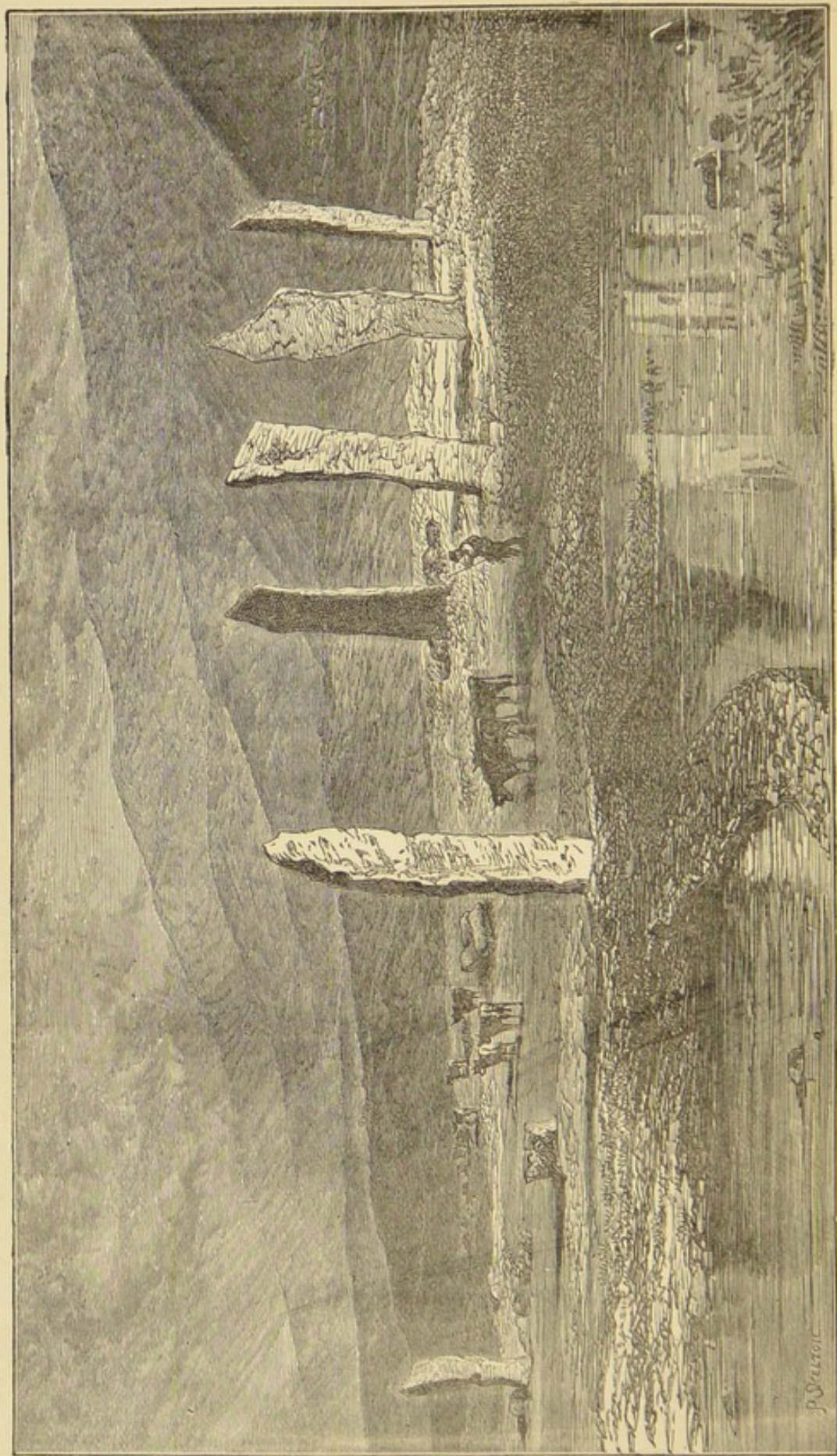




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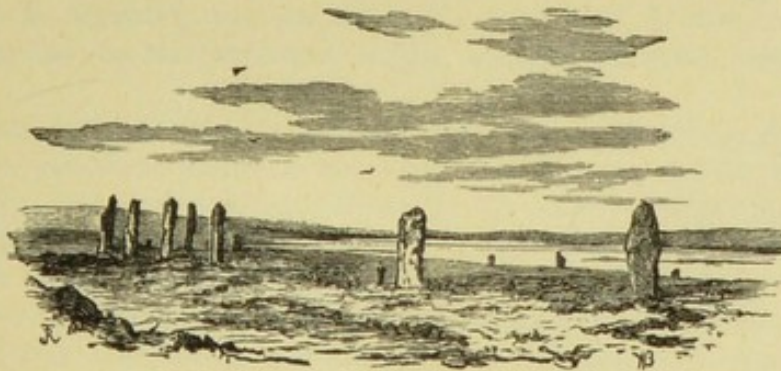
THE STANDING STONES OF STENNESS. From an original drawing which belonged to the late James Fergusson, D.C.L.

Frontispiece.

THE ORKNEYS
IN
EARLY CELTIC TIMES

TWO LECTURES

BY
JAMES M. MACBEATH, F.S.A. SCOT.



KIRKWALL
WILLIAM PEACE & SON

1892

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*NOTE BY THE PRESIDENT OF THE ORKNEY
NATURAL HISTORY SOCIETY.*

THIS Society was formed in the Burgh-barony of Stromness in the year 1837. As an auxiliary, it was resolved to form the nucleus of a Museum, having for its object the illustration of the natural history and antiquities of the entire group, and for the preservation of whatever else of scientific interest might be presented. In a comparatively short time, a considerable and varied collection was obtained, and temporary premises secured, but the accommodation proved inadequate for the rapidly-increasing contributions to the Museum; thus the prosperity of both branches of the institution was much retarded.

About twenty years after the formation of the Society, its friends felt the necessity for suitable accommodation. Efforts were accordingly made to secure this, in connection with the erection of the new Town Hall for Stromness, which were successful. A joint building, vested in Trustees, was erected in the year 1857, in which the Society and its Museum have happily found a desirable resting-place.

About five years ago the Museum was re-arranged and classified, and the collection placed in new cases specially prepared for their reception, the expense being defrayed by the Society and its friends. The Museum now presents a handsome appearance, and is illustrative of the natural history, geology, and antiquities of the Orkneys, besides possessing numerous exhibits from other lands.

Latterly, there has been added an industrial department, showing the process of manufacture from the raw material to the finished article in seven or eight different industries.

Quarterly meetings of the Society are held, when business is disposed of, and papers read by members, or by others who have been asked to prepare them, on subjects generally possessing local interest.

The two lectures which are now published were of the series, and were read at two separate meetings of the Society. They were

NOTE.

considered of special value to all who take an interest in the antiquities of these islands, and the Society resolved to publish them, having obtained the consent of the writer, Mr Macbeath.

The Society is maintained by the annual subscriptions of its members, by donations from friends, and by the small charge for admission to the Museum. It is the only public one in the islands, and can now bear favourable comparison with others.

The Society cordially invites contributions possessing local interest from Orcadians at home and abroad, which will be gratefully and heartily acknowledged, and they confidently hope that this appeal will not be fruitless.

JAMES RITCHIE.



INSCRIBED TO

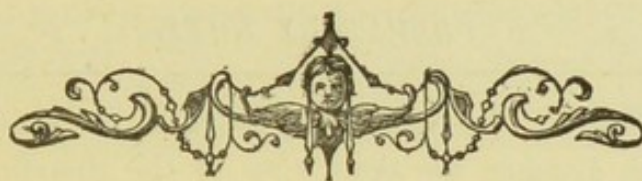
THE REVEREND JAMES RITCHIE,

PRESIDENT OF THE ORKNEY NATURAL HISTORY SOCIETY,

AT WHOSE DESIRE THESE LECTURES WERE WRITTEN AND DELIVERED,

AND THROUGH WHOM THE REQUEST FOR THEIR PUBLICATION

ON BEHALF OF THE SOCIETY WAS MADE.



PREFATORY NOTE.



THESE two Lectures were undertaken at the request of the Rev. James Ritchie, President of the Orkney Natural History Society, and delivered at two of its quarterly meetings.

I did not anticipate for them anything beyond the ephemeral existence of a newspaper report; but when that Society expressed a wish for their publication in pamphlet form, I felt the necessity of revising and improving them, with the view of their being more worthy of the unexpected honour.

I have not attempted to exhaust the subject. My desire has been merely to present its main features succinctly and in a popular manner.

I have to acknowledge my obligations to Joseph Anderson, Esq., LL.D., Assistant Secretary and Keeper of the National Museum of the Antiquaries of Scotland, for his kindness in reading the proof-sheets; to other friends for valuable suggestions; to John Murray, Esq., publisher, London, for so freely giving the use of the cut which forms the frontispiece, as well as the three

PREFATORY NOTE.

illustrations of Maeshowe; to Messrs A. & C. Black, publishers, London, for their view of the Standing Stones of Brogar, taken from "Black's Picturesque Tourists' Guide to Scotland"; to Messrs Wm. Peace & Son, publishers, Kirkwall, for several views of Mousa and others; to David Douglas, Esq., publisher, Edinburgh, for the ground plans of early sepulchral mounds; and to the Society of Antiquaries of Scotland for those illustrating the monumental stones of Shetland.

J. M. MACBEATH.

LYNNFIELD, KIRKWALL,
April 1892.





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ERRATA.

Page 12, fourteenth line from top, for "thirty," read "several."

Page 29, fourth line from foot, for "confidently," read "partly."



LECTURE FIRST.



ARCHÆOLOGY—literally discoursing on first things or beginnings—is the science and study of prehistoric antiquities. In its sphere and phenomena, long clearly defined, archæology occupies the borderland of the “elden time” between geology and history, and receives illustrative material from both. Therefore we must revert to the last chapters of geology for the first chapters of archæology and ethnology. Both the geologist and archæologist find the evidences and substance of their respective sciences in the earth’s crust, and from these they re-write the chronicles of the long-hidden past.

The characteristic function of archæology is to reason from the particular to the general—from manifold individual instances—to arrive at a general and substantially clear conception of the prehistoric period, and the life and habits of the men who lived then. The science of archæology puts the existence of prehistoric man beyond all doubt. The remains of human industry, and rude attempts of man to maintain himself on the earth—instruments of “fence,” “defence,” and “offence”—are abundant and varied. It is the province of archæology to recover these from the earth, and from them re-fashion, as far as possible, the hidden past, so as to see man’s ways and works, his habits and thoughts, his fears and hopes, from his earliest traces, till the search merges in authentic history.

It is, then, man’s “footprints on the sands of time ;” relics—marks of work and war still traceable—that the antiquary searches for and studies ; the changes which have in successive

eras taken place ; the materials and forms of implements and tools which man has, from the earliest times, fabricated and used in the chase, in fishing, in his agricultural pursuits, and in his domestic life ; the weapons of his tribal warfare ; the habitations in which he dwelt during peace ; the earth-works and stone - works he constructed for self - protection ; the ornaments he wore ; the manner and materials of his dress ; the arts he cultivated ; the deities he worshipped ; the varying forms of his religious faith ; and the various modes in which he disposed of his dead—all these the antiquary collects, classifies, and builds into historic unity.

It follows that the more systematically, intelligently, and diligently this study can be pursued, and the more clearly and fully these early relics can be identified, both in quality and quantity, as the well-authenticated, primary, and primitive remains of our race, the more will we be able to apply the inductive process to the task of piecing together consecutively the several links in the chain of man's gradual development and civilization.

It is to be feared, however, that before this can be attained, still further advances in antiquarian knowledge will be needed, amounting it may be—on the part of those who have means and leisure at their command—to an increasingly enlightened awakening on the part of the many, to the true value that attaches to the past, on the lines of those scientific methods which have of late years been so successfully introduced.

The object of these two lectures is an attempt to fit some of these links together, so far as the local "finds" from the early tumuli afford material for the task ; for these in general are the materials which remain of that early period when our prehistoric forefathers peopled "this kingdom by the sea." They will also attempt to describe the early Celtic remains of the county.

Whatever, then, has been found, or may yet be found anywhere over the group—in sepulchral deposits, or in early graves by the sea-beach, or by a burn, or by a larger running stream, or in dark green mounds on the hillsides, or in richer

pasture valleys, or by the gravelly lake beach, or by its mossy margins, or on the moors, or in dry gravelly hillocks—all are of great value in helping to unfold the interesting story of the varied and ever-changing features of that early Pagan age; besides being—as learned from a picture clear and definite of the time of our far-off forefathers—a distinctly important contribution to our own intellectual life.

It must be acknowledged at the outset that the earlier mounds over the Orkney archipelago, so far as these have been examined, are singularly destitute of relics of any kind, even of the class by which the burial customs of that early period may be correlated, with those which present indications of a more advanced age and civilization.

The general contents over the Orkneys of the burials of pre-historic Paganism have not, unfortunately, been clearly defined and unfolded by any great grave find, which has proved to be rich in grave goods, that has come within the scope of my reading or observation. If they exist, it is either as phenomena of unrecognised character, or as what is still unknown.

But while this is so, the results of the study of the two sciences—geology and archaeology—clearly prove that the earliest historic period was preceded by a prehistoric one of long duration, marked by slow progress, from arts of the rudest kind, to others which involve the germs of many of the later developments. Thus the prehistoric mound builders gleam forth obscurely, in the waste sea of distant and shadowy time, and are little more than visible above the surface—the barest fragments of a long past influence, otherwise now nearly submerged; and the green mounds and ruinous stone monuments which they have left us, stand on their own distant horizon—clear and monumental, great and solitary—yet not altogether silent; for they speak to us of the past as objects of great interest only can, and are for all human eyes to see and admire, and all minds to study and venerate.

It is foreign to the object of these lectures to discuss the subject of the race to which the first prehistoric settlers of the group belonged. It may be presumed that a branch of the

Turanian race was driven out of the islands by the early Celtic inhabitants of the mainland of Scotland, who were a section of the widely separated branches of the Aryan race. It is further presumed that the controversy regarding their ethnographical position is settled—that they were, in fact, a geographical division of the early Celtic Britons.

There are many reasons which lead up to the conclusion that the islands were colonized before the beginning of the Christian era ; and it may be that they were so long prior to that date.

It is now generally conceded that at the period of Agricola's invasion, A.D. 81, the condition of the Caledonian tribes bore a close resemblance to that of their kindred in the south of Britain in the time of Julius Cæsar—being little, if at all, removed in the scale of social life from rude savages, leading a pastoral life, and living on the milk of their flocks, or on the produce of the chase. We also read that in the time of Severus, A.D. 210, the various tribes who inhabited the northern portion of Britain “were very bloody and warlike, and in warfare used a little shield or target, and a spear, and their sword hung on their naked bodies, which they tattooed with the figures of animals, and they used no clothing that these might be seen. They wore iron collars and girdles, deeming these ornamental, and an evidence of wealth, as other barbarians esteem gold ;” and thus had they passed beyond the Stone Age proper in many respects.

The redoubtable resistance which these two Roman generals met with from the native tribes, from the time Agricola first invaded the Caledonian territory, to the time Severus penetrated as far north as the promontory separating the Cromarty and the Moray Firths (some early writers say that he marched northward to the very extremity of the island), sufficiently attests the formidable character of our rude ancestors.

These native tribes must have been both numerous and powerful, and doubtless were the occupants of the country for centuries prior to these invasions. The distance between these firths and the north and north-eastern shores of Caithness, does not much exceed sixty geographical miles, if it be so

much ; so that there was nothing deterrent in their traversing the territory lying to the north. Indeed, all that district, along with the Orkney Isles, clearly visible from these northern shores, must have been well-known to those migratory tribes for centuries.

The traveller who first made known to the inhabitants of Europe generally the existence of the British Isles was the eminent mathematician, Pytheas, the contemporary of Aristotle and Alexander the Great. Pytheas, of Marseilles, landed on the shores of Britain, probably Kent, in the early summer of the year 330 B.C. He traversed considerable portions of the country, and found that while inland consisted chiefly of forest and marsh, with pasturage here and there for sheep and cattle in the open spaces through the woods, the natives, who were numerous, grew wheat only on narrow strips along the seaboard opposite Gaul, which they "thrashed in barns, as owing to the 'little sunshine, and much rain,' it could not be done on open fields." When travelling northward, however, he found that corn could not be grown, owing to the naturally backward condition of the country, the inclemency of the seasons, and the savage state of the native tribes—the *Caoill-daoin*, or "people of the woods." The ostensible object of the adventurous voyager at that early period was to discover the *Cassiterides* of Herodotus—who wrote B.C. 484—or Tin Islands, which were then believed to lie somewhere off the north-west coast of Spain. At a very early period the ancient Britons were familiar with tin ; and in the fifth century B.C., if not earlier, traders from Tyre and Carthage visited the British Isles for the purpose of obtaining that metal to compound with the copper found so abundantly in several parts of Asia.

After some months' residence in England, Pytheas sailed northward along the east coast, thence to the Orcades and the Shetland group. Thus early were ancient Anglia and Alba, and the islands lying off her northern promontory, made known to the inhabitants of Southern Europe. But Anglia was known at a much earlier period to the *Celtæ* of Gaul, who were then on familiar terms with their neighbours across the Channel,

from whom they were continually receiving reinforcements to aid them in their struggle against the Roman power.

Nearly three hundred years after the visit of Pytheas, Cæsar found the same district in much the same agricultural condition, though the inhabitants seem to have considerably increased the strips of land under cultivation along the sea-board. He speaks of them as agriculturists to some extent, and as practising the arts of peace. He refers to the construction of their military chariots, and to their dexterity in making use of them as weapons of war, and concluded "they were neither novices in the arts of metallurgy, nor poor mechanics, nor unskilled tacticians."

It is now the general belief that a knowledge of the use of iron was probably general throughout Britain at the commencement of the Christian era. Further, the idea is now entertained, upon what appear to be sufficient data, that an acquaintance with bronze, at least in the southern portion of the island, probably dates many centuries farther back; so that the tribes which inhabited ancient Anglia at the latter period—*i.e.*, some centuries prior to the Christian era—were considerably in advance of the Stone Age.

It may be noted that only scant remains of the Palæolithic (old rough), or First Stone Age, have been found in England, and that hitherto no relics of that era have been discovered in Scotland. It has been the general belief for nearly half a century, that during this early period the art of polishing stone implements was unknown. But it by no means follows that in the discovery of both bronze and iron, and their partial use as weapons and tools, the time-honoured use of stone for many purposes to which it had previously been applied would have suddenly ceased. The probability is that in the poorer and more remote parts of the country, stone continued to be used for many ordinary purposes, long after bronze; and possibly iron was in general use in the richer and more civilized districts. Most, if not all, peoples may, at a certain period of their history, have used stone tools; but the discovery of metals must have been made much sooner at some places than at others.

Taking into account the many centuries which must have passed between the landing in Britain of the Belgic invaders, and the date of Cæsar's invasion—and that prior to the former there were still older occupants of the soil—may it not be that Anglia was colonized at an earlier date than is generally supposed ; and that, as wave after wave of a comparatively numerous population found its way northward from the Caledonian valley, it would push its way to those remote islands—possibly many centuries before the Christian Era.

In verification of this I may quote a short paragraph from an edition of the "*Historia Britonum*" attributed to Nennius :—"After an interval of many years, when Brito reigned in Britain, about 250 B.C., the Picts came and occupied the islands which are called Orcades, and afterwards from the neighbouring isles, wasted many and not small regions, and occupied them."

It may also be noted that in the year A.D. 50, the Romans knew that Britain was an island, and that certain islands, termed Orcades, lay to the north of the mainland ; but the names of the northern tribes were unknown to them. In the year A.D. 86, that portion of the Roman fleet which had been sent north with Agricola, proceeded by his direction along the coast to the north, till they had circumnavigated the island. In the course of their voyage they passed and took possession of the Orkneys, in the name of the Roman Empire.

I am aware that it is the general belief, that at the time the islands were discovered by the Romans they were uninhabited ; but has not enough been advanced to show that even then, and indeed at a much earlier date, they were in possession of a Celtic people who had been pushed forward to these remote islands, and who had subdued previous and older inhabitants—a Turanian race, to which I shall refer subsequently ; a people who were so low in the scale of civilization as to leave no written records of their wanderings and colonizations ; a people living in a state bordering on savage infancy—with arts altogether rudimentary, having language, but without letters, tradition without history—everything, as it were, in its veriest

beginnings. This applies particularly to the period more immediately antecedent to the Bronze Age, *i.e.*, to the Neolithic Era, or Second Stone Period, and extending backward in time through an unknown and conjectural number of centuries.

By the fifth century the islands and their native tribes had become well known, and had assumed considerable importance ; for then it was that the Saxons invaded the group. Thereafter they came under the rule of the Northern Picts ; subsequently there was a Dalriadan invasion in the sixth century, when they were wasted by the Pictish King Bruide ; and yet again were they once more brought under the Northern Pictish Kings. It was in that century that Christianity was planted in the group by the followers of Columba ; and three centuries intervened between the coming of the Iona Clerics and the arrival of the Norse invaders in the war galleys of Harald Harfagri, their leader.

From what has been advanced, I think it may be inferred, that our savage forefathers roamed over these islands, and lived off the products of sea, shore, and soil considerably upwards of one thousand years before the first Norwegian prow touched the shores of the Orkneys. It is, however, with the first-named period only that we have to do on the present occasion.

The appearance of the group before their first colonization must have been one continued stretch of heathclad hillside, broken here and there with trees, with many undulating bogs, and swamps, and numerous lakes small and great. During spring and summer, the early settlers would be cheered in their lonely solitudes by the singing of birds sheltering among the native woods clothed in their robes of variegated green, and clad in all the sylvan loveliness of stately trunk, spreading bough, and umbrageous foliage ; or amid the blooming reeds and sedges by the water's edge, or in the welkin (for even music and poetry of an order suited to the savage are native products) : while the soft and many tinted grey clouds, and, anon, the fleecy, feathery cirri floated gracefully overhead—broken here and there by the deeply tinged and variegated azure blue, which has often been compared to the lovely tints

of the Italian sky. All this would present infinite variety, and impart touching beauty to the otherwise sombre landscape, during the sunny season of the year ; but when winter came the prospect would be dreary and desolate in the extreme, all along those sunless, bleak, and lonely shores during the short, dark days and dreary months, mid the many continuous storms, and rain, and hail, and piercing cold of these northern latitudes.

When our Celtic ancestors came first to the islands, and for centuries after, there is reason to believe that the lower lying grounds were thickly covered with wood, in which mountain ash, birch, pine, and hazel largely predominated ; and other species have been found embedded in peat mosses with the bark still fresh and entire. These would form a covert for the wild boar, red deer, reindeer, and other animals then native to the group, as well as fuel and shelter to the early settlers, who were little if at all removed from the condition of homeless, roaming savages, living chiefly by their success in the chase and fishing ; making rude and primitive garments and tools of the spoils of these, and having the roughest and rudest weapons made from native wood, bone, and stone, with apparently very little, if any kind of knowledge of the working in metals, on which the simplest of all known arts depends.

The wood growth—product of vegetative processes in pre-historic times—must at first have been general over the islands, as wherever peat mosses exist to any depth, trunks of trees, of considerable size and very abundant, are still unearthed ; and hazel nuts have been preserved in these mosses, and are yet found at a depth of 10 to 12 feet from the present surface, while the seeds of the birch and the ash are also met with.

By the beginning of the tenth century, wood for economic purposes must have become scarce, for then it was that the reigning Jarl became known as “Torf Einar,” from having taught the islanders how to prepare moss for fuel as a substitute for wood. This was in the century succeeding the successful Norse invasion of the group.

The apparent scorching observed on many of the trunks of the larger trees dug up is, doubtless, the result either of fires

kindled for various purposes, or more probably produced by resorting to the simple method then practised, of notching grooves with stone axes round the stem roots of those trees which they wished to fell, deepening the groove by fire, and repeating the process until the tree toppled over.

There are remains of primeval forests, still to be seen at low water during spring tides, in various parts of Orkney ; —as at Westness bay, in Rousay ; at Sandoright, Widewall bay, in South Ronaldshay ; at Millbay, and at Rothiesholm bay, in Stronsay ; at Storehouse bay, in North Ronaldshay ; at Otterswick bay, in Sanday ; at Pierowall bay, in Westray ; at Longhope bay, in Walls ; at Skaill bay, in Sandwick ; at one or more bays on the coast of Hoy ; and doubtless in other places over the group. During a very severe storm, a few years ago, there was exposed to view in the bay of Skaill, Sandwick, by the shifting of a mass of superincumbent sand, the remains of a submerged forest. There has also been found, considerably below the present low water mark, petrified peat moss, in submarine formations ; all of which give clear indications of very considerable subsidence.

There is a very old belief, that the Orkneys were broken off at an early period from the northern mainland of Scotland, and that the dismembered portion was then formed into the existing group. This could only have taken place by means of greater geological changes—exceptional depressions—than we have any authentic record of in historic times in these northern latitudes. Startling as this idea may appear, it receives considerable confirmation from the uniformity of the rock strata on both sides of the Pentland Firth, as well as on each side of the narrow firth running between the west side of the island of Sanday, and the east shores of Eday, and in other places and headlands over the group, where the geological section is of sufficient depth to permit its being seen.

This introduces a very interesting subject, but one which the scope of these two lectures precludes me from discussing at length, the question—What agencies formed the Pentland Firth, and in what era, and under what circumstances, did it

scoop out for itself its present channel? Was it then that the disjoined portion became so many separate islands? Did the Atlantic on the west, and the German Ocean on the east and north, flow simultaneously into and cover the lower grounds and valleys; and were the firths, and sounds, and bays, as we now have them, thus formed? Did these become deeper and wider from the ever-increasing encroachments of both seas? Were the valleys and lower lying grounds previously covered with wood, and was there a considerable subsidence at that time, and is it still slowly, yet surely, going on? Were only the higher lands left above water, and are these remains of trees which are still seen at low water, when searched for during spring tides, the relics of primeval forests?

There can be no doubt that for centuries the sea has been making steady inroads on our shores. In the west portion of the Mainland stands the ruin of a broch, which originally had a diameter of about seventy feet, only twelve feet of which now remain—the other fifty-eight feet having been washed away by the continuous encroachments of the sea on the stone cliff upon which it stands, and where no perceptible change has taken place during the present century. There is another ruinous broch situated on a cliff in the bay of Berstane, near Kirkwall; and other instances are not wanting where brochs, originally built on or near the seaboard, have been similarly washed away.

Over the entire group the sea is making slow yet sure encroachments. These are perhaps more discernible on the eastern shores, where the coast line is generally lower than it is on the western, which is protected almost uniformly by strong natural barriers of high rocky crags and precipices.

The coast land on some of the lower portions is disappearing on an average, at the least computation, at the rate of fully one foot per annum, or even more; so that, within a comparatively short period, portions of the lower lying lands in the island of Sanday may be submerged, and the island broken up and divided into several smaller ones. Of course, where the coast line is protected by rocky shores, the

encroachments are not so apparent; still they are steadily, though slowly, advancing. If additional evidence were required, it is furnished by the fact that, on the western coast, the channel between the Broch of Birsay and the Mainland has both widened and deepened considerably within the past quarter of a century.

From what has been said, it will be seen that over the entire group there are no traces of raised beaches. There have been no recent elevations. Not only is this the case, but there has been a gradual subsidence probably for centuries, and this is still going on. It is somewhat hazardous to offer a definite opinion on the subject, but, from various considerations, the subsidence in certain localities over the group, within the last few centuries, cannot be less than thirty feet, and may have been considerably more.

I shall now consider more particularly the Celtic antiquities of these isles of the sea.

About half a century ago, it was computed that there were upwards of two thousand prehistoric tumuli scattered over the group, the greater portion being affiliated with the earlier inhabitants, and all of them bearing a distinctly sepulchral character. They are scattered promiscuously over the group, and may be seen quite alone upon the hill-top, or upon its brow, or half-way down its side, upon the moor, by a burn, by the shore of a lake, or by the seaside. Occasionally they are found in pairs as twin barrows—a larger and a smaller; the latter generally in the proportion of two-thirds of the former, and situated near each other. They are found to be varied both in external form, size, and internal arrangement. These dual mounds are generally found situated either on elevated positions commanding a view of the sea, or of a lake, or of both, where that could be obtained.

When we bear in mind that at least half as many more barrows have been either removed or obliterated, some vague idea may be formed of the many centuries which have elapsed since the first settlers landed on these shores.

Kistvaens, unconnected with barrows, have been accidentally discovered from time to time in many parts of the group, generally by the plough, tuscar, or spade having struck the covering stone. Probably at first, barrows, which have long since disappeared, were placed over these kists, which, being below the surface, escaped notice, until exposed to view in the manner indicated.

In some of these have been found crania which, upon being examined by skilled anatomists, have been pronounced to be a type of skull earlier than the Celtic—a race presenting in the construction, and cavity, and type of formation enclosing the brain a lower, if not the lowest, grade of a race, generally designated Turanian.

Two races of men, distinct and widely separated, with different brain characteristics, seem to be represented by the crania which have been found during the past half-century; the older ones having long and narrow-shaped skulls, while the others are much more rounded and of greater breadth.

The general appearance of the early Orcadian barrow is of the bowl shape, presenting the outline of one-third or one-fourth of a sphere cut through at its axis, and compressed a little at the top. It will thus be seen that, from their compressed appearance, they do not bulk largely on the landscape. There is, however, considerable diversity in this species of barrow. The simplest is a low mound of earth, rising about 18 inches from the ground, and from 7 to 8 feet in diameter. There is a group of five of this class close to the great Stone Circle of Brogar, four of which are placed in a line. The next in order and importance, which for convenience may be termed the second class, range from 4 to 6 feet high, and from 8 to 12 feet in diameter. Those forming the third class are from 20 to 30 feet in diameter. The fourth class of bowl-shaped tumuli may be considered those whose circumference is bounded, or circumscribed, by a ring of rough blocks of stone, and are about 4 feet in height, and about 20 feet in diameter. There is yet another variety of early tumuli, where "menhirs"—*i.e.*, perpendicular or pillar stones—form a distinctive feature of the

mound, having been placed in position upon the mound. Two examples of this class were in Birsay half a century ago ; one on the Knowe of Cruston, the other at Stoneranda or Stoneround.

These five classes of prehistoric mounds, speaking generally, have each their distinctive character—in their form and size, and in their internal structure. In form they are comparatively low and broad ; in size they vary from 7 to 30 feet in diameter, and from $1\frac{1}{2}$ to 10 feet in height, while internally they present without exception evidence of a sepulchral character ; but there is considerable variety in the character of the interments, and in the interments themselves.

The smaller mounds contain generally but one grave, which is usually formed of four slabs of undressed stones, thus making a small oblong cell, the slabs being frequently placed on their edges upon the natural surface of the moor, where the burnt bones were simply deposited in a hole scooped in the earth, over which a covering stone was placed, large enough to get additional support from the surrounding clay or earth, which was heaped up and moulded into the determined form.

In the second and third classes, the kistvaen varies in size from $1\frac{1}{2}$ to $3\frac{1}{2}$ feet in length, from $1\frac{1}{2}$ to $2\frac{1}{2}$ feet in breadth, and from $1\frac{1}{2}$ to 2 feet in depth, in which is generally found an urn, or vessel, or parts thereof, containing the burnt bones resting on an oblong stone, nearly fitting the size of the cell.

The urns or vessels are varied in size, design, and execution. Sometimes the incinerated bones were found lying on a stone placed in position in the bottom of the kistvaen, and the vessel simply inverted over them. In other instances the ashes have been placed in the vessel, and kept in position by very fine sand, while outside had been placed earth and clay, and then the soil which formed the barrow heaped over all, and so brought into the desired shape. Some of the urns have been made of very coarse clay, of a dark colour, not unlike burnt cork, having the appearance of rude earthenware, into the composition of which small pieces of stone have freely entered.

In the fourth and fifth classes, the mounds range from 6 to 10 feet in height, and from 20 to 30 feet in diameter, and are

found to contain from two to six separate graves, or kists, which are similar in construction, though of a much larger size, than the earlier classes. The cist nearest the centre of these mounds commonly presented the appearance of having been more carefully constructed than those on either side. From this it has been conjectured that they are the graves of chiefs and their families; while those on either side are the cists of the more favoured dependants.

The central kistvaens have been sometimes found to contain double interments. At one end have been seen calcined bones, and parts of bones, covered by an inverted vessel, while at the other were bones unmixed with ashes, which had simply been placed in a hole scooped out of the natural surface of the soil. Interments, both by cremation and inhumation, have been met with in the same barrow and in the same cist.

It should be borne in mind that in burials of the Second Stone Age—the Neolithic, or Surface Stone Period—the body was either placed in a contracted position, or in a sitting posture, or burnt, but very rarely extended to its full length; sometimes the knees were drawn up to the breast, and rare instances would seem to indicate that the limb bones had been broken, when the body could not be otherwise disposed of within the straitened dimensions which custom had prescribed for these primitive tombs.

The people of that early age were probably warriors of the type prevailing for centuries, whose creed was that to die in bed was to die dishonoured: thus was the warrior placed in his grave, in a position enabling him readily to spring up when the sound of the war-cry should summon him to join his comrades, and renew the strife.

The vessels found in these cists have evidently been made from a coarse, dark-coloured clay, almost as porous as coarse cork, and are so rudely made that pieces of stone have been freely mixed with the clay. The size of this class of urn may be given at 1 foot in diameter at its mouth, 5 to 6 inches inside and outside of bottom, and 9 inches high, while the bottom is 1 inch thick, and its sides barely three-fourths of an inch.

The investigation of these early mounds has hitherto proved very disappointing. An occasional flint arrow-head, or a solitary stone-hammer and mallet-head, with or without holes for handles—which implements may or may not have been placed in the cists when first used as places of sepulchre : —“ This, with a few urns in which parts of bone of various sizes were found, and pieces of a vitrified substance, like a parcel of peas, with a vesicular internal structure, and of a whitish appearance, as if it were vitrified bone—along with human remains in a very decayed state, and in a few instances a lump of metal supposed to be manganese, but no entire bones,” have been all, or nearly all, the reward which has resulted from the expenditure on these early mounds of much time and labour.

Speaking generally, polished stone weapons and hand-made pottery belong to the Neolithic—*i.e.*, the Surface or Second Stone Period. Hitherto, neither have been found in the Palæolithic or First Stone Age in Scotland. Between these two eras there exists a long undefined period, a deep gulf which, despite all the efforts hitherto made to bridge it satisfactorily, still remains unbridged—unconnected.

Of the fifth variety, I instanced that called the Knowe of Cruston, which, although surmounted by a standing stone four to five feet in height, did not contain an urn, but merely burnt bones deposited in an ordinary cist.

This classification is now considered by many archæologists to be somewhat arbitrary, and may possibly be departed from in the near future.

So far as known to me, there have been hitherto, save in one or two instances, very few bone or stone implements found in Orkney in the graves of those who burnt their dead ; and the kistvaens of the Neolithic or Surface Stone Period—for we have nothing earlier—and their contents, exhibit a very meagre degree of skill in their construction.

It may be noted, for the sake of those who have not studied the subject, that urns made from steatite were not used until the islands had come under the bane of Norse Paganism.

All through the heathen period, the older system of burial in mounds or tumuli took place without regard to locality. There were no special places of interment, at least in the earlier period of the Celtic occupation of the islands, such as have prevailed during the Christian era. In these mounds—held inviolate and jealously guarded from aliens, sacredly preserved also by the descendants of the family to which they originally belonged—the early Celtæ buried their dead.

Such was their veneration for and their attachment to these mounds, that it was difficult, even after they had renounced heathenism, and had adopted the Christian faith, to restrain them from burying their dead in these old sepulchral resting-places of their heathen forefathers.

It may aid us to realize in some degree the rude barbarism of that very early age if we view the picture from another standpoint. When the first wave of population found its home in the islands, their material wants were few ;—to satisfy their daily returning hunger ; to protect themselves as best they could in a climate so rigorous ; to prepare their lairs for the night ; to follow the instincts of their being, by caring for and, if need be, defending their offspring—these would constitute alike their concern and their enjoyment, and furnish their daily round of duty.

Having at first no fixed home, these early settlers would roam at large—without regard to territorial divisions of proprietorship—as do the beasts of the fields. Such a primeval condition as this suggests, appears to underlie all civilization, and carries us back to the time when all mechanical arts were of the very simplest and most primitive description. It does not, however, of necessity follow that man was then in a condition of intellectual sleep. Need I remind you that the degradation of his moral nature, and not the absence of the arts, with which we associate modern luxury and enterprise, made and kept him a savage.

In such a condition of life, man is but a huntsman by land and by sea. He looks round him, and the very necessities of his position teach him to form his first rude weapons out of

the materials lying within his reach. With these he defends himself as he best can from hostile tribes. Living thus he would fabricate rough and ready tools wherewith to pursue the chase by land and fishing by sea.

For the same purpose as his descendants chipped, and latterly polished, the harder and closer-grained stones they could find, into shapes which they ultimately assumed, he used natural stones, which, once used, were probably thrown aside, and were as if they had not been. Those early stone implements were of necessity contemporaneous with the savage. He required food and clothing, and obtained both from the beasts of the field. The wild animals around him roamed at large, and his instincts told him that they did so for his use, but that without weapons he could not succeed in capturing his prey—and all the more would this come to be experienced as a daily necessity in a zone like ours, where fruits and roots are so scanty, nay, almost wanting, during a large portion of the year. Cæsar informs us that at the time of his landing in the south of Britain, B.C. 50, "the interior of the island was quite uncultivated, that there they never sowed their lands, but followed the occupation of the hunter and the shepherd, and were clad in the skins and lived on the flesh and milk of their flocks, and herds, and spoils of the chase."

When civilization was no further advanced than is implied by this quotation, before the Christian era, in the more landward portions of sunny and southern Kent, what was the condition of the inland districts? And travelling northward for nearly seven hundred miles, through what was then a trackless wilderness, what must have been the condition of the country and its people! We are told, so late as the invasion of Severus, "that the Caledonii and the Mætæ lived upon the milk of their flocks, upon wild beasts, and whatever they could procure in hunting, and often satisfied the cravings of hunger by eating roots as these could be found." How long this primitive state of things continued among the early populations cannot now be determined, but those of the race who were pushed forward and northward so

far as the Orkney Isles, must have long experienced a very precarious subsistence : the maintenance of life with them being nothing short of a daily struggle.

Perhaps succeeding waves of the race from the mainland brought practical ideas, which gradually and happily accelerated the pace of these island tribes, from a very primitive stage of culture towards, at the least, semi-civilization.

At this early period the islanders were comparatively few in number, and occupied limited areas of the group ; for where the inhabitants mainly subsist on the produce of the chase and fishing, their *habitat* cannot be other than scantily peopled. Possibly the first settlers possessed very few domestic animals, but more of these would follow in the train of subsequent migrations.

In proof of this it may be stated that the early mounds have yielded very few, if any, bones of animals, while the later ones have produced the skulls of cattle, the bones of a diminutive breed of sheep, and of the pig and dog, together with the head and antlers of deer, and the large vertebræ of a whale, also quantities of shells of the oyster, scallop, common whelk, limpet, purpura, and periwinkle, besides a considerable variety of implements made of bone.

When we keep in view that a great number of animals would be killed to maintain the life of one human being, say during an average life of from thirty to forty years, and that most mammalia are far shorter lived than man, we would naturally expect to find human remains very rare, as compared with those of the lower animals ; and amongst people who burnt their dead, the disproportion would be greatly increased.

With the gradual increase of domestic animals would come the necessity of caring for and carefully tending them, as a further and more permanent means of subsistence, and consequent increase of material resources. The herdsman and his herd would roam the adjacent forest during summer, pasturing them on the green and fertile spots mid the trees, and, perchance, bivouacing under their shelter for the night ; but the privations of a long and rigorous winter would awaken into

action his slumbering instincts in devising ways and means of providing food and shelter for himself and his beasts, so far as his environments would yield them.

Man's first home would be the natural caves and dens he could find in his wanderings; but as these are few he would soon have to betake himself to the construction of such rude and primitive huts as his resources enabled him to fabricate. Tacitus furnishes us with a description of their type among the Germans:—"As caves dug in the earth, in which they laid up their grain, and whether they retired in the winter, or on the advance of an enemy to plunder the open country." Julius Cæsar describes the dwellings of the ancient Britons as similar to those of the Gauls, and these we learn from Strabo and Diodorus Siculus, "were constructed of wood, of a circular form, and with lofty tapering roofs of straw or coarse grass." Sir R. Coalt Hoare, in his work on Ancient Wiltshire, remarks:—"We have undoubted proofs from history, and from existing remains, that the earlier habitations were pits, or slight excavations in the ground, covered and protected from the inclemency of the weather by boughs of trees and sods of turf."

There are yet to be seen numerous supposed traces of these early habitations in those parts of the various districts of Scotland, including the northern counties, which are still uninvaded by the plough. Their traces are believed to have been found in the counties of Argyle, Aberdeen, Inverness, and Caithness; and similar remains were doubtless to be found scattered over the Orcadian archipelago, down to the commencement of the present century.

To modern ideas, these primitive dwellings must have been rude and comfortless in the extreme, and probably of the type now called *eirde*-houses, or *weems*—that is, pits, or slight excavations in the ground, with coverings made from boughs of trees, and sods of turf, heather, and coarse grass. They were sometimes circular, and sometimes oblong, and rarely exceeded seven to eight feet in diameter, and were thus semi-subterranean adjuncts to overground sites of habitations of slighter materials.

Where excavations within the area of these have been made, charred wood and vegetable matter have generally been found ; and their sites are often to be discerned mid the brown heath, or on the grey slope of the hillside, from the richer growth, and brighter, deeper green of the grass within the circle, where once stood the little homestead of the early settler, round which the accumulated refuse of culinary operations have sufficed permanently to enrich the soil.

Is it not probable that it has been among the unrecognized *debris* of these, the earliest human surface habitations, that stone implements, celts, arrow-heads, scrapers, &c., have been found ? We should be careful, however, to guard against the extreme of attributing every implement that may be found to the Stone Age, merely because it is made of stone. The two Stone Ages are characterised not merely by the use of stone implements, but by their exclusive use, to the entire absence of metal—the latter being then unknown.

In these early times, stone tools and implements would be highly prized and carefully preserved, and mayhap secreted in underground recesses attached to these eirde-houses, as well as in other places ; while some would be left there by accident, or otherwise, where they remained till chance exposed them to view, when they would be readily picked up as treasures, and held as charms, which they were believed to be for centuries.

While these stone implements are the simple and only tool products, which have come down to us from the savage state in which our early forefathers lived ; they are at the same time a proof that the first streaks of the dawnings of a higher civilization they were then groping after, and striving to find, were becoming visible, even amid the dense darkness of that Pagan period. Thus were our early ancestors, unconsciously it may be, seeking to rise, from the lower and ruder beginnings of life, to its higher and more cultivated forms, in which the forces of nature were ultimately to be subdued, and made subservient to human wants.

It is singular that man's instincts regarding the forms in which he shaped his stone tools should have proved so true ;

for these are still found to be, on the whole, the most fitting and convenient which have been devised. To those who fashioned and used them, during the long conjectural centuries in which they were man's only weapons, offensive and defensive, they could have had but one meaning and one use ; but in the ages which succeeded—the bronze and the iron — these implements, flint and stone weapons, had lost, because of their antiquity, their original significance, and for many centuries had been regarded with superstitious reverence.

So recent as the first and second decades of this century, a halo of mystery was associated with these relics, over the north of Scotland, the Western Isles, and the Orkneys. The mythical element had cast its glamour over them so far that they were regarded as sacred and supernatural objects, possessing virtues almost miraculous. Stone hammers were viewed as "thunder bolts" which had fallen with the lightning from heaven, and stone axes were believed to have had a similar origin. It was the popular belief that their possessors were fully protected from the dangers of the thunderstorm and other climatic evils. They were placed in conspicuous positions, in byres and sheep-folds, as a protection from the diseases incident to the beasts of the field. They were intimately associated with human successes and reverses in a great variety of ways. They were also much used as amulets and charms ; and for more than a thousand years they have, on occasions, been so greatly prized as to be mounted in gold and silver, and deemed worthy of being given as Royal gifts. Many of them were highly valued by those to whom they belonged, and were handed down from one generation to another as heirlooms.

Flint arrow-heads are the most numerous, best known, and most attractive product of the Stone Age. When they passed into the region of the mythical and superstitious, witches caught the idea, and incorporated it in their mysteries. They averred that they were made by the arch-fiend and his imps, for their special use, and were so fatal that whoever was struck by them would die, even if protected by a coat of mail. The uses

and customs with which flint arrow-heads were associated, permeated all classes of society.

The use of the bow by savages seems to have been almost universal in Europe, and may have suggested itself to man by instinct. Its use gave additional power and value to the arrow, and these, to an expert, were a great increase to maintenance. The swift bird fled, and the fleet animal ran, and bow and arrow materially aided in their capture, and secured the coveted prey.

Universal as the arrow was during the later Stone Age, and all through these early centuries of savage life, their real use has been so little known during more recent times, that up to the present century they were popularly believed to be "elf arrows," or "fairy darts," and there are numerous instances in which they were so regarded. Many of them have been for ages safely guarded and kept inviolate, from a deeply-rooted conviction that, if parted with or lost, "good luck" would no longer be the heritage of those through whom the heirloom had changed hands.

It is not yet two decades since a friend got for me a fine specimen of a "fairy dart," from a young woman who received it from her grandmother with the strict injunction, "that she was not to part with it ; that, if she did, the fairies would take herself, and her luck would be gone for life."

Some years ago I learned incidentally an instance which occurred towards the end of last century, where one of these arrow-heads was believed by its owner to have been the handiwork of the "elves," or "fairies." It was owned by an Orcadian, who wore it night and day for the greater portion of a long life. The old man resided in what would then have been considered an isolated district of the group. It had come to him as a heirloom, and he had worn it from youth to extreme old age, suspended by a cord round the neck, superstitiously as a charm. On no account would he part with the heirloom, affirming that, if he did, the "fairies" would come and take him bodily away, so that he would never be seen or heard of again. When he believed himself dying, he left

strict injunctions that his heirloom should be buried with him, he leaving no descendants.

It is probable that among the older people, in the more remote parishes and islands of the group, there yet linger in folklore stories illustrative of the many-sided superstitions which were early associated with the "virtues and vices" of these "elf darts," in their relation to both sexes, and to the beasts of the field, which should be preserved. Might it not be one of the aims of the Orkney Natural History Society to devise means whereby this can be attained?

The first evidence of a slight advance in the constructive skill of the early inhabitants, would be discernible in the houses being built wholly above ground, and in the construction and strengthening of their abodes and enclosures, by the use of stone as a material, along with turf and clay. Their first fields would be small circular or oblong enclosures attached to their dwellings, and small patches but partially reclaimed from the surrounding waste. This would be done by the laborious process of clearing the ground of trees and their roots, and burning the latter, then by mixing the ashes with the soil, a bed would be prepared in which to sow corn. Thus, by slow industrious processes, on an unproductive soil, and in an unpropitious climate, would the early settlers be instinctively labouring to attain the rudiments of a pastoral life.

Their implements of husbandry would be of the rudest possible description; the forks or diggers being made either from the sharp points of the antlers of the buck deer, or from other horn, or from stone, or from sticks of wood shaped as required, and hardened by fire. The shoulder-bone of the ox was also used as an implement, by being attached to a handle, and so turned into a primitive hoe.

Thus did our hardy ancestors make for themselves their first and earliest homesteads and fields, in the more sheltered and sunny spots over the mainland and islands which form the group, and all around these shores. In the more settled dawn of their agricultural life, they would sow, and pull their corn, storing the ears, or these on the stalk, with some kind of

thatch, wherewith to preserve it from rotting, taking the old ears from day to day, and using them as food, having at first no other means of preparation than roughly bruising the grain between two oblong stones, by rubbing the upper and smaller backwards and forwards on the lower and larger.

Ultimately, however, the rotatory quern—of which there are many specimens yet to be seen in every island and parish—came into use, which would be considered a great improvement on its prototype ; and then the still but partially bruised grain would be kneaded into a rough and unpalatable kind of dough, and baked as bread, on stones prepared for the purpose, and heated in the fire.

These, then, it is presumed, were the first possessions of our hardy ancestors in their sea-girt homes, placed amid these northern seas:—the grave mounds they raised, the animals they reared, the lands they cleared and cultivated, the mud huts, and afterwards stone and field huts, they built, the implements of wood, bone, and stone they fabricated—all these they would guard, and, when required, defend for themselves and their offspring.

Out of this state of things would arise the necessity for fixing, to some extent, the boundaries of acknowledged possessions, or townships—both family and tribal, which would include fields and houses, lakes and streams, with pasturage on hills and dales—all of which are needed, in so northern a latitude, in the struggle to sustain the life of man and beast. With such a state of things, and in these the dawns of civilized society, would come the necessity for the establishment of primitive law, which doubtless became vested in the chief, or acknowledged head of the tribal family. May it not be that it was during the early part of this period, that the prehistoric leaders began to rear over their dead the early mounds which I have attempted to describe—evidence of a meagre claim to civilization and culture on the part of their constructors ? The inference is that they belonged to an early age—the earlier portion of the Neolithic or Later Stone Age.

From the cumulative evidence which can now be adduced, the prehistoric mound builders in our northern archipelago, seem to have been too low in the scale of civilization to have known anything of the arts or of metals then, and long before that, current among the people of the same era in Southern Britain and the Continent. Seeing, then, that they were so little removed from the condition of the savage, it has been made a subject of inquiry—Did they really supersede an earlier and more savage race?

It is now the generally-received opinion, founded on varied conclusive data, that they were a branch of the Celtic race—the race characterised by the possession of round and broad skulls, and that they really supplanted a weaker race—those possessing long and narrow skulls, commonly called Turanian.

It will, however, be apparent that the materials are still too scanty, to enable the archæologist to present a correct and well-authenticated picture of the early colonization of the Orcadian group, and the gradual development of the civilization exhibited by those of our earliest ancestors of which we have any authentic knowledge; still, a charm of mysterious "eld," peculiarly its own, attaches itself to, and surrounds, the Neolithic or Surface Stone Era, in which it lies, and as that in which the earliest dawns of civilization of Ancient Alba, and the islands off her western and northern coasts, first became clearly visible.

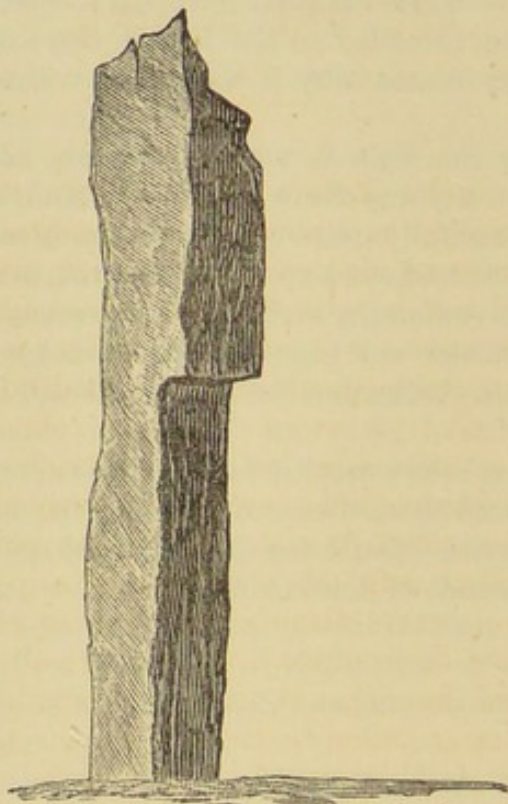
As time rolls on, other investigations, more systematic and scientific it may be, will probably be made, in those numerous mounds (with their environments), scattered over the entire group, and still unexplored, with the view of ascertaining more fully than heretofore, what human productions, either of stone, or bone, or bronze, or iron, exclusively or conjointly, in either or in all, can yet be found associated with human remains, or with those of animals—the only remaining source (apart from incidental "finds" that happily occur now and again), along with geological features and surroundings, from which an enlargement of our present knowledge of the subject can be obtained.

Does it not amount to an anomaly that, while during the past fifty years great interest has been shown, and public money expended on the elucidation of our earliest historic period, yet it has been left almost exclusively to the private enterprise and zeal of the several Antiquarian Societies of Scotland to investigate the prehistoric era? Seeing the public favour has been extended to the former, there does not seem any satisfactory reason why it should be withheld from the latter.

Presumably the time is not far distant, however, when whatever can in any way throw light on the study of prehistoric times will be carefully preserved for future investigation. It is becoming more and more apparent, that unless what remains be treasured as containing early relics of great scientific value, the sources whence our increase of knowledge on the past phases of human civilization can alone come will have perished for ever.

This care has been extended to the grave mounds of Ancient Scandinavia; and there does not seem any insuperable reason why a like service should not be rendered to the northern division and islands of Ancient Alba.





REPRODUCTION OF DRAWING BY REV. GEORGE LOW, 1774, OF STANDING STONE
AT GRIMNESS, IN THE ISLAND OF SOUTH RONALDSHAY.
HEIGHT, 16 FEET.



LECTURE SECOND.

IN my former lecture I endeavoured to show that Archæology is a study with a purpose, other than the mere indulgence of idle though intelligent curiosity ; that it is, in fact, a scientific examination of, and a careful research into, the long-forgotten past, through the remnants of man's handiwork preserved in the soil from unrecorded ages, commemorative of a social state long lost in the darkness, dense and almost impenetrable, shrouding a hoary antiquity.

I also endeavoured to state the present position of the question connected with the archæological inspection of the earlier prehistoric grave mounds, scattered so profusely over the Orkneys, and the comparatively small results which have come to us from those opened, and the consequent need that a very careful examination be made of those remaining ; and that an interest, intelligent and widespread, be shown in this important and instructive subject ; and, lastly, I ventured to urge that a more thorough examination of those remaining be instituted, encouraged by a small annual grant from the Scottish Exchequer, if requisite to its accomplishment.

In the present concluding lecture, I shall proceed to describe and discuss what our early Celtic ancestors have left us, other and further than that embraced in my former one. What remains—both interesting and instructive—may be confidently assigned to the Neolithic or Second Stone Age ?

First, probably in point of time, is the cairn of which that of Unstan, in Stenness, may be taken as the type. Its main

characteristic is that its small chambers have been formed out of one large apartment, by stones set on edge, and jutting out from each side of the main chamber, thus dividing it into small compartments of a primitive type.

Next in order in this class are the chambered cairns proper—as that of Bookin, in Sandwick ; Quoyness, in Sanday ; Quanterness, in St Ola ; that on the western declivity of Wideford Hill, and others having similar characteristics ;—with the larger one on the holm of Papa Westray, and the more elaborate and justly celebrated of all, Mæshowe, in Stenness. All these, save the last, are characterised by having low and narrow passages communicating with the exterior, and leading to one central apartment, which, by short passages, branches off to small similar cells.

In Mæshowe, however, there are no passages of this kind, but there are three chambered recesses, constructed in the thickness of the wall, three feet above the floor of the central chamber.

These chambered cairns have been either wholly or mostly constructed on the surface of the ground, and roofed on the principle of stone overlapping stone, till a single slab completes the edifice. Then the earth, clay, and *debris* are heaped over all, forming a mound, bee-hive shape, and a retaining wall of rude structure is run round its edge to preserve its form and give additional solidity to the cairn. These, both internal and external, are very superior in structure to the earlier mounds delineated in my former lecture, and could only have been erected when society had become somewhat organised, and made subservient to chiefs, or acknowledged leaders, to whom, by general consent, obedience would be a recognised, if not an enforced, duty.

Second, there are the more elaborate cromlechs*, or stone circles, small and great, as at Stenness ; then there are the dolmens,† or single stone chambers ; and, lastly of this class,

* "Cromlech"—from "crom," a circle, and "lech," stone.

† "Dolmen" from "daul," a table, and "mean," stone.

there are menhirs,* or single standing-stones, which at an early period were much more numerous over the entire group than now.

Third, there are the ruins of the brochs, and that found in their *debris*, belonging to that early period when they were occupied by their builders.

Lastly, there are the remains of the early Celtic churches ; and collaterally the Celtic MSS. of contemporary date.

All these, doubtless, were constructed during the era under discussion—the Neolithic or Surface Stone Period. These four divisions would each require a separate lecture to do them justice, but as the scope of these two lectures is to treat the subject in as popular and succinct a manner as is consistent with clearness and precision, my descriptions shall be brief.

We will now retrace our steps to consider the first of these divisions—the cairns. Their main feature is being chambered, and so *constructed* that communication with the interior is obtained by a *passage*.

First, then, is the class of which Unstan is the type. The mound stands on a small neck of land jutting into the Loch of Stenness, a short distance north-east from the Bridge of Waith. At an early period the mound had been cut off from the land by a moat, or ditch, extending across the promontory from shore to shore. Its extreme diameter was upwards of 50 feet, while, within the somewhat irregular circumference of its base, the usual double retaining wall was found, by which the original outline of an approximately circular mound, 40 feet in diameter, was clearly defined. The passage communicating with the interior was found to point south-east.

Its special distinction from the class next in order, and much more elaborate, is that there are no passages branching off from a central chamber, to others of a like character, within the precincts of the mound. Unstan consists of one elongated apartment, $21\frac{1}{2}$ feet in length by $6\frac{1}{2}$ feet in extreme width,

* "Menhir"—a standing-stone, from "maen," stone, and "hir," long, or high.

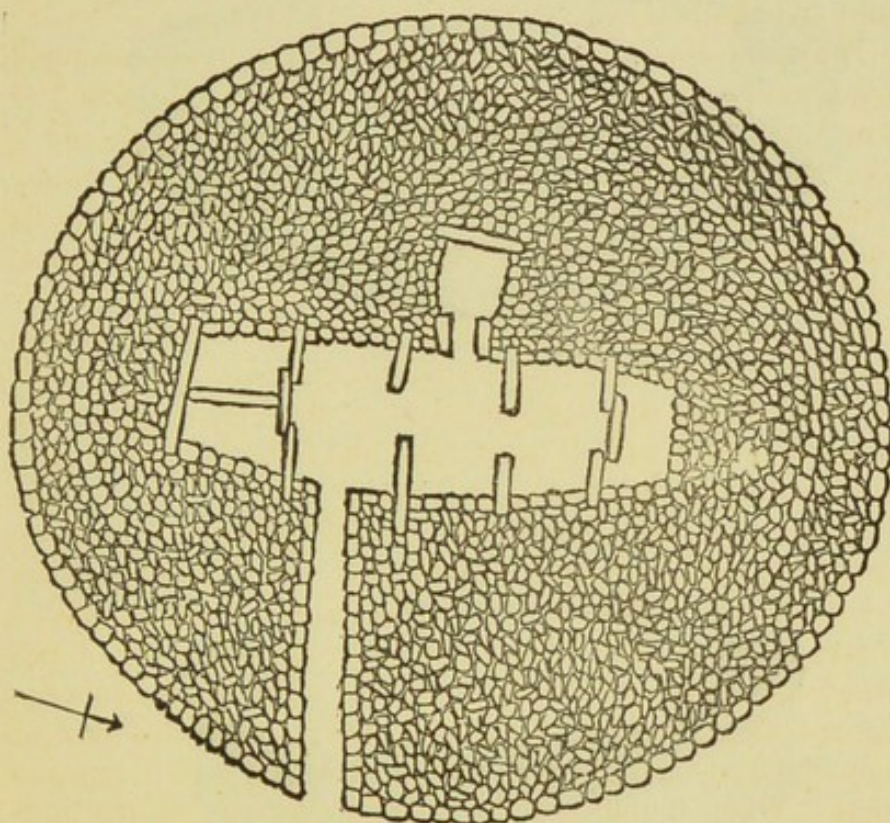
divided into five compartments by stone slabs placed on edge, projecting from its opposite sides, with side and end recesses, but partially paved with coarse slabs of stone. When the mound was opened a few years ago, there were found considerable quantities of unburnt bones, both of man and beast. There was also evidence of cremation, in the presence of burnt bones and charcoal.

The specimens of pottery found with the bones, although exceptionally numerous, were mostly in fragments, and probably represented about thirty separate urns, but only six of these were in such a state of preservation as to be capable of being pieced together—the greater portion having been doubtless broken when the rude and primitive roof gave way and fell inwards centuries ago.

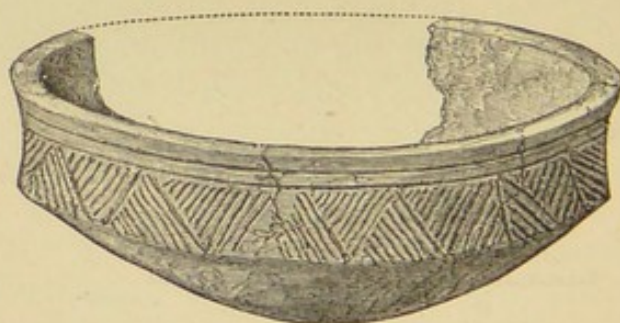
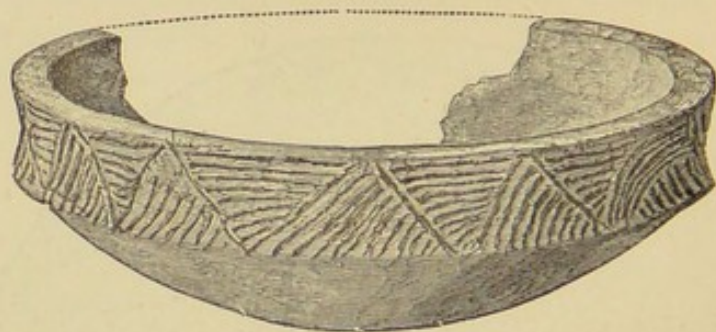
The urns are mostly large, shallow, round-bottomed vessels, made from a hard, dark brown coloured clay, and free from grit and admixture of stones, having vertical rims, ornamented with incised lines of triangular patterns ; and the cairn itself, being chambered, is of the Stone Age type.

There were also found four leaf-shaped arrow-heads of large size, finely chipped ; one of small size, of the triangular variety, having barbs and a central stem, together with a beautiful scraper and knife ; and an elongated knife of rare pattern and finish—all of flint. These eight implements and weapons, thus found with their sepulchral deposits, were all finely finished, and form a very interesting and suggestive group. When found, their calcined appearance clearly indicated that they had been subjected to the influence of fire. It may be noted that, from various considerations, the leaf-shaped arrow-heads now described may have been the earliest form of arrow ; and, if so, this carries us backward to an early period of the Surface Stone Era.

The presence of so many urns, &c., shows that there have been numerous successive interments within the precincts of this mound ; and that with human bones, forming the fragmentary remains of several skeletons, there was a commixture of the bones of the ox, sheep, deer, and dog, with those of the horse



Ground Plan of Chambered Cairn at Unstan.



Urns from Chambered Cairn of Unstan.

and swine, together with numerous bones of birds, some of which were of considerable size.

The total absence of any kind of instrument of metal from this group of grave goods, taken in connection with other characteristics, mark it off as one of the early grave mounds of the Neolithic Era. I have been induced to give these particulars somewhat fully regarding Unstan, as it was recently opened, was especially rich in its contents, and is doubtless more or less known to many members of this Society.

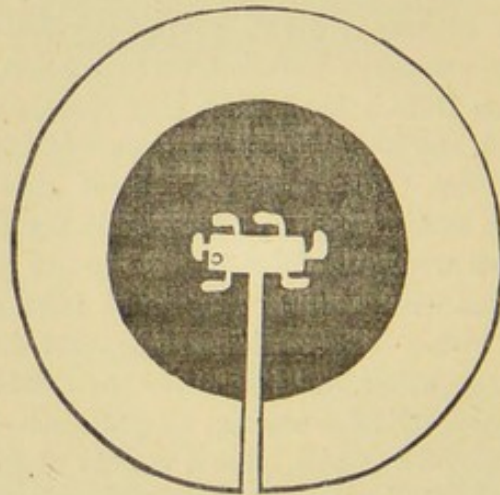
Next, we have the chambered cairns proper. Being chambered is their distinctive feature. They are constructed on the principle that access to the interior is by a passage from without. The contents of the chambered floors have been found mostly to consist of burials after cremation, accompanied by vessels made from a hard dark clay paste, and of a correspondingly dark colour, and free from an admixture of stones and grit, and are thus in every respect superior to those belonging to an earlier date, as described in my former lecture. The vessels with which we have now to do are either round or oval, bowl-shaped with wide mouths, thick edges often bevelled outwards, and round bottoms, having straight lines running at all angles to each other, indented over their exterior surfaces, consisting of geometrical markings or patterns—straight lines, triangles, zig-zags, &c., which give a variety of fluted patterns, and impart a graceful and artistic appearance to the vessels.

Along with these have been found some arrow-heads, made from flint nodules, with a very few other tools of polished stone, also needles made from bone, of varied workmanship and design, along with bones, both human and animal, but more of the latter. The presence of burnt and unburnt interments in the same chamber, and the absence of tools made of metal, are features common to the class, irrespective of the external form of the cairn which contains the chamber.

Bookin exhibits features in the arrangement of its chamber which makes it an intermediate structure—a connecting link between Unstan and those that follow. The passage communicating with the interior, led to a chamber almost square on its

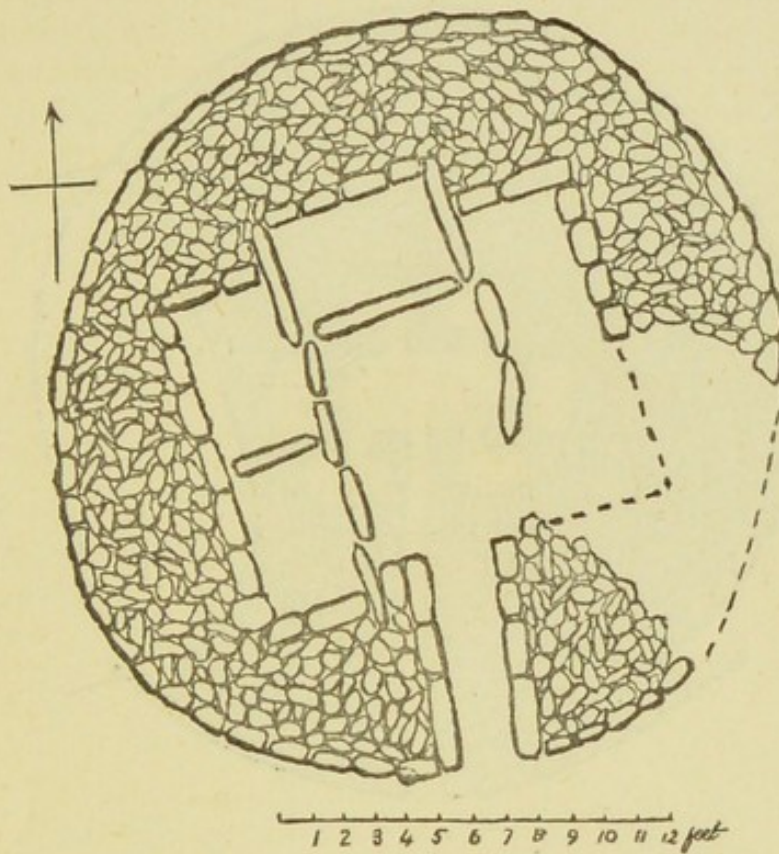
surface, having walls built in the usual manner, with flagstones set on edge projecting into the area of the floor from three of its sides. These stone divisions crossed each other at right angles, and subdivided the area of the central chamber, with cells at either side, into which the passage led. In the central chamber were found a flint lance, or spear-head, and some fragments of clay urns, but no human remains, while in some of the surrounding compartments were found the remains of a number of human skeletons.

The cairn of Quoyness, in Sanday, has been a large circular mound fully 60 feet in diameter, with an average height, even

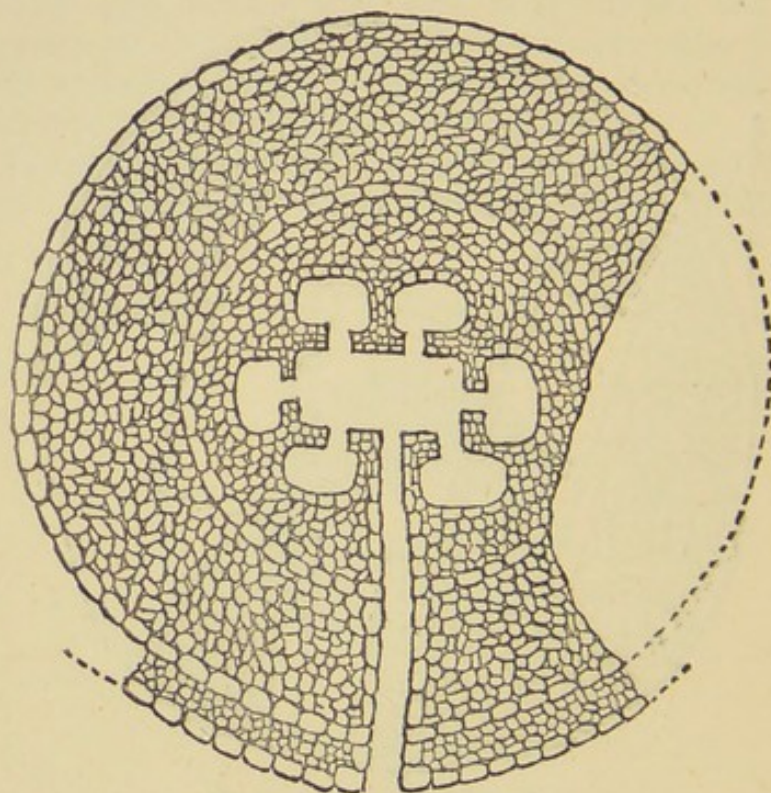


GROUND PLAN OF QUOYNESS, SANDAY.

now, of nearly 10 feet ; while, from the accumulation of *debris*, it must have been much higher originally. The passage leading into the interior was about 24 feet in length, and led directly to an oblong shaped chamber, nearly rectangular, $12\frac{1}{2}$ feet in length, $5\frac{1}{2}$ feet in width, with walls upwards of 12 feet in height. From this there were six passages leading to an equal number of irregularly - formed oval cells, two on each side, and one on each end of the central chamber. Fragments of upwards of twelve human skulls were found in these cells, of all ages ; one or more had the appearance of

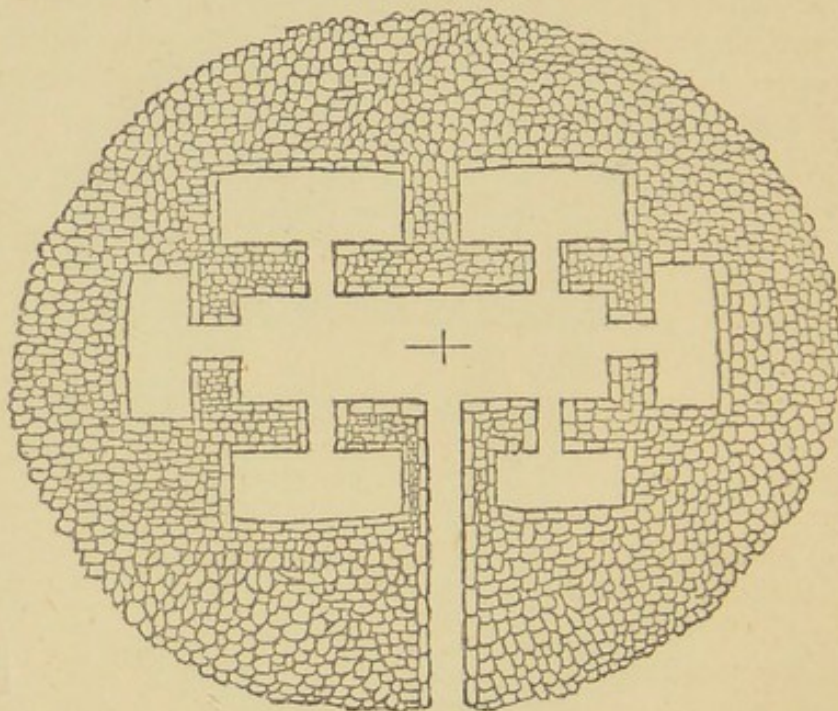


Ground Plan of Chambered Cairn at Bookin.



5 10 20 30 feet

Ground Plan of Chambered Cairn at Quoyness,
near Elsness, Sanday.



— 1 2 3 4 5 6 7 8 9 10 feet

Ground Plan of Chambered Cairn at Quanterness,
near Kirkwall.

having been cleft prior to being interred. With these fractured skulls were found some animal bones, supposed to be those of the ox. No pottery was found, but two stone implements of unknown use, and a third, made of bone, resembling an elongated borer, 7 inches in length.

It has been suggested that possibly this cairn was originally a broch, and that within its central area the building just described was subsequently constructed. But the essential features of a broch are conspicuous by their absence, and the relics found are those associated with the chambered sepulchral cairns. Its design, and the character of its contents, clearly indicate its typical relationship.

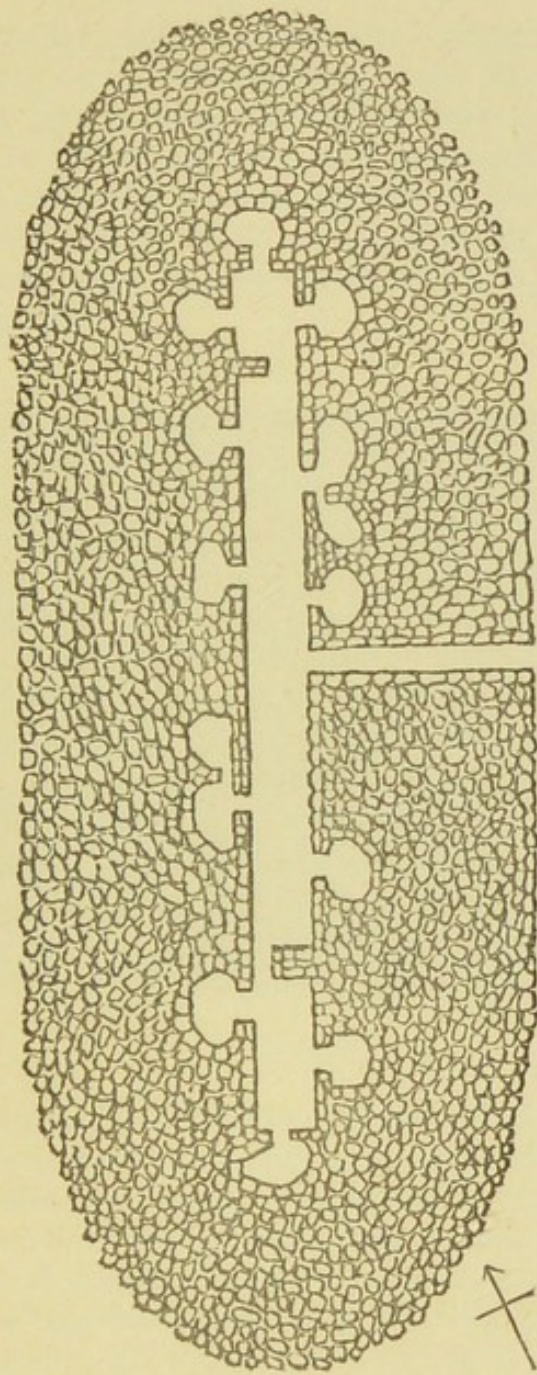
Closely resembling Quoyness, in its internal structure, is that at the north side of Wideford Hill, commanding a fine view of the bay of Firth, with the island of Damsay embosomed midst its waters; while north-east lie the islands forming the more northerly group. The mound presents the form of a truncated cone, 384 feet in circumference at its base, and 14 feet in height. A long, narrow passage from without, pointing due east, led to a central oblong chamber, $21\frac{1}{2}$ feet in length, $6\frac{1}{2}$ feet in breadth, and $11\frac{1}{2}$ feet in height, constructed and roofed in the manner formerly described, and common to its class. On either side of the chamber, and at both ends, were six short passages, having openings two feet square, leading to six small cells, two on each of the long sides of the compartment, and one off each end; thus forming a *loculus* similar in design to that at Quoyness. The floors of the chambers, large and small, were of a dark-coloured, earthy, adhesive clay, mixed with which were found bones, both human and animal, much broken and decayed; while in one of the cells was found an entire human skeleton, which must have been a subsequent interment.

There is yet another of this class, considerably larger than either of the preceding—that situated on the highest part of the small uninhabited holm lying off the east side of the island of Papa Westray. This pretty, green island rises gently from west to east, when it terminates abruptly in a perpendicular

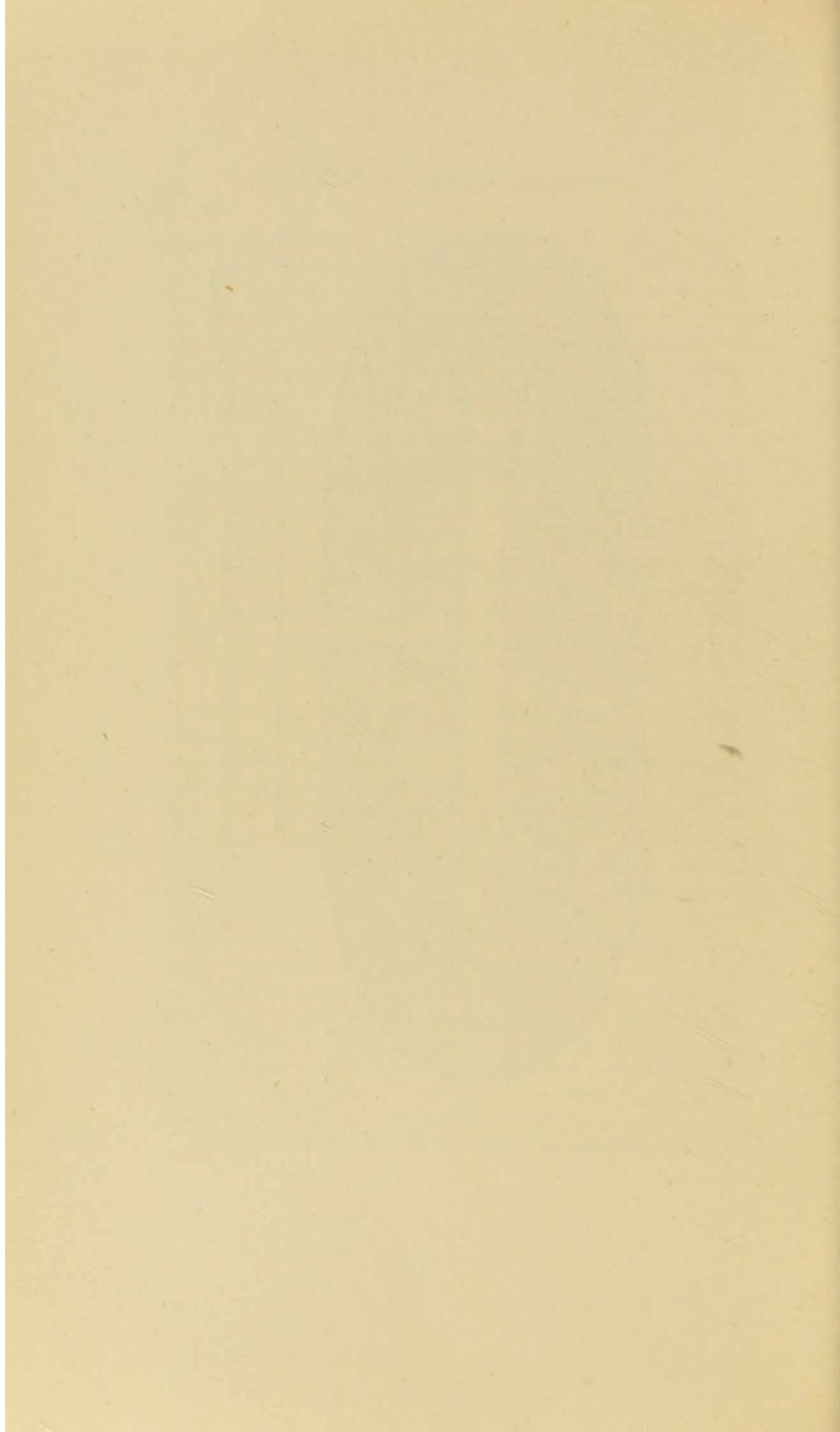
cliff, 60 feet in height. The cairn stands twenty or thirty yards from the edge of the cliff, is exceptional in external form, being an elliptical mound, 115 feet in length, 55 feet in breadth, and 10 feet above the natural surface. It has an elongated compartment, 67 feet long, and 5 feet wide, with a partition wall towards either end, projecting about 3 feet into the chamber. Opening off both its sides and ends were ten single and two double cells, averaging from 4 to 5 feet in length, 3 feet in breadth, and 3 to 5½ feet in height—all having the same level as the main chamber, and roofed, as are all the others, on the overlapping principle. On the east side of the central apartment, and about its middle, was an opening communicating with a passage outward, 18 feet long, 1 foot 10 inches wide, and 2 feet 8 inches high, roofed with large, thick, oblong flags, set on their edges horizontally. When opened, upwards of fifty years ago, this large sepulchral house for the dead was found apparently destitute either of human or animal remains, or implements, or other relics of any kind.

I hope you will not consider it inappropriate, or foreign to the subject, that I make special reference to the justly-celebrated tumulus of Maeshowe, as the crown and glory of early Celtic sepulchral remains in Orkney. No one taking pleasure and pride in the past, can view that time-honoured and singularly striking structure, enclosed within its grassy covering, without experiencing a deep thrill of emotion. Its erection dates backward, in all probability, a millennium and a-half, transporting us into those long past centuries, hoary with a weight of years, and venerable by antiquity. There is, doubtless, a striking resemblance between it and the great cairns on the banks of the Boyne; but Maeshowe is far superior to these in workmanship and finish. As a tomb of very early structure, it is believed to stand unrivalled in Britain for its completeness, massiveness, and durability. Indeed, it is affirmed that there is not another of its class, in so good a state of preservation, in the United Kingdom.

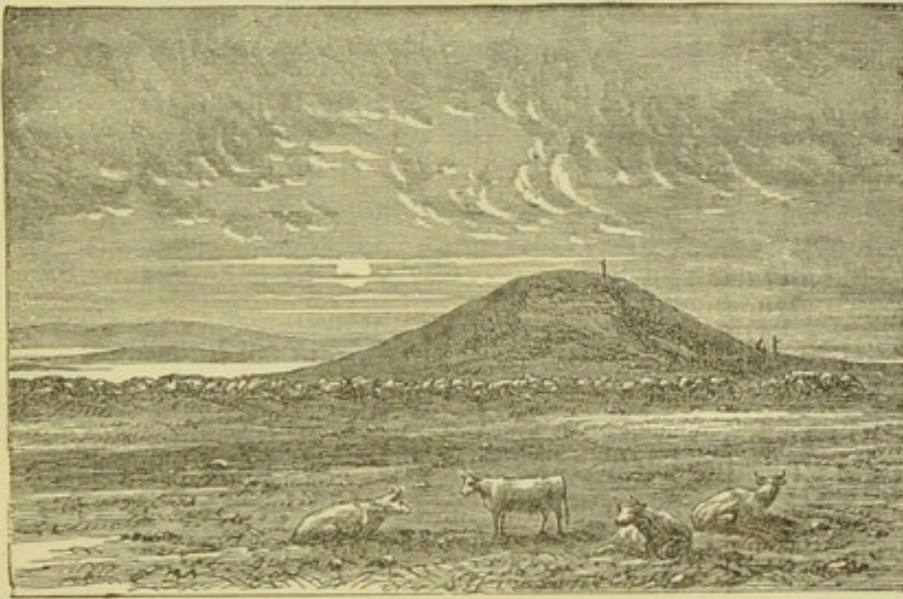
Externally, it presents the appearance of a gracefully shaped



Ground Plan of Chambered Cairn on the Holm of Papa Westray.



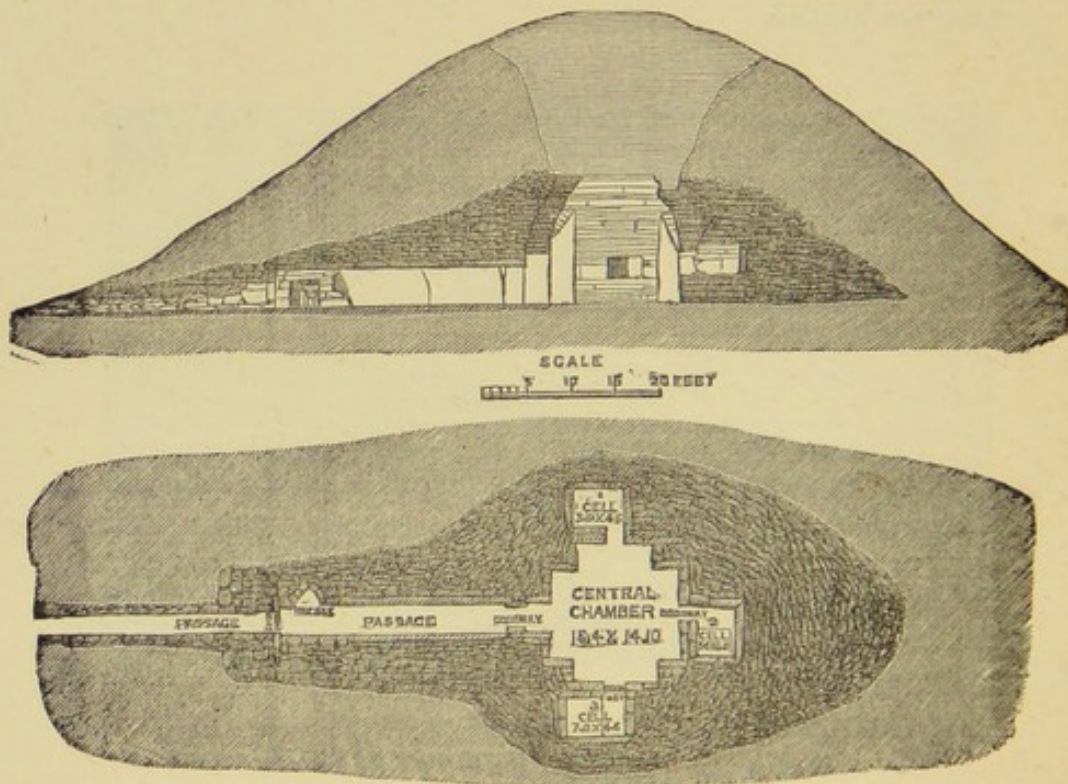
and beautifully rounded conical mound, rising from the natural surface of the soil, and measuring about 300 feet in circumference, 92 feet in diameter, and 36 feet in height ; while about 90 feet from its base it is surrounded—as if by an enchanted circle—by a moat, 40 feet in width, having even now an average depth of 6 feet, out of which the earth seems to have been taken to keep the structure in position, and to form the mound.



MAESHOWE.

The building itself consists of a central chamber about 15 feet square and 20 feet in height, to which there is access on the west side by a passage over 50 feet in length, in the construction of which colossal block slabs of stone have been freely used ; two of them—one on either side—measure 18 feet in length, reaching from a recess on the left hand side, as we proceed inward, till within a few feet of the chamber. The passage measures 4 feet 6 inches in height, by 3 feet in width, which is narrowed by the projection of a stone slab from both sides, where there seems to have been a doorway, originally

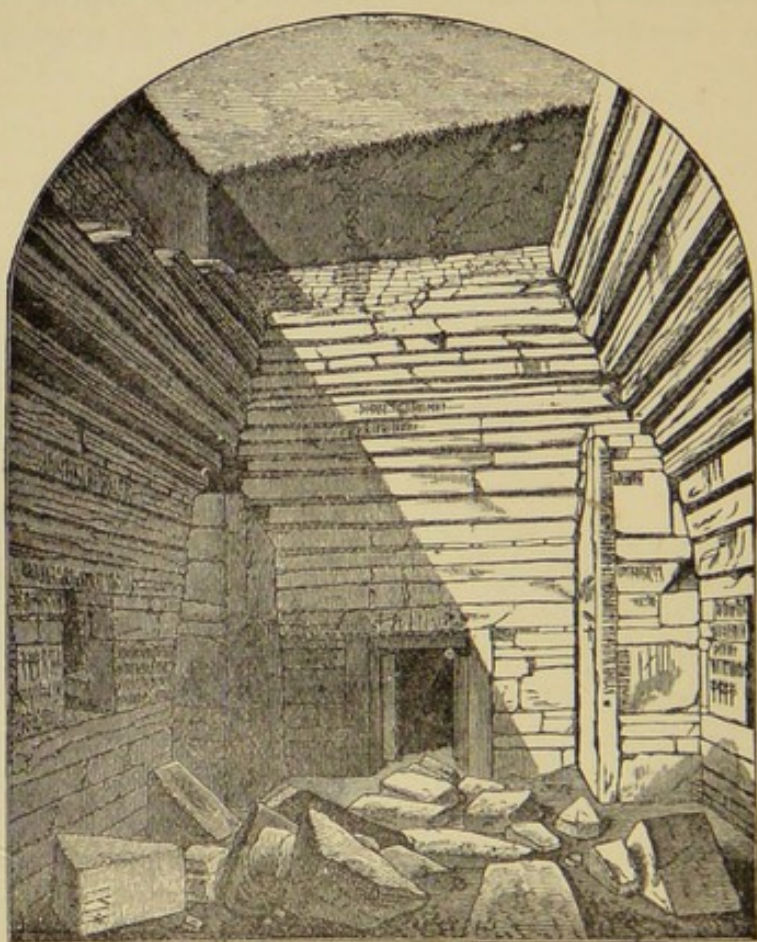
standing about 2 feet 6 inches from the entrance to the chamber. Treading our way cautiously along this dark gallery, with bowed head and stooping shoulders, we are at length ushered into the deep shadows of the central apartment, where floats the dim light of antiquity, and which we are unable to disassociate from the mysteries of the elden times ;—where



GROUND PLAN OF MAESHOWE.

we stand, our flickering extemporised lights helping to dispel the gradually decreasing darkness, until at length we find ourselves able to penetrate the gloom, so far as to form an approximate estimate of the design and size of the strangely weird structure—old beyond tradition's lore.

On looking round, and overhead, the spirit of anti-mediævalism predominates ; in the grimness of the flickering of



View of the Central Chamber in Maeshowe.

greyish lights that struggle through the darkness from floor to dome, and but faintly penetrate the thickened gloom which has gathered there for ages ; in the design of the structure itself, and the materials of which it is built ; in the colossal strength expended in its erection ; in the absence of any kind of tool having been used during its construction ; and in its singularly quaint impressiveness.

By the aid of feeble lights we perceive, on the three remaining sides from that by which we entered, viz., the north, south, and east, lateral crypts—sepulchral recesses—varying from $5\frac{1}{2}$ to 7 feet in length, and $4\frac{1}{2}$ feet in breadth, with openings $2\frac{1}{2}$ feet square, and 3 feet above the natural surface of the floor. The cells were closed by square blocks of stone—which are still there—closely fitting the openings.

Looking around, we are forcibly struck with the large size of the stones used in the construction of the building, being huge undressed blocks of the hard thin-bedded claystone of the district, rectangular in form, having clean vertical joints, which enabled the builders to fit them nearly as close to each other as if they had been hewn for the purpose. In the four corners there are large and strong buttresses—rather, I should say, massive projecting block buttresses—measuring 3 feet square at the base, and rising to the height of 9 to 10 feet, for the twofold purpose of giving solidity to the structure and to assist in carrying the overlapping layers of stone, which converge as they ascend, and thus form what, for convenience, may be termed the horizontally crossing arches, constituting the semi-bayed vaulting of its domed roof.

On looking minutely to the stone surfaces of the walls, we perceive, here and there, that they are studded with incised inscriptions, comprising in the aggregate over 900 letters, all of which are in the Runic character, besides a neatly cut dragon and serpent-knot.

It seems almost superfluous to say, that these were carved by the retinue and retainers of Earl Rognvald the Blessed, about the years 1152-53, centuries after the erection of the mound. This incident in its history, however, has no bearing

on the question of the date of its construction, or of the design and purpose of its erection, or original use.

Retracing our steps into the light of the outer world, we found ourselves underneath the blue and white vault of heaven ; when, after walking round the anciently-consecrated enclosure, we ascended to the top of the mound, which seemed near the centre of an extensive, but now treeless, amphitheatre of hills. We had a most enchanting view, for the sunshine streamed through the fleecy curtain of clouds that o'erspread the sky, and, by its silvery softness, lit all around with its own matchless loveliness.

Looking westward, we clearly descried, in the distance, the far-famed primeval stone pillars and stone circles of the Orkneys, standing tall and clear against the sky ; and the thought of some very ancient and mysterious relationship with these takes conscious possession of the intelligent and sympathetic beholder of the scene.

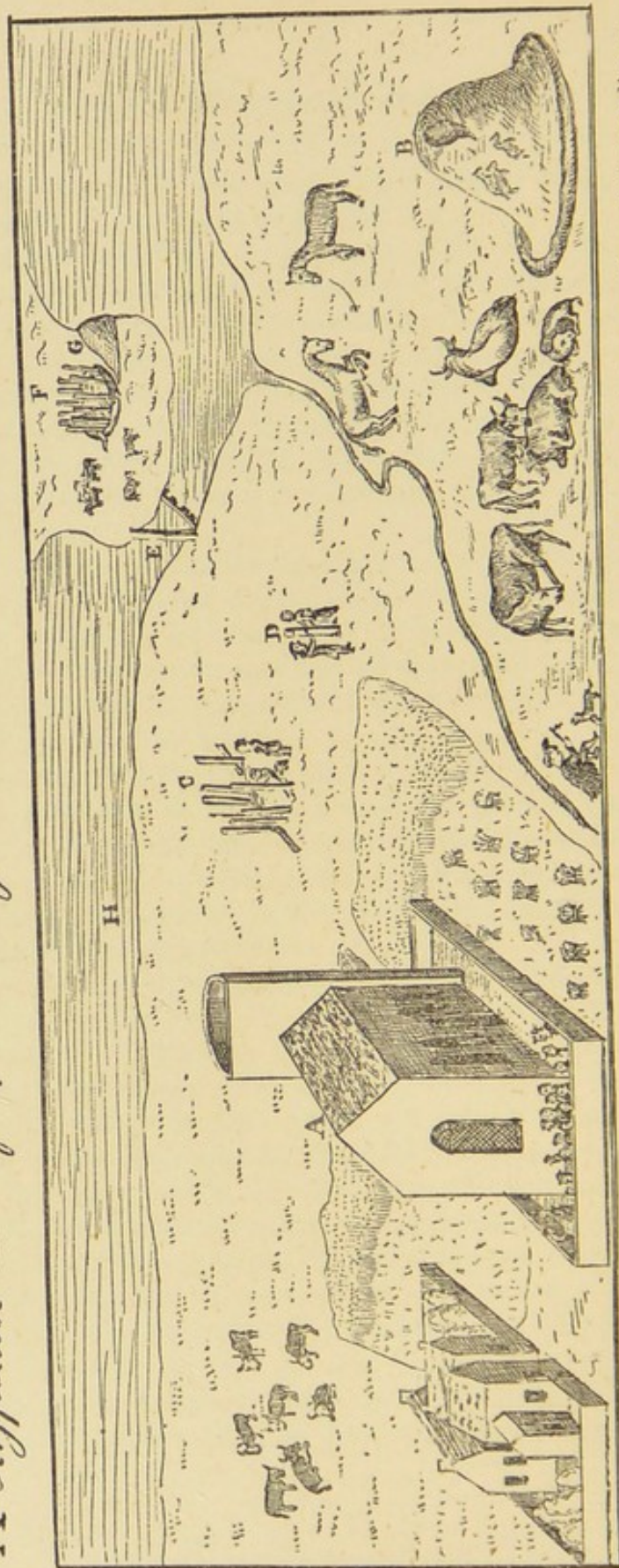
Norsemen who have made the early history of their country and its people a special study, are careful to disclaim a northern origin for this or any other of our chambered mounds, or the brochs, or the stone circles ; and unhesitatingly assign their origin and construction to the early tribes which preceded their ancestors in the possession of the islands.

Maeshowe is unmistakably linked, by the character of its structure, to the type of chambered cairn which I have endeavoured to describe, and of which it is, by universal consent, acknowledged to be the crowning glory.

Undoubtedly, the far-famed chambered mound is, by general consent, regarded as the work of the race which preceded the coming of the Norse invaders. To how much earlier a period than the ninth century we are to assign its erection, I will not hazard an opinion ; but, from various considerations, its construction may date several centuries earlier.

Fully a mile beyond, and south-west from Maeshowe, are those impressive remains of early Celtic hands, which have attracted many thousands to our shores from the four quarters of the globe. Here, then, on these spots—those two necks of

A Perspective View of the Standing Stones in the Parish of Stenness in Orkney.



Reproduction of antique Sketch of Standing Stones of Stenness, giving a general view of the relative positions of these relics as they existed upwards of one hundred years ago.

A. Old Church.
B. Mound of Maeshowe.

C. Circle of Stenness.
D. Stone of Odin.

E. Watch Stone.

F. Circle of Brogar.

G. Large Mound, N.E. of Circle.

H. Loch of Stenness.

land—sacred by so many associations of the past, there is much to develop feelings of reverence for the place and its hallowed environments. On this sepulchral area, so fully occupied with the memorials of those long departed, may I not dilate a little? and while we all gaze mentally on a scene so weird and spectral, may I not indulge in musing, sketching, and moralising on a subject so interesting and attractive?

Let us place before our mental vision these two promontories, elevated above their immediate surroundings, where stand, *in cumulo*, the memorials of a long past age, which so meet as to divide the lake of Stenness into two parts—that of Stenness to the south, and Harray to the north—viz., that remarkable group which forms the great Stone Circle with its tumuli, and other circles and pillars with their tumuli.

To the early Celtæ, the area comprised within these two circles would be a spot of great sanctity, constituting their hallowed ground; for there are still to be seen the remains of two circles, having circumferential stone columns, besides two others without erect stones, together with about twenty bowl-shaped and conoid barrows, some of which are of large dimensions, and all presenting great variety in their proportions and magnitudes, as well as remains of cromlechs and tumuli, which have unfortunately been too much defaced by time, or mayhap ruthlessly destroyed by vandalism, to admit of their characteristics being clearly defined.

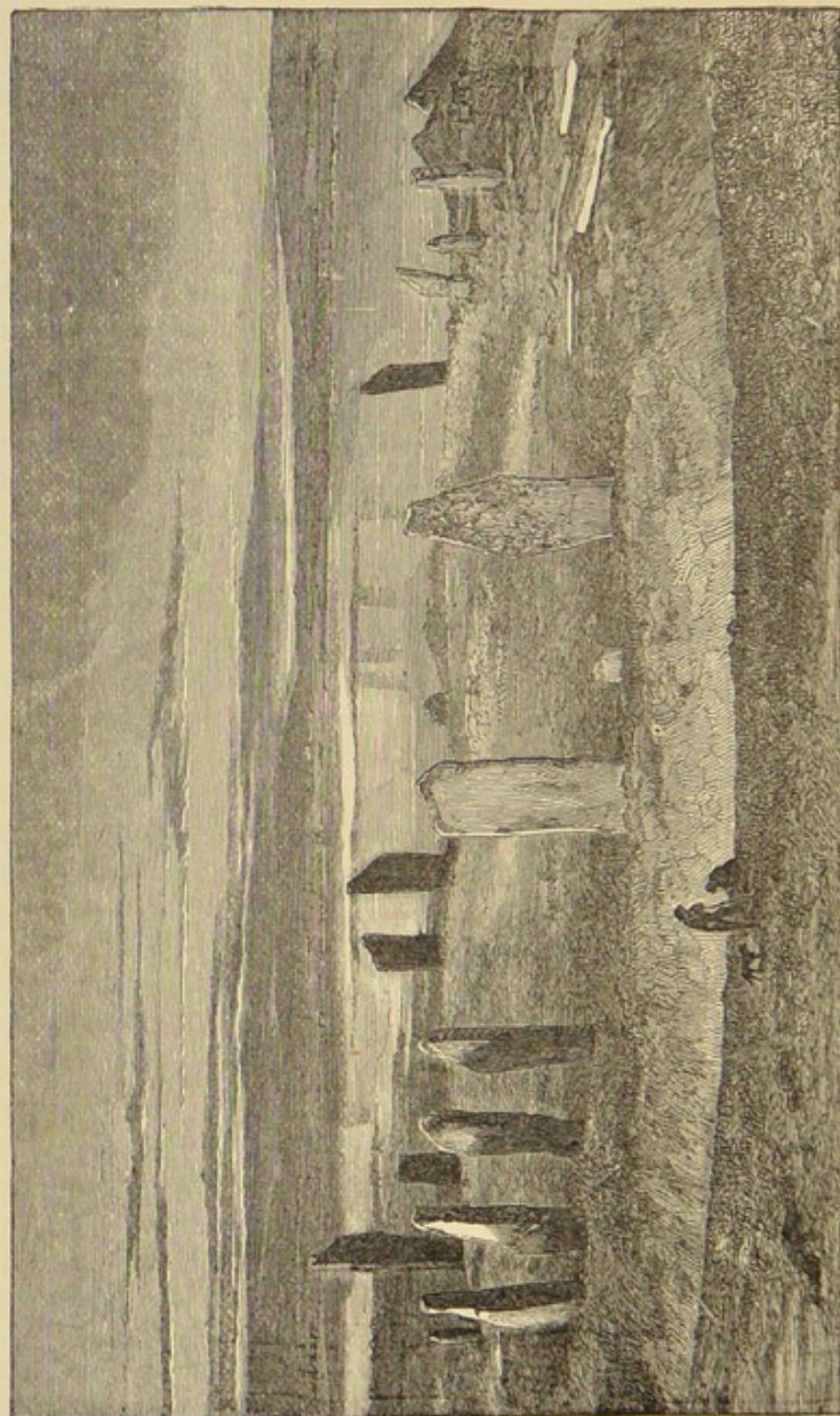
First, there is the lesser stone circle situated on the south side of the Bridge of Brogar, known by the name of the "Stenness Circle," near which, though quite apart, stood the celebrated "Odin Stone," which was only 8 feet high, 3 feet broad, and 9 inches thick, the round and artificial hole being 3 feet above the ground, and 6 inches in diameter. The segment of this circle is unfortunately all that remains, and is an artificial structure, having an interior raised mound, nearly flat, and surrounded by a trench, part of which can still be traced; and though long since shorn of its stately impressiveness as an early structure, still, from what remains, both its original size and design can be determined.

The three huge stone slab columns which remain are about 18 feet in height, two being still erect, while the largest lies prostrate, and part of a fourth is still there. Four slab columns are represented as standing when Dr Barry's view of the monument was published in 1807; the same number are figured as standing in a series of drawings made by the late Marchioness of Stafford in 1805; while eight appear to have been in position about the year 1780, and three were prostrate, as shown in a drawing presented to the Society of Antiquaries in 1784. Their appearance shows design and power, and presents a massive, though semi-savage grandeur, in their rugged realism; and a feeling of awe overpowers us while we stand gazing on these shapeless and colossal blocks, so entirely devoid of every trace of artistic design, and so impressive in rough boldness of outline.

The circle seems to have been formed by twelve of these massive slabs of the old red sandstone of the district, 15 to 18 feet in height, set perpendicularly in the soil, without the aid of machinery of any kind, and erected by a power not mechanical, but what may be designated gigantic. When seen by the stranger they impart the idea of magnificence. When complete, the circle was about 104 feet in diameter. Peterkin states that three of these large pillar stones were thrown down, ruthlessly broken, and removed, about the year 1814, by the tenant-farmer of the surrounding lands.

The circle possesses additional interest from the presence of a dolmen, or stone chamber, within its precincts, though not situated at its centre. It is, unfortunately, much injured; still enough remains to enable the initiated to determine its original form. One of the blocks forming the dolmen rises three feet above the ground, and seems to have retained its original position; while the opposite corresponding block, of similar size, has fallen outwards, lying on its side, and on it the large covering stone partly rests. Originally there were four blocks to complete the square, but two have been taken away, and apparently destroyed.

It is worthy of note that, so far as now known, there are



VIEW OF GREAT CIRCLE OF BROGAR.

only two other dolmens in the Orkneys, both being situated in the neighbouring parish of Sandwick, but neither are perfect.

As about one-third only of the circumscribing ring of the Stenness circle can now be traced, it was conjectured, for a considerable time, that the structure was originally semi-circular, but that theory has been abandoned.

When on the way to the Bridge of Brogar, attention is at once arrested by a single gigantic monolith—the finest and highest of the entire group—being nearly twenty feet in height, standing erect, like a giant sentinel, called the “Watch Stone.” There are no earthworks either around it or near it; but from its position at the entrance to the early causeway which joined these necks of land, may it not be the sole relic either of a huge or incompleated avenue, whereby the lesser Circle of Stenness would be connected with the greater one immediately beyond?

I shall now pass to the great Circle of Brogar,* which has a diameter of 366 feet, and 340 feet within the stones, and contains an enclosed area of no less than two and a-half acres. The moat encircling the area on which stands this great stone circle is wonderfully perfect, and is about 30 feet in breadth, and 6 feet in depth, with no perceptible rampart on either side. There are two causeways or entrances to the circle, and these are directly opposite each other; but they do not face either of the four cardinal points. The circle has originally consisted of sixty upright stone slabs, of various sizes—being thirty in each semi-circle. Thirty-seven can still be traced, and sixteen are now standing, but are so mutilated as to vary in height from 3 feet to 15 feet.

When the visitor has placed himself within its area, over which the storms of so many centuries have passed, he will gaze on these remnant stones of antiquity—which stand like rock spirits of the past—now clad in long grey lichens, that

* Brogar is derived from the Scandinavian “bro,” or “bru,” a bridge, and “gard,” or “gardr,” an enclosure. At the beginning of the present century, foot-passengers crossed the ford by means of stepping-stones; but a bridge-causeway has connected the points of land for the past half-century.

hang like grizzled beards from their weather-worn surfaces, starred here and there with variegated hues of green, purple, and orange-coloured mosses. Looking round, he will find the position embosomed amid an amphitheatre of gracefully rounded hills and softly undulating heights ; and, while thus situated, a strong feeling of desolation will be felt.

If in sympathy with his surroundings, and what they suggest, he will in thought wander backward, far into the past, to the time when the early leaders first visited the place—then enriched by an abundant supply of growing wood—set the spot apart as hallowed ground, erected those stone circles, raised those tumuli, in either of which, when life's battles and struggles were over, both leaders and people, mayhap, would be laid to rest, "to sleep their sleep outright," and where, it may be, the better spirits of those early centuries would worship—the ever-changing, yet changeless, heavens overhead, the ever-shifting forms and colours of nature beneath and around them—to them, and to all men, nature's great and solemnizing temple.

There are no remains of a dolmen within this enclosure, neither are there traces of any other structure.

Cultivation has not yet invaded the bare and heath-covered plateau, on which stands this world-famed circle, where for centuries have grown undisturbed the stunted heath, wild weeds, and coarse grass, starred here and there with daisies, cowslips, and other native wild flowers.

The extensive view from this ancient plateau commands a varied and pleasant scene of hill and dale, sea, lake, land, and blue sky—all blending and intermingling so harmoniously as to be both inspiriting and inspiring ; while, in the still farther distance, there is an enclosing circle of heathclad hills, intersected by cultivated valleys, which, either in their robes of yellow or green, afford a pleasing contrast to the dark brown and rich purple of the surrounding moors.

When we consider the early date at which these stone circles were erected—probably between the second and fifth centuries A.D., or it may be even considerably earlier—the huge

size of the unhewn and rugged slabs which have been used as pillar stones, the large area enclosed, the rough and primitive design exhibited, the power and labour expended in fencing and trenching, with the very limited appliances at command—without the aid apparently of a single tool, they are more than simply interesting and remarkable—they are invested with a unique interest and notable impressiveness all their own.

These numerous structures, within so limited an area, must have profoundly affected so impressionable a people as the Celtic race ; and all the more so that the design in their construction was to possess kistvaen, or cists, or graves for those, among others, of their race who would distinguish themselves as leaders—a class comparatively few in number ; so few, indeed, that all peoples and nations have instinctively done them honour—either in their funeral obsequies, their last resting-place, or subsequently in their national literature.

It has been remarked that strangers set a much higher value on those relics of our early forefathers than we do who are natives. Orcadian scenery is both varied and attractive ; but, methinks, no part of the group can offer a more pleasing holiday, or a more pleasurable retrospect, than a visit to Stenness, or temporary sojourn there, meditating on the monuments of primeval man, in the grey dawn of rude civilization, or pacing, in pensive mood, soil so redolent with hoary antiquity.

I presume you would consider it a work of supererogation were I to detain you with proofs that these circles were, in the main, anything else than sepulchral. The popular notion that they were structures originally designed and set apart for the observance of Pagan rites and ceremonies, more particularly druidical, and erected at the instance and by the influence of an early sacerdotal class, is no longer tenable. But while this is so, we must guard against the extreme of supposing that they were not so used, even at first, or at a very early date, and subsequently, for other uses.

The tenets of early Celtic Paganism are somewhat obscure, still, we know enough to enable us to perceive to some extent

what they were. Mysterious beings and evil spirits were believed to dwell in the heavens and the earth—the air, the sea, the river, the mountain, and the valley—who were to be dreaded, and by some means conciliated. These were worshipped and invoked, as well as the natural objects in which they were supposed to dwell. This conception permeated the early history of all the Celtic tribes which peopled Ireland, the Western Isles, and northern Scotland during the Pagan period.

We thus see that the elements of their religion consisted in a sort of fetichism, which peopled all the objects of nature with malignant beings, to whose agency its phenomena were attributed; while a sept termed “Magi,” or “Druadh”—*i.e.*, Druids—exercised great—rather, I should say, supreme—influence over the people, from the belief that, by the aid of these evil spirits, they could practice a species of magic or witchcraft that would either benefit or injure their votaries, as they favoured or opposed them. We learn, from the “Life of St Columba,” that the Gentiles—*i.e.*, those who were non-Christian—“often celebrated their idolatrous solemnities, accompanied with many incantations, in presence of the leaders, principal people, and inhabitants generally.”

There were, undoubtedly, certain places of public resort, where the people assembled on special occasions, and at stated and well-known times, where Pagan rites were solemnized; and may it not be, that a secondary purpose to which the stone circles were appropriated was the observance of these within their time-hallowed precincts?

The further belief that cromlechs, or stone circles, were erected by the Norse invaders, as places where their quarterly “Altings” or yearly “Law-Tings” would be held, is likewise untenable; but there can be little doubt that they—*i.e.*, Norsemen—appropriated them for that among other purposes.

There are notices in some of the old chartularies of the county, that courts of law were held within their precincts as late as the years 1349 and 1380. Even so late as the year 1438, there is a notice to the effect that “John off Irwyne and Will

Bernardson swor on the Hirdmane Stein, before our Lord ye Erle off Orkney and the gentiless off the cuntre." Such were, however, secondary uses.

Stone circles were very numerous at an earlier date, and were profusely scattered over the western isles and that part of Scotland north of the Forth and Clyde. Wherever careful excavations have been made—and they have now been going on upwards of half a century—they have almost invariably resulted in establishing, on an increasingly firm basis, the theory that these stone circles are sepulchral.

They often differ, however, in plan and construction ; sometimes they are surrounded by a trench, at other times both a trench and an embankment of earth surround the cromlechs ; occasionally there is an inner and outer circle of erect stones, and there are instances where there is even a third circle of the same character ; but whatever may be the precise form the circular stone setting assumes, the enclosed area, when carefully examined, has been found to be sepulchral in character, and contains a plurality of interments, burnt and unburnt, showing that they are not simply monuments of single and solitary individuals, but family, or tribal, or public burying-places.

It is not affirmed that in every stone circle evidences of interment have been, or are to be, met with ; but the absence of these in a few cases does not invalidate the general conclusion drawn from the fact that, in the vast majority of instances, the evidences are so conclusive as to place their original purpose beyond controversy. It may be that in some instances those circles still unproved to be sepulchral have only been partially examined, perhaps not examined at all ; if searched, they might yield additional evidence to augment the growing and cumulative proof on the subject.

The fact that we have so many of these cromlechs, scattered over such a wide area, which on investigation have been found to be burying-places, leads up to the belief that it is impossible to conclude that those which are still uninvestigated would disclose a different purpose for this ancient and primitive type

of what may be termed sepulchral pillar-stone temple structures.

Fully a mile northward from Brogar, and on rising ground elevated about seventy or eighty feet above the surface of the lake, is the Blackhill of Wasbuster. Proceeding a short distance along its ridge, there are the remains of an ancient enclosure, known as the Ring of Bookin, circular, with a diameter of 136 feet inside the surrounding trench, which is 44 feet in width and 6 feet in depth, but without a footpath across the fosse into the interior. Though there are no circumferential stone settings, yet within the area there were single stones of small size, both erect and prostrate—the centre being occupied by a triangularly-shaped block (the corresponding one being at the edge of the circle); while, irregularly over its surface, were five or six smaller circles, each about 6 feet in diameter, formed of earth, on which stumps of stones were visible half a century ago, which it has been supposed were the remains of small cromlechs long since destroyed. The plough partly invaded the enclosure many years ago, greatly defacing its few remaining characteristics.

The remaining cromlech is situated between the top of Lingafield and the loch of Clumley, and is known as the "Stones of Vea"—the latter word meaning holy, or sacred. It stood near the centre of an old circular enclosure, about 25 feet in diameter, with a tumulus on its southern border, which, when examined, contained nothing beyond some large stones. The cromlech is formed by four square pillar-stones, 3 feet in height, supporting a massive square slab, 1 foot in thickness, 4 feet 9 inches by 5 feet 10 inches.

In the same parish, on rising ground to the north of Quoyloo, are the remains of a much larger erection, locally known as the "Haly Kirk," which has been supposed to be the ruins of a more elaborate cromlech than either of the others. When on a visit many years ago to the proprietor on whose lands the interesting relic is situate, he spoke of those remains of a bygone race with much interest, and, taking me to them, pointed to a large slab—then, and long before,

prostrate—remarked—"There is a very old belief that at an early date it rested on the tops of the others, all of which stood erect, and this had led to the supposition that they were the remains of a very ancient stone altar."

Like the mounds and cairns, these stone circles and dolmens mark the spots set apart considerably upwards of a millennium and a half ago, from the surrounding area, wherein to deposit and preserve the remains of the prehistoric race, which at an early period peopled the Orcadian archipelago.

Though some of the menhirs, or standing-stones, may not be of Celtic erection, yet an enumeration of those which have become historical, as well as of others which still remain, may be of interest. On the mainland, a short distance east from the Circle of Stenness, stood the celebrated "Odin Stone," which was, unfortunately, destroyed in December of 1814. Though latterly it bore the name of a Norse divinity, it has been uniformly classed among the earlier remains of the islands. Then there is the "Watch Stone," so strikingly imposing by its massiveness and baldness of outline. In the neighbouring parish of Sandwick, near Quoyloo, and close to the ruins which have been indicated as the probable remains of a large cromlech, stands a third. Birsay contains a fine specimen, near the farm of Stanger, 14 feet in height, and 1 foot in thickness; while on the Knowe of Cruston is another; and a third stands at Stoneranda. In the parish of Harray there are two or three, but none of them have an imposing appearance. In the parish of Orphir there stood two large stones, but little more than the stumps remain, over which superstition, at an early period, cast its mystic mantle. In the southern group, two fine specimens are still preserved in the island of South Ronaldshay; while the remains of others are easily traced. South Walls contains two. The group of islands lying to the north contain three fine monoliths—one in Rousay, one in North Ronaldshay, and one in Eday—the latter being at least 20 feet in height, 6 feet in breadth, with a proportionate thickness, the upper part having worn away into three lengthy shafts. The peculiar weathering aspect which they exhibit, and the interblending and shading

of the mosses and lichens on each of them, impart an aged and venerable appearance.

We now leave the early Celtæ, and their various grave structures, to consider them from another standpoint. Not only did they construct elaborate mounds, and cairns, and cromlechs, and dolmens wherein to place and conserve their dead, they also reared massive structures for the living.

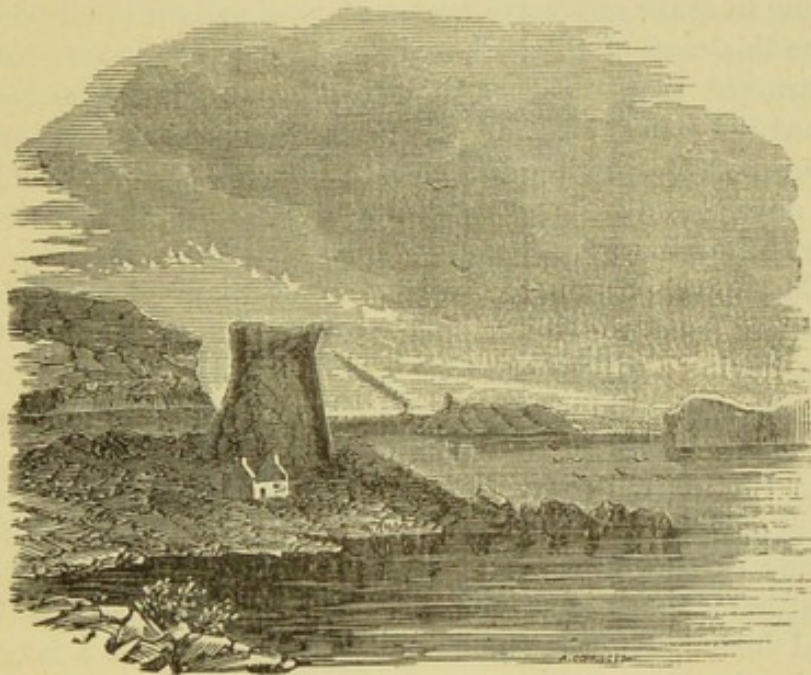
It seems out of place to occupy time in proving the Celtic origin of the brochs, the subject being too extensive for my present limits. It may, however, be stated that the controversy regarding their origin seems for the present to be at an end. The Norse invaders of the ninth century found them scattered over the entire group, and indeed over all Scotland north of the Caledonian valley, and appropriated them to such uses as circumstances dictated.

The first question naturally presenting itself is—For what purpose were they erected? Whether were they places of daily habitation, or were they used merely as strongholds—places of safety and defence? In reply, it may be said that their specific characteristics are, first, a marked uniformity of plan and structure, implying inter-communication among the entire population of Scotland and the isles, northward from the Caledonian valley, over which extensive district of country their ruins have been found. Their size, strength, and internal design are such that they cannot be fairly characterized as devoid of architectural invention.

In point of form, a broch is a massive circular tower, varying from 40 to 70 feet in external diameter, having an interior ranging from 20 to 45 feet across at the base; and, judging from a variety of circumstances, probably from 50 feet to 60 feet in height.

They were constructed of large undressed stones, without mortar of any kind to bind together their several parts; thus their own vertical pressure kept them into form. There are no marks of any kind of tool observable on the stones of which these buildings are composed, but the masonry is good.

The walls are built with a curve, somewhat resembling that of a lighthouse, and there are no external openings save a small doorway, placed on a level with the ground, having internal chambered recesses at either side, affording additional facilities for guarding the entrance, which is, to our ideas, both small and contracted. The huge stone lintels, which formed the



ELEVATION OF BROCH OF MOUSA, SHETLAND, SHOWING RELATIVE PROPORTIONS TO SURROUNDING LANDSCAPE.

roof of the entrance passage inside, served for the floor of the chamber immediately above, which was made large enough to contain additional guards to those placed beneath and at either side, to protect and, when needed, defend the entrance—there being ample space for one holding a spear, or similar weapon, to be thrust down on the unwelcome intruder.

Entering by this tunnel-like opening, through a wall in some instances nearly 16 feet in thickness, the Celt was in the interior of a circular well-like court, open to the sky. From this inner court there branched off other doorways,

leading into chambers formed out of the thickness of the walls, having ambry-like recesses ; but there are no traces of fireplaces or chimneys in the original structures.

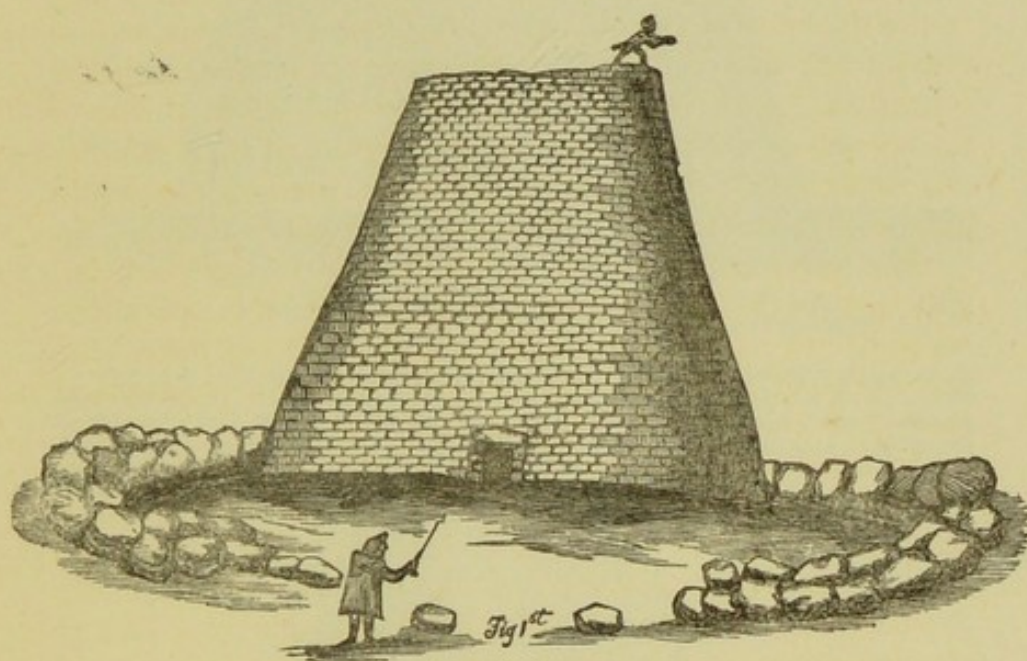
These recesses are near the ground floor, or level, and their roofs are constructed on the overlapping principle already described, and exemplified in Maeshowe and other early structures. There is also a flight of stone steps, partly circular, leading to other successive ranges of level galleries—all placed in the thickness of the wall, and going round the tower, and so constructed that the roof of the range immediately below formed the floor of that above. These would afford shelter to the owners of both the land and the broch, to their families and dependants ; while the enclosed area, open at top, would alike shelter and protect their animals and other valuables.

The upper portion of the tower differed in plan and construction from the lower, being formed of two concentric walls, having a gallery or space between, while the lower part was a mass of solid masonry, save the chambered recesses and their accessories, which have been described.

In Shetland, the sites of a few of the brochs have been found on small islands situated on inland lakes ; but in Orkney the greater number are situated close to, or in the more immediate neighbourhood of, the sea-shore. When found inland, they are generally near the margin of a lake or running brook, evidently to secure a supply of water ; and where this could not be obtained, wells, often dug out of the solid rock, have been found inside the tower.

As the Broch of Mousa, in Shetland, is the only one now remaining of these once numerous strongholds nearly complete, and as drawings were made in 1774, when it was much more perfect than now, they are here reproduced, to aid the reader in forming a correct opinion of its construction and design.

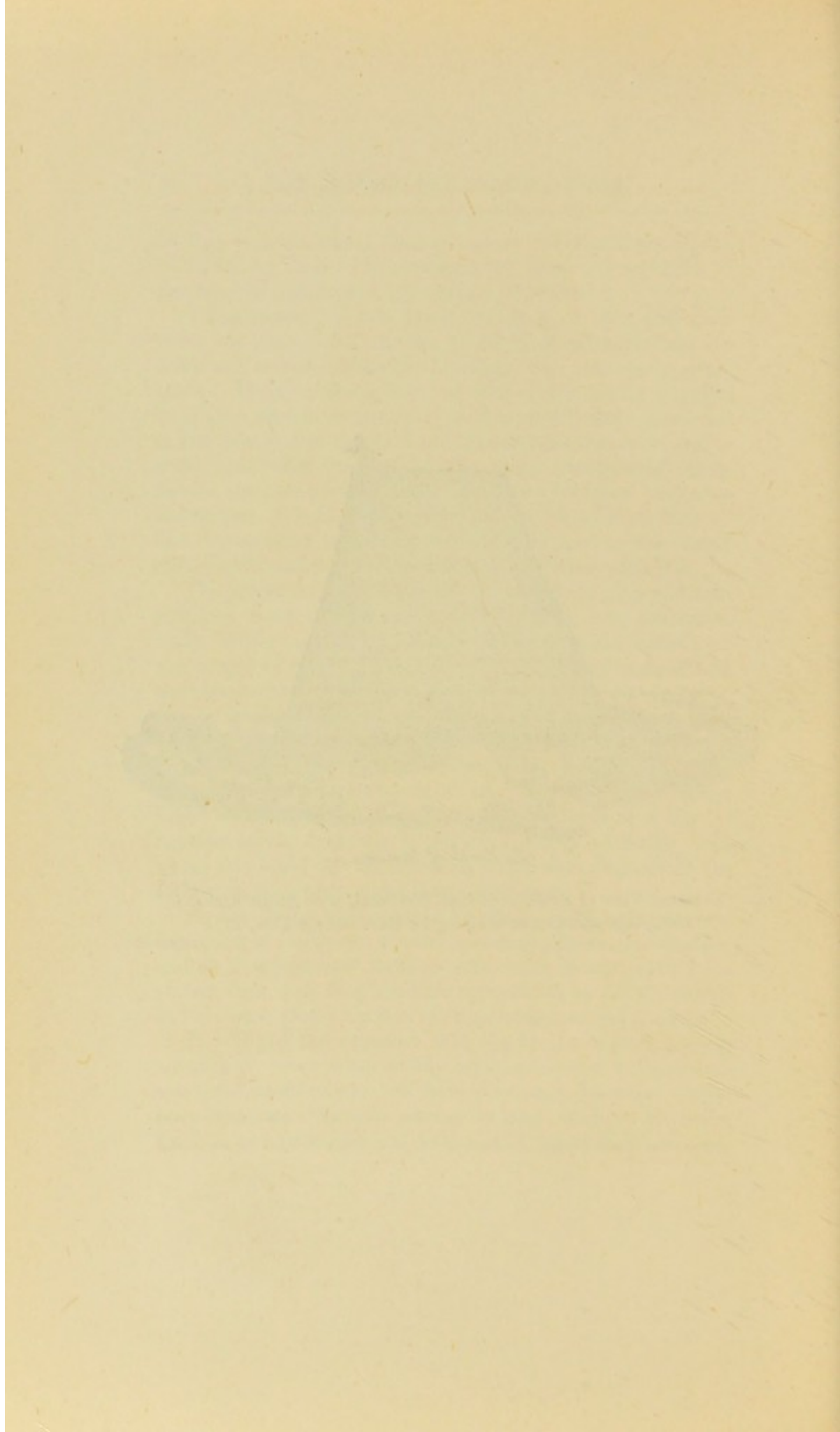
It will now be apparent that the brochs exhibit a great advance in constructive ability when compared with the examples of masonry which we have previously described. It has been suggested they were erected by local chiefs, or headmen, for their own protection and defence, and that of their followers,



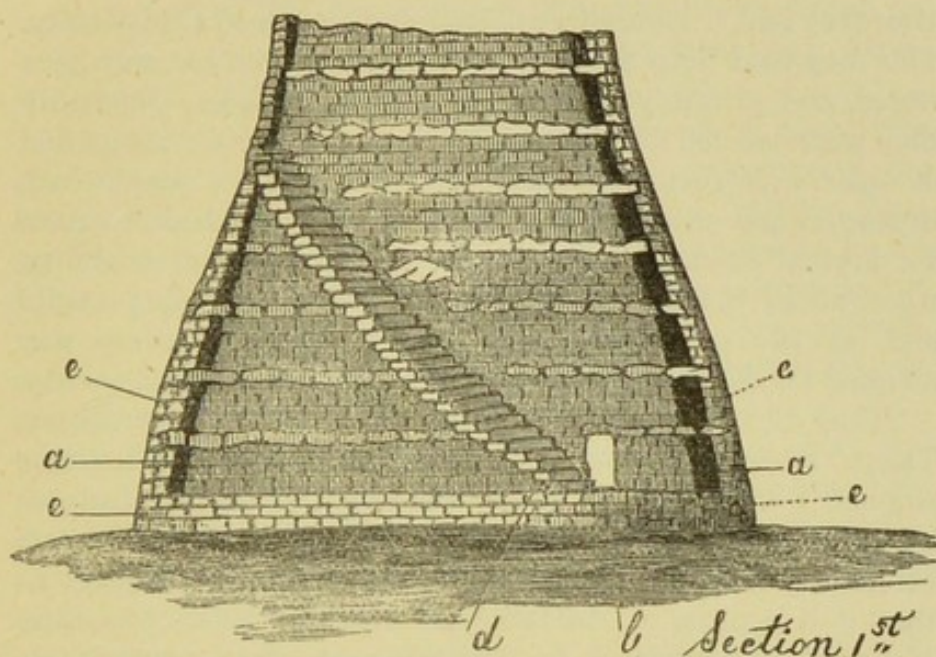
The Burgh of Mousa

External View of Broch of Mousa, Shetland, with Stone Rampart,
being reproduction of drawing by Rev. George Low, 1774.

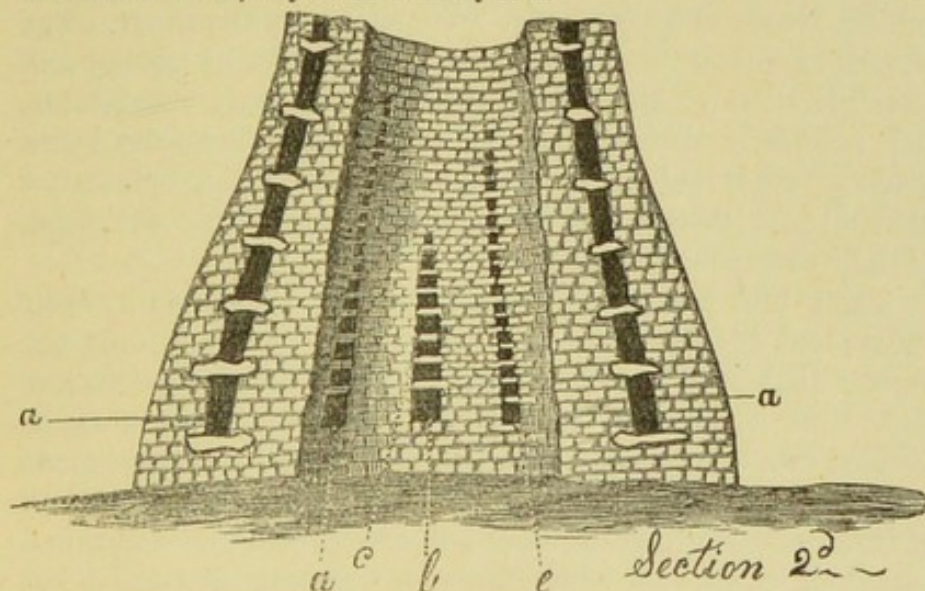
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SECTIONAL VIEWS OF BROCH OF MOUSA, SHETLAND, BEING REPRODUCTIONS OF
DRAWINGS MADE BY REV. GEORGE LOW IN 1774.



SECTION 1ST.—*a*. Recesses or chambers; *b*. Entrance from the exterior; *d*. stone staircase; *e*. Chambers formed in the wall, inside of tower, to which access is obtained by a flight of stone steps. N.B.—Only a portion of the thickness of the outer wall is shown, so that the stairs, and successive ranges of galleries and their divisions, may be more clearly seen.



SECTION 2ND.—*a*. Chambers shown in full thickness of wall; *b*. Entrance from the exterior; *c*. Chambers immediately above entrance; *d*. and *e*. Chambers or recesses, 17 and 18 in number respectively, at either side of perpendicular range above doorway entrance.

after they had renounced Paganism and embraced Christianity. This may have been the case ; but the motive power may have rested, and probably did rest, on a broader basis. Evidently they were erected by the people who were, during the period of their construction, possessors of the soil ; a people both numerous and energetic, and organised to a considerable extent for mutual defence ; a people possessed of inventive ability, who showed themselves equal to the task of providing a solid and, at the same time, impregnable structure, every way adapted for defence in a lawless and turbulent state of society.

Thus the construction of the brochs was quite unique. Taken severally, they possessed characteristics altogether singular ; when grouped in one building, they exhibit features which invest them with a distinctive individual character. A careful study of the design of such a structure convinces us that it is a place of strength—the ruins of an ancient form of Celtic embattlement or military post ; while their wide range of situation implies for their builders the possession of almost the whole of Scotland.

The ruins of those which have been examined generally exhibit traces of at least two occupations of the tower. The Norsemen found them scattered over the entire group, and after mercilessly slaughtering many of the early inhabitants, and ruthlessly driving the remainder from homestead and holding, converted their strongholds either into places of defence, into houses for the living, or tombs for the dead, as their exigencies demanded.

Their first occupants, then, were the Celts, while their subsequent holders were the Norsemen ; and it is only the objects that have been found in the *debris* left by the former that come within the scope of this lecture. These may be divided into two classes—those made of stone, and those made from bone. Of the former may be noted a considerable variety of stone vessels of various sizes and forms, both oval and round—ranging from very small to large—sometimes rudely, but often beautifully formed, and frequently made, apparently, from stones rounded by the action of the sea, having natural

hollows on one side, of which advantage has been taken, by these being enlarged and deepened, so as to make them useful for domestic purposes.

There have also been found well-made stone cups, with and without handles, both oval and round, but more of the latter; also discs, both round and oval, of various sizes, seemingly used as covers for the larger vessels, and as plates, dishes, &c., for a variety of domestic purposes; stone lamps, with and without handles; stone pounders and mortars, large and small, oval and round; hammers, perforated sinkers, smoothers, scrapers, querns made from various kinds of stone, whorls, and culinary vessels of different kinds and sizes; also fragments of coarse pottery, which, if pieced together and the vessels reconstructed, the variety of their forms and workmanship might tend to enlarge our knowledge of some of the past phases of Celtic civilization and culture.

Among the articles formed from bone are found cups, made out of the vertebræ of the whale; long-handled combs, made from parts of the horn of the stag, having eight to ten teeth each, now believed to have been used in weaving cloth of a primitive and coarse kind. There have also been found various forms and sizes of buttons; whorls, both plain and ornamented, which formed part of spinning gear for wool, together with a great variety of pins, with and without heads; awls, borers ranging from 1 in. to 7 in. in length, a few being rudely made, while many exhibit good workmanship, some having flat heads, while others have these ornamented and varied in design and finish; also a variety of well-formed bone needles, with elongated eyes; likewise handles, of various forms and for varied purposes, made generally from portions of deer's horn. Other relics might be introduced to swell the list, but I do not wish to press into the service that which does not legitimately belong to it.

The largest collection of objects, implements, and ornaments made from stone and bone, particularly the latter, which have yet been recovered from the ruins of a broch, is from that of Burrian, North Ronaldshay; but four objects of special

interest were found there which demand more than a passing notice.

First, a thin slab of clay slate, 27 inches by 15 inches, having on its surface an incised cross of ancient Celtic form and type, with a fish and an Ogham inscription peculiar to Celtic areas—mostly, if not exclusively, associated with early Christian times. Second, a small bell, exactly similar, save in size, to that found in a grave mound at Birsay. Third, a metatarsal bone of a small ox, having incised on its surface the crescent-shaped symbols, traversed by the double sceptre, similar to that so often seen on the sculptured memorial-stones of early Christian times in Scotland. And, last, an oblong-rubbed pebble, having incised on both sides figures of crossed triangles.

In excavating the brochs, it has been sometimes found difficult to identify those objects which belonged to the first occupants from those of their successors ; still, in the enumeration which has been given of the former, there is a pretty clearly-defined line of demarcation.

The inference deduceable from the character of the relics of stone and bone is the same as that which comes from the buildings themselves—that the people who designed, built, and occupied these towers had emerged from the low condition of the savage, and had entered on the beginnings of those higher phases of life where some degree of culture and civilization were even essential to existence.

From these relics we find that our Celtic forefathers in these islands, fifteen hundred years ago, and it may be considerably longer, reared flocks and herds, hunted the forest, fished the sea, and to some extent cultivated grain—all as a means of subsistence. They made various implements of stone, bone, and wood, increasingly utilising these materials as their requirements multiplied. They formed from the smaller bones and horns of animals such articles as pins, needles, and bodkins, of various sizes and kinds—used in sewing skins of animals made into garments ; also buttons, small and large, spindle whorls for spinning, and combs to aid in weaving their wool

into fabrics. They also used the points and broader parts of the large antlers of the stag, and other horns, and the shoulder-bones of oxen, more or less often fitting them to handles, so that they could be utilised as tillers of the soil.

Of stone implements, they made and used pounders, hammers, scrapers, knives, all varied in size, design, and finish; while those made from softer stone were querns, mortars, lamps, bowls, cups, culinary vessels, varied in kind, and of various patterns and size; also, net weights, sinkers, &c.; and they perforated sandstones of different weights, which were probably hung round the necks of their domesticated animals, that they might all the more readily be caught. They also made rude pottery, not like that found at Unstan, but more varied in pattern and finish.

The women practised the arts of spinning and weaving, and mayhap some kind of knitting, and probably also made the pottery, ground the grain, and cooked the food; while the men made the implements described, pursued the chase, and engaged in fishing, tilled their small patches of cleared land, built these huge circular strongholds—the castles of the period—as well as their more primitive and fragile huts, protected the household, and defended the family property.

Before quitting this branch of the subject, may I take a survey of a Celtic hut of that period, in the hope of making the picture as varied and complete as possible. It is partly below and partly above ground, having been scooped out, circular fashion, and faced, it may be, with stones, while the part above the natural surface of the ground is less substantial, being built of trunks and branches of native trees, the spaces being filled with mud and clay.

One small opening serves alike for door and window, near which we may see a woman seated on a clump of stone or wood, dressed in primitive woollen garments of various colours, diligently plying her deft fingers in preparing winter garments for the household; all the while she may be singing one of the old Celtic airs, akin to those which yet linger in the noble harp music of Ireland and Wales.

At her call appears a bright-eyed girl, with fair complexion, bearing a jar of coarse sun-dried clay, which she quickly fills with water from the running brook close by. With mother and child let us enter the hut. It is small in size, circular in form, and low in the roof, and is, unhappily, full of smoke. In the centre of the floor there lie smouldering on the hearth pieces of wood, and close by we observe wet dough, newly kneaded into shape, lying on round plates of stone, heated by the fire, thus being baked into bread; while near are wooden platters, bowls of coarse clay, thin stone disks, and other round and oval stone vessels for house use. On looking round, mid the smoke, we see blocks of stone and clumps of wood that serve for seats and tables; while around lie a few fleeces of native sheep, skins of the stag and the hind, forming the bedding of the family. On the walls hang bundles of long and short wooden arrows, with points hardened in the fire, or, it may be, tipped with arrow-heads and flakes of flint; while probably other stone weapons lie on the ground, along with a sword or dagger of bronze or iron, if the family could spare the barter wherewith to secure the much-coveted possession.

The men are away in different directions. The head of the family has been engaged in tilling his patch of ground, or in fencing his small field, and enlarging and strengthening his enclosures; or, perhaps, sowing his grain, or reaping — *i.e.*, pulling up by the roots—his scant crop, or in storing the unthrashed ears, probably in an underground chamber; or he may be engaged in tending his scant flocks, or still more scant herds, on the green pastures, amid the umbrageous foliage of the more wooded districts.

Or perchance he is away, equipped with bow and quiver, accompanied by his dog, on the lone hillside, or glen, in search of the stag deer, or an old hind, or wild boar,—proud if he can succeed in carrying home the much-coveted prey. Or, it may be, a son of the family has carried down the small canoe, which has been hollowed out of the largest available trunk, by dint of fire and stone axe; or the light and fragile coracle,

made from the sun-dried skins of the largest animals, and pegged to a slender wooden frame, made from the branches of trees having the naturally required curvature — and is paddling about in search of the products of the sea. Nightfall, however, brings the household together, when, after a meal of flesh or fish, with coarse bread and milk, or mead, they rest for the night in the skin garments worn during the day, or kept for the purpose, till daylight brings again the routine, and worry, and common order of every-day semi-savage existence.

But I must pass from these interesting phases of life among the early Celtæ, to speak of the period during which these brochs were erected. There existed considerable diversity of opinion some time ago on this subject; but during the past quarter of a century the topic has received much attention, and now the best authorities date their construction between the third and eighth centuries.

Christianity was planted in the Orkneys, by the followers of St. Columba, towards the end of the sixth century, and from thence to the Norse invasion, in the ninth century, is the period assigned for their erection; but I cannot stay to deduce proofs which seem conclusive on the point.

Of the brochs so profusely scattered over the Orcadian group, upwards of seventy have been identified, while many mounds, if explored, would increase the number. Four have been identified in South Ronaldshay, two in Burray, one in Hunda, one in Walls, three in Holm, three in St Andrews, two in Deerness, four in St. Ola, three in Firth, one in Rendall, three in Evie, two in Birsay, seven in Harray, four in Sandwick, and four in Stromness parish. In the North Isles, three have been identified in Rousay, one in Gairsay, one in Shapinsay, three in Stronsay, one in Eday, nine in Sanday, five in Westray, two in Papa Westray, and two in North Ronaldshay—making in all seventy-one.

From their number, size, strength, and peculiar construction, and from the early date at which they were erected, they, and the relics found in their *debris*, are objects of great interest to all students of the past.

There remains one deeply interesting phase of that early period, which was named at the outset—the religious.

May I recall the fact that three centuries elapsed between the introduction of Christianity and its overthrow by the Norsemen. It is difficult to estimate, at this distance of time, how far, and to what extent, the early Celtæ of these islands had been brought under the benign influences of the Christian faith ; but, from various considerations, it seems probable that during these three centuries it had permeated the life and being of no inconsiderable portion of all classes in the islands, and had thus secured a hold over the Celtic mind.

The more immediate cause of its introduction at that early date arose from the fact that an Orcadian Mormaer, or ruler, incidentally met the celebrated St. Columba, when on a visit to King Bruide at his stronghold on the river Ness. During their stay at Court, the missionary, ever watchful for an opportunity to extend Christianity, entered into an arrangement whereby St. Cormac, one of the four great founders of monasteries, undertook to extend missionary efforts to the Orkneys, provided he had the protection of this prince.

When friendly relations and mutual confidences had thus been clearly established, St. Cormac and his associates set sail for their new field of labour in a coracle, and arrived in safety ; but so bitter was the hatred towards these Irish clerics, that, but for the protection of their host, they would have met with an untimely death. Thus were the leaders of the old Pagan rites and ceremonies, even then, jealous of those who led the van in propagating the newer religion.

Our islands were thus, so early as the sixth century, visited by these herald missionaries of the Cross. It is well to bear in mind, that, towards the close of the Pagan Era, and during the transition period, which extended from the fifth to the close of the eighth and beginning of the ninth century, the rites of the Christian faith did not secure complete ascendancy, but rather became blended, more or less, with the customs of the older faith of Paganism, which had for centuries previous held undisputed sway.

The indications which point to a pretty full occupation of the group by St. Cormac, his coadjutors, and successors, during these three centuries, are :—First, the dedications of the early ecclesiastical foundations ; second, the occurrence of sculptured monumental stones, similar in style and type to those associated with, and peculiar to, the earliest Christian monuments of the mainland of Scotland, Ireland, and Wales, having inscriptions in the Ogham character ; third, the finding of ecclesiastical bells of the square-sided form, so closely identified with and peculiar to the early ages of the Christian Church ; and, fourth, the occurrence in the Norse topography of the islands of place-names, indicative of the previous settlement of Celtic Christian priests.

As coming under the first division, and classed among the earliest dedications in the islands to St. Columba, there were three in South Ronaldshay alone which bore his name—one at Grymness, one at Hopay, and one at Loch of Burwick ; while the islands of Walls, in the south, and Sanday, in the north, had one each. The parish of Burness, in the latter island, was formerly called St. Colm, and may have embraced a much wider area than now, as the names of the other two parishes in the island—"Lady" and "Cross"—are comparatively modern. In the adjoining parish of "Lady" there was a large, flat, green mound, having a considerable area, called "Collie-garth ;" and a mile to the south, on Hellsness—*i.e.*, the holy or sacred ness—there is a mound bearing the name of "Egg-mount-howe." The former may be a Norse-Scotch corruption of Colm, while the latter may have assumed its present name from the Irish word *Ecclais*—church. If so, there is presumptive evidence that there has been a large Columbite settlement at the former place, and an associated church at the latter. St. Ninian had a dedication at Stove, South Ronaldshay ; St. Tredwell had one at Papa Westray ; St. Brigid had chapels in Stronsay and Papa Stronsay. Celtic churches, somewhat after the Irish type, were situated at the two extremes of the mainland—the Broughs of Birsay and Deerness ; while at many other places scattered over the group—as exemplified by the

two last named, as well as at Linton, in Shapinsay ; Wire ; Enhallow, *i.e.*, holy isle ; also Egilshay—there were, in all probability, early religious sites of Columbite churches, whose original dedications have been lost for centuries.

As explanatory of how these headlands, situated at the east and west extremities of the mainland, were so chosen, let it be noted that wherever the Irish clerics went as heralds of the Cross at that early date, and for generations after, they exhibited a strong partiality for selecting rocky promontories, or small islands difficult of access, as sites for their churches and monastic establishments.

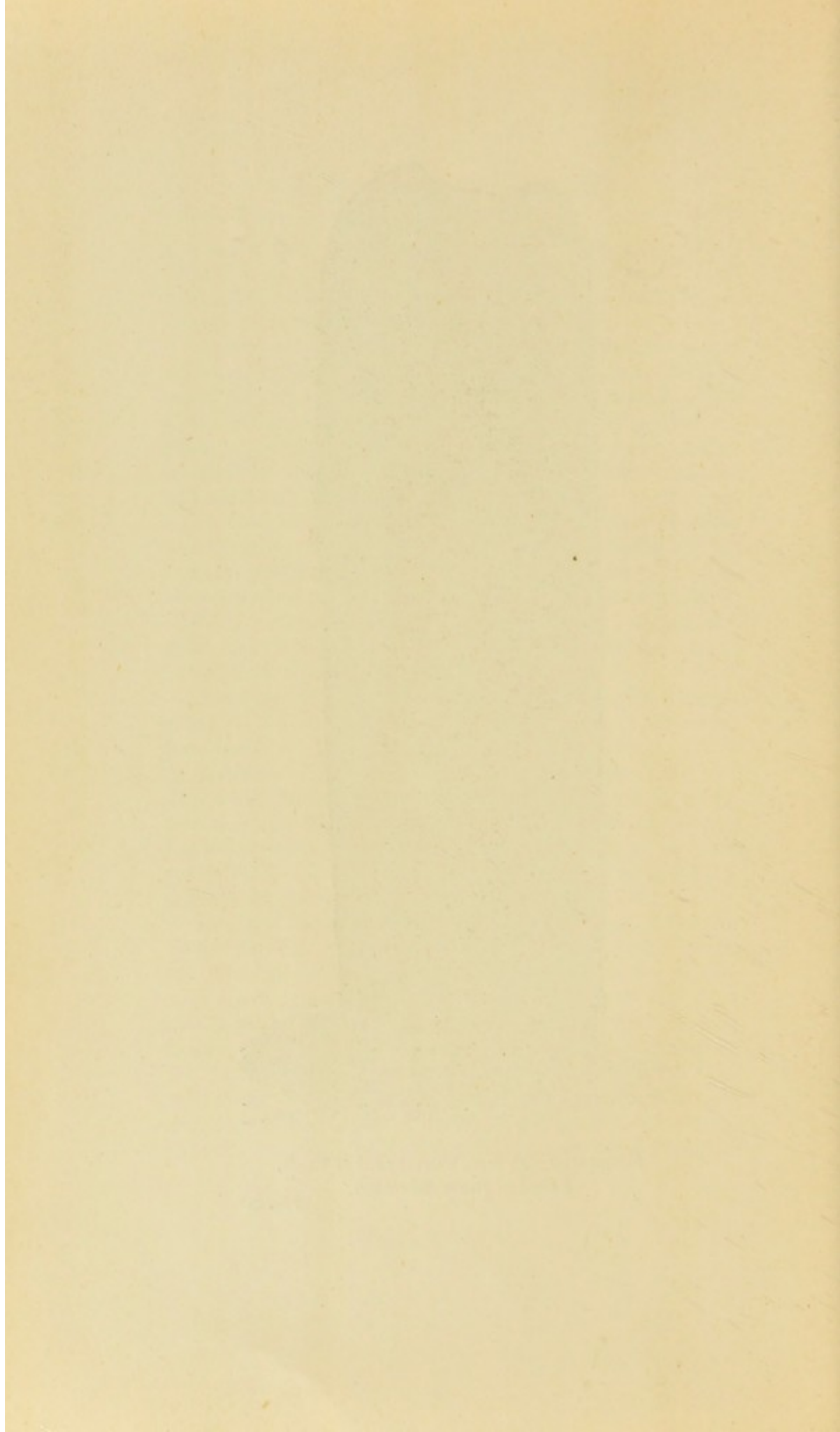
As comprehended in the second division, it may be noted that the spirit of enterprise which led to the colonization of the Orkneys would soon extend itself to the more northern group—the Shetland Islands ; so that whatever influences, Pagan or Christian, characterised the one, would in a comparatively short time be equally characteristic of both—for they are by nature so situated as to be twin groups.

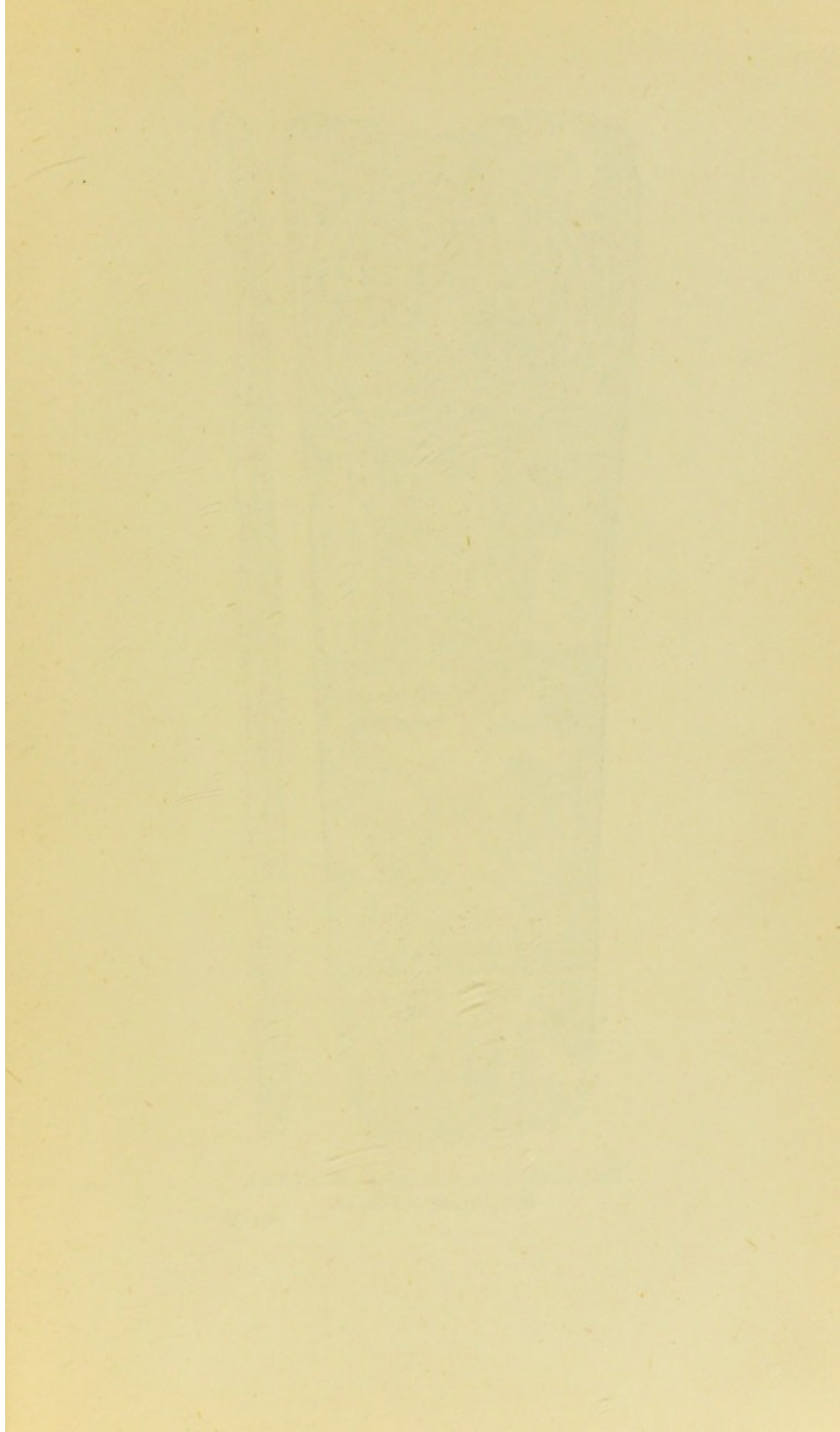
Once the Celtic missionary gained a footing in the Orkneys, attempts towards the Christianising of Shetland would not have been long delayed ; and, as time rolls on, this view is being confirmed ; for within the last few years there have been discovered, in both groups, inscribed and sculptured monumental stones of distinctly Celtic type. At least six of these important silent witnesses to the early conversion of the twin groups have been recently found —Orkney producing directly but one, while Shetland has yielded no less than five.

The Orcadian specimen was found at the Broch of Burrian, North Ronaldshay, and has already been described. Of the five found in several parts of the Shetland Islands, all have been found near the sites of very ancient churches, and three bear incised Ogham inscriptions—the St. Ninian Stone, with these on its edge ; the Lunnasting Stone, bearing them on its flat surface ; and fragments of one or more stones, with similarly incised Oghams, were found near the ancient Church of Cunningsburgh. Within the same period the Burra Stone has been unearthed from the ancient graveyard of Papil, the



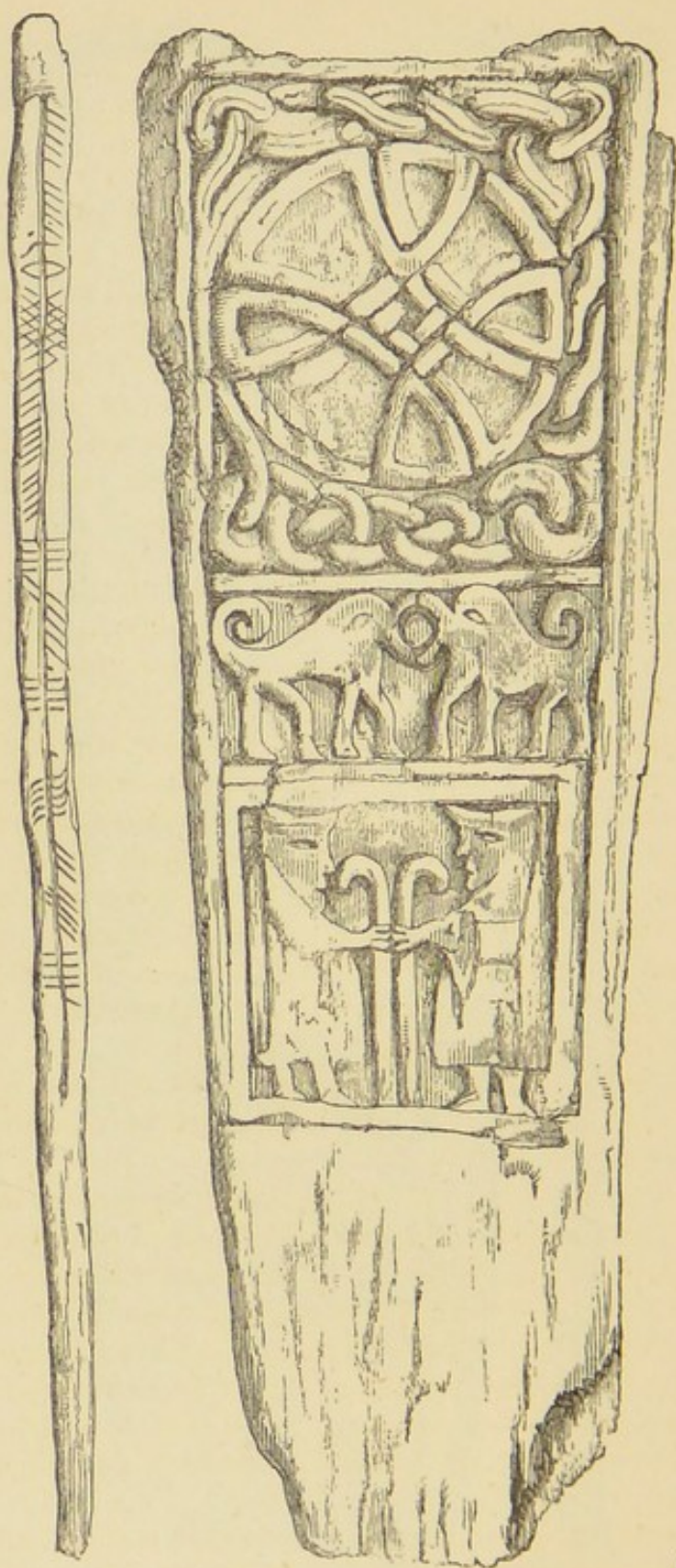
Sculptured Slab from Churchyard of Papil,
Island of Burra, Shetland.







Sculptured Stone, with Ogham Inscriptions,
from Bressay, Shetland.



(Reverse)

Sculptured Stone, with Ogham Inscriptions,
from Bressay, Shetland.

sculpturings of which are on one side only, and are mostly formed of incised lines. At its top are the arms of a Maltese cross, leaf-shaped, with interlaced ornamentation, all set within a circle of double lines ; while at either side of the short shaft are two ecclesiastics bearing croziers, and below is a nondescript lion-like creature empannelled ; at bottom are two figures facing each other, half man, half bird, with semi-human faces, and long projecting bird-like beaks, which meet from either side, and pierce a miniature human head.

Previous to these, there was found, near the site of an old church in the island of Bressay, a monumental slab, which is known as the "Bressay Stone." On its obverse and reverse are richly carved interlaced Maltese crosses, within circles, with sculpturings above of two fish-like monstrosities swallowing a human being, and underneath ecclesiastical figures of primitive type, and nondescript animals interspersed, all in low relief ; while on both sides are Ogham inscriptions. These, with the only Orkney example we yet have, supply us with three concurrent lines of inference, all tending in the same direction, viz., that derived from their inscriptions, ornaments, and symbols. All these, save one, bear inscriptions in the Ogham character, being a style of cryptographic writing peculiar to the earliest inscribed stone monuments of Celtic art.

The association of the Christian emblem of the cross with Ogham inscriptions carries us back to a period antecedent to the Norse invasion of the group.

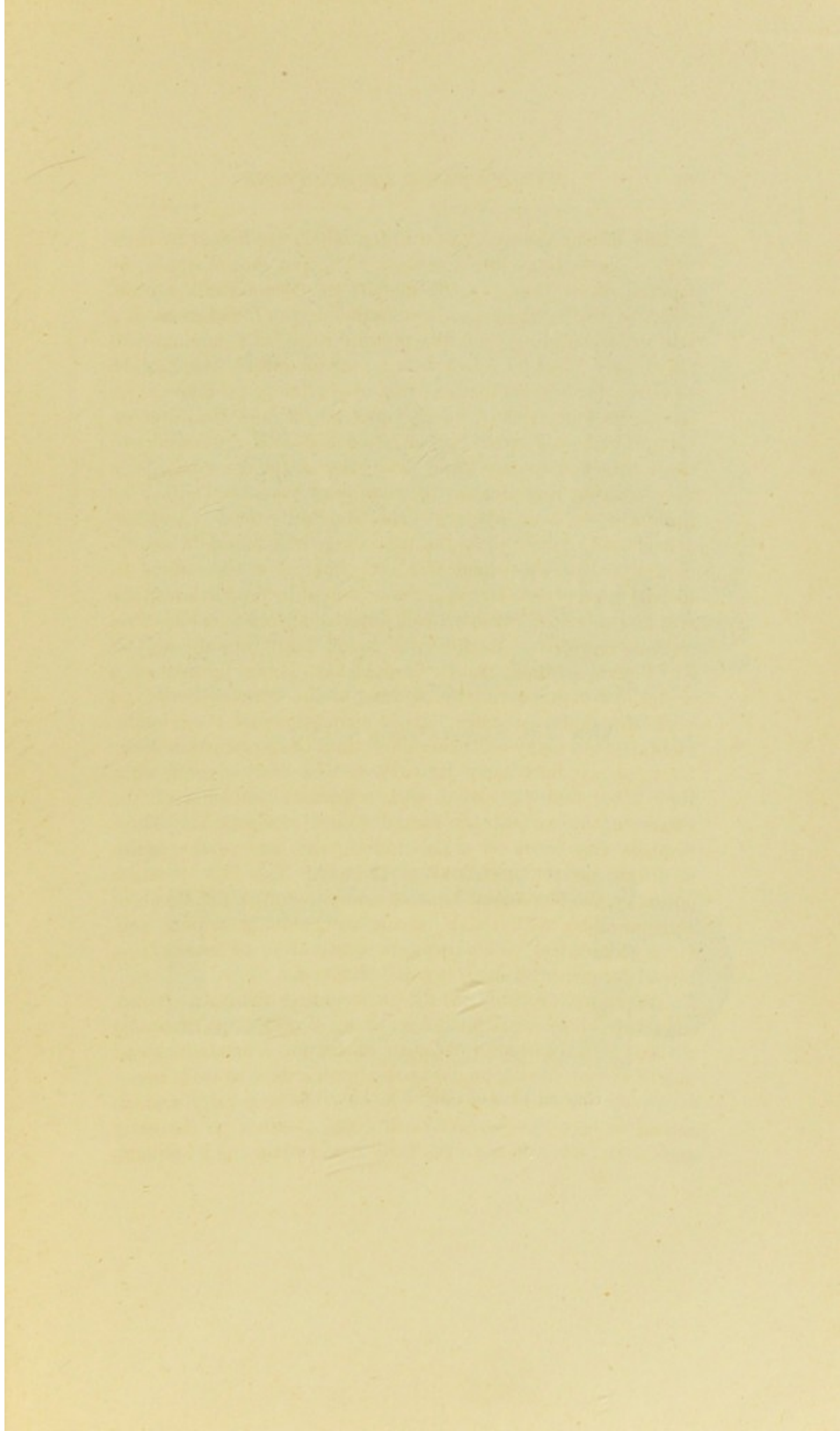
But while we can speak only of one small monumental slab, with an Ogham inscription, having been found in the islands, it may be that had equal diligence in the search characterised Orcadians with those of the neighbouring group, similar success would have been the reward. There are, doubtless, sites of ancient Celtic churches over the group, with their environments, that have lain undisturbed for centuries, which, if carefully searched for and examined, would yield valuable results.

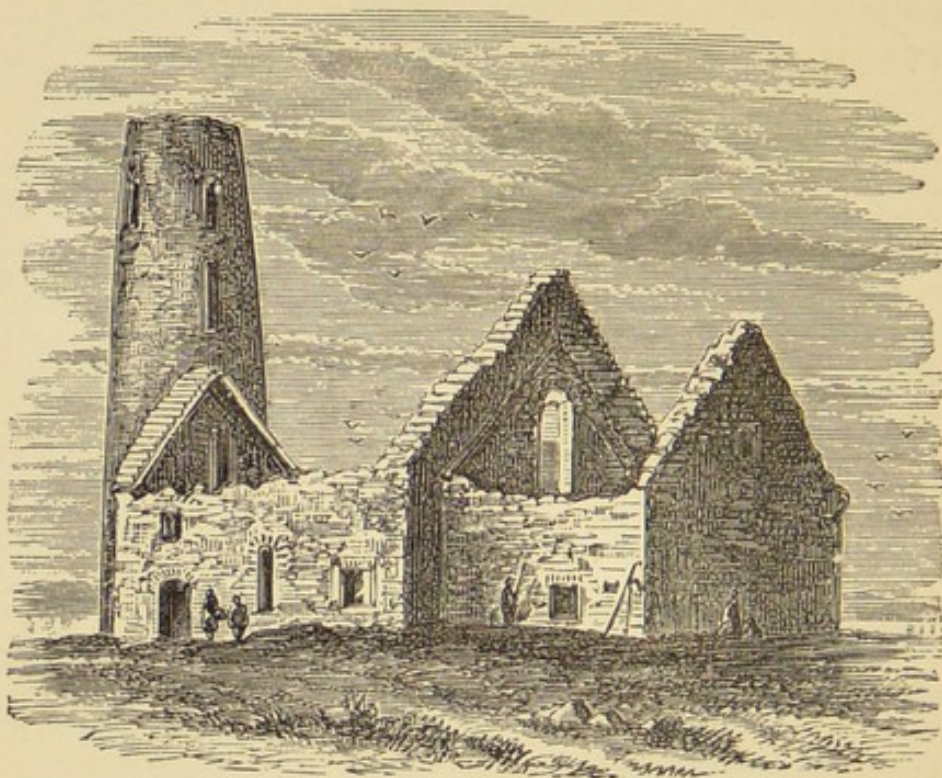
To show that this is not quite visionary, it may be stated that five other stones have been accidentally found from time

to time during the past half century, which are linked by their symbolism to those just described. The first, on the site of the Church of St Colm, in the district of Osmondwall, on the island of Walls, which had been built into the foundations of a still older building than the present ruins, is a monumental slab nearly 3 feet by 2 feet, bearing on its surface the Eastern or Greek form of an incised cross of distinctly primitive type, having its four arms of nearly equal length, and the intersections deeply hollowed into semi-circles, with a terminus or shaft attached to the lower arm—the entire cross bearing a very striking resemblance to what may have been either its prototype or contemporary—the Burrian Stone. Another, considerably larger than the preceding, was found in an old churchyard on the island of Flotta, having on its surface an incised cross of similar type, though small in proportion to the size of the stone, but with rich interlacing ornamentation on each of its shafts. A third was found, built into the wall of St. Peter's Church, South Ronaldshay, being portion of a sculptured slab, bearing the symbol of the crescent conjoined with the double sceptre. It is evidently part of a monumental stone many centuries older than the present building; for these symbols carry us back to the early period when they are found associated with Christian emblems of the Cross on the earliest sculptured stones of Scotland. These symbols also occur on a slab found years ago in the parish of Firth, on the mainland of Orkney. The fifth instance occurs on the phalangeal bone of an ox, found at the Broch of Burrian, along with a slab bearing an Ogham inscription previously described, which owes its preservation to having been buried for centuries in an isolated situation.

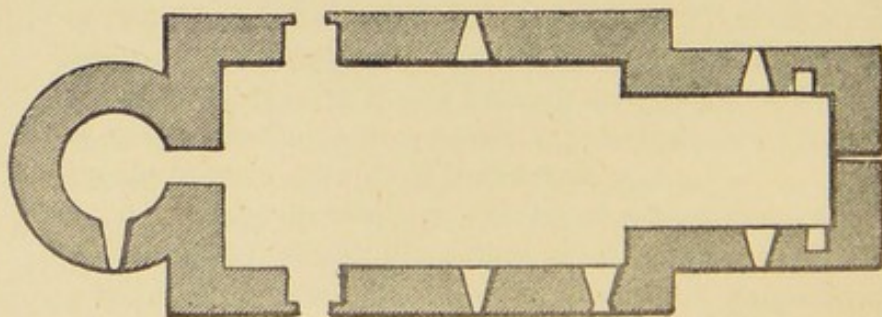
Belonging, probably, to the same period, there was found, some time since, near the Chapel of St. Brigid, Papa Stronsay, a small slab, bearing a cross in miniature, long-shafted and neatly carved, having angles at the intersections of its arms.

Under the third division, two only of these early ecclesiastical bells, of the square-sided form, peculiar to the early ages of the Church, have yet been found within our borders;





View of St. Magnus Church, Egilshay.



Ground Plan of Church and Tower.

the larger in a cist among graves in a Celtic burial mound at Birsay, locally known as the Knowe of Saverough ; the smaller at the Brough of Burrian, North Ronaldshay.

Our fourth and last division yields some interesting material. Place-names were numerous over the entire group at an early date. Referring to the names Papey and Papyli, as descriptive of early Columbite missionaries, and afterwards of the localities where they resided and the churches they built, we have districts or ancient townships named Papley in South Ronaldshay, Papley in the parish of Holm, and Papdale near Kirkwall ; and doubtless there were many others, which, through the lapse of centuries, have been lost. Then we have Papa Westray and Papa Stronsay.

Of Celtic saints, we have Rinansey, now Ronaldshay, from St. Ninian, with the termination "ey" for isle, *i.e.*, St. Ninian's Isle ; Daminsey, now Damsey, for St. Adamnan's Isle ; En-hallow, Holy Isle ; and Egilshay, the Ecclesiastic's Isle, or Church Isle.

We must bear in mind that these names are of Norse origin ; but while this is so, it cannot be doubted that they were given intelligently, as indicating sites of ancient Celtic churches, their associations and surroundings.

Notably, there were, at the least, seven of the Orkney churches in whose dedications St. Columba was commemorated ; but there are two localities of great interest more immediately connected with that early period—the church of Egilshay and the ruins on the Brough of Deerness—to which brief reference may be made.

The church of Egilshay is situated on the highest part of the island which bears that name. It consists of chancel and nave, with a tower attached. The extreme length over all is about 63 feet, and the extreme breadth $21\frac{1}{2}$ feet. The chancel is vaulted, and is 15 feet by $9\frac{1}{2}$ feet, with walls 3 feet in thickness. The nave is 30 feet by $15\frac{1}{2}$ feet inside, while the tower so measured is 7 feet in diameter, with walls $3\frac{1}{2}$ feet in thickness, and is now 48 feet high, but originally it was over 60 feet in height, and seems to have been divided into four chambers,

including the ground level. Hibbert's drawing shows both church and tower with stone roofs, the latter having a conical cap resembling the Irish round towers.

For centuries the dedication has been to the gentle Magnus Erlendson, who was so treacherously murdered on the island by his fierce cousin, Hacon, in 1106 ; but this may have been a secondary dedication, and is believed to have been so, as the name of the island carries with it this evidence.

It is highly probable that the church of Egilshay, as it now stands in its several proportions, but more especially its time-honoured tower, may have been dedicated to the Christian rites of the Celtic Church before the conquest of the island by the Norsemen.

Considerable latitude may be given to the date of its erection, but it can hardly admit of doubt that both church and tower, but especially the latter, were built by the Columbite missionaries from models they had known and learned to venerate in their fatherland.

Coming now to the ruins of a church and monastic buildings situated on the Brough of Deerness, it seems clear that we have there a visible link uniting us to the long past. It is highly probable that these are the oldest ecclesiastical remains which we possess of a type so primitive. Had they been situated anywhere but on an almost inaccessible headland, they would have disappeared long ago. The Brough of Deerness measures 400 feet by 240 feet, and is from 90 to 100 feet above the level of the sea. Near its centre is the ruins of a small church, within a quadrangular enclosure, consisting of a stone wall about 3 feet in breadth, of which nothing remains but the foundations. It is a small oblong building, with lime-built walls 3 feet in thickness, measuring outside 24 feet by 17 feet, with the door in the west end, 2 feet wide, while the jambs are not splayed, and there is no rebate for the door, which seems to have been hung on the inside of the wall, and may have been the skin of an animal sufficiently large to cover the opening.

Scattered over the area of the brough and round the church are the foundations of a group of eighteen dry-built cells. The settlement was protected on the side next the mainland, if not entirely enclosed, by a stone cashel, which, prior to the examination of those in Ireland in the early part of the century, led to the conclusion that those on the brough were the remains of a stone fort. This church had no name so far back as 1520, when John Ballenden lived in the islands and wrote his account of them ; yet at that time, far remote from the period of its erection and dedication, so great a halo of sanctity surrounded the place, that people of all ages and conditions made pilgrimages to the shrine.

In studying the Orcadian branch of the early Celtic Church, we must revert to the parent Church of Ireland, of which it was an offshoot. In Ireland, even in the days of Columba, when the chief of a tribe embraced Christianity, he took it under his own immediate protection. The rude huts of chief and clan were enclosed within a strong rath or cashel. This arose from a felt want for security to life and property in these barbarous and Pagan times, when "might was right." Historical evidence shows that from the earliest dawn of Christianity in Ireland, down so late as the tenth and twelfth centuries, the church buildings were protected within the cashel of the chief. Each bore its own distinctive features, but neither could have survived in any other way, for the greater power and influence of the Pagan priesthood would soon have stamped them out root and branch.

It seems almost beyond doubt that the earliest Christian churches on the Continent, before the time of Constantine, were small and unadorned. The remains of early churches, such as that on this brough, may be regarded as representative patterns of others still more ancient and venerable. May we not in these behold the direct offspring of the lowly temples of the early persecution period ?

Though it be but collateral, there remains one deeply interesting subject to which only a short reference can be made—the Celtic art of that early period. When we recall

the many monasteries and churches which were founded by St. Columba and his successors, and the great number of MSS. which in the aggregate they must have produced, it is almost beyond belief that, so far as yet known, but one genuine MS. of the early Celtic Church of Alba has escaped the ravages of time. It is known as "The Book of Deir," and was made public so recently as 1859 by the issue, for the members of the Spalding Club, of fac-similes of its more interesting portions, with the full text of the volume, and an elaborate introduction by its editor, the late Dr. John Stewart. It is but a small octavo of eighty-six pages, and is an imperfect copy of the Gospels in the Latin of the Vulgate, the Gospel of St. John alone being complete. It is closely written on both sides, the form of the letter being common to Irish and Anglo-Saxon manuscripts, and an adaptation of the Roman minuscule character. The pages are surrounded by ornamental borders, most of which are filled in with interlaced work in panels and with fretwork of a peculiar style. It is acknowledged to be a genuine specimen of early Scottish art of the ninth century, and in character thoroughly Celtic, though but a poor specimen of calligraphy when placed in comparison with Irish MSS. of contemporary date.

It can scarcely be questioned that during the three centuries which preceded the devastations of the Northmen in the ninth century, the Celtic clerics in these islands produced many copies of the Psalter, the Gospels, the Apostles' Creed, and the Services of the Church. It was during the eighth and ninth centuries that the Scotie missionaries carried Christianity, and with it Celtic art, all over the Continent of Europe; and that while hundreds of these early Celtic books have been lost, many have been preserved, and are to be seen in the principal libraries of Britain and the Continent. It was during these two centuries that Irish and Scottish Celtic art reached its zenith.

Doubtless, the Orcadian branch of that early Church had scriptoriums at Egilshay, Deerness, and Birsay, and if only one of the many MSS. produced there had been preserved,

what an interesting and precious relic!—what an attractive treasure it would be to your museum!—in value priceless.

The men who built the structures I have described, who produced and brought to such perfection their own school of art, though living in beehive houses made of unhewn and uncemented stones, and worshipping in churches scarcely more ornate in appearance, or more architectural in construction, possessed a large cultured faculty both in art and in literature. They were men of such acquirements and tastes that they multiplied their books laboriously, and counted it a virtue to be diligent in this and every other work to which they applied their energies, whether mental or physical. They also persevered assiduously in acquiring the skill which enabled them to produce manuscript volumes, written with faultless regularity, precision, and delicacy of touch, rivalling the best caligraphy of the most literary nations of that age, adorning them with illuminations of exquisite beauty and intricacy of design, needing only to be seen to be greatly admired, and requiring to be so ere their marvels can be fully realised.

Moreover, for the spreading of this varied and refined culture, they planted seminaries wherever they went, sowing the seeds of an intellectual energy and moral force, strong and beautiful, which not only bore effective fruit then in many forms, but which has entered as elements into modern Christian civilization.

Such were our early Celtic ancestors, and such are the remnants of their handiwork. The extent of the field so briefly and imperfectly traversed makes my work, it may be, superficial; still, it is hoped, enough has been said to rekindle fresh admiration for those noble human qualities which, with the Saxon and the Scandinavian, went to form the Anglo-Saxon race.

The Celt often dreamt, the Saxon slept, the Scandinavian is credited with having worked; and these distinctive traits of character, blending and intermingling through successive generations, have formed the noble, chivalrous charac-

teristics which for centuries have distinguished the British race.

It may be that Roman civilization—of which many traces survive among us as a people—exercised ultimately a more powerful influence, through the early Celtic inhabitants, on our Teutonic forefathers than is generally supposed.

From a linguistic point of view, however, the Saxon element has all along largely preponderated. Our language and literature are neither Roman nor Celtic, nor even a mixture of the two, but Saxon. This may have arisen from wave after wave of that race having crossed over to England at an earlier, and during a much longer period than is sometimes believed, before the acknowledged invasion of Britain by them.

The Saxon and the Norse elements, then, have done much, in their respective spheres, to form our national character, but they are not the only basis on which it rests. The Celtic, in its higher temperament, in its fervent and imaginative genius, has had its share of influence—in its love and reverence for religion ; in its native refinement ; in its admiration of the beautiful, whether in nature or art ; in its thirst for knowledge ; in its love of literature, ever craving to express itself in poetic language, ever aiming after the ideal, ever striving after higher attainments, often seemingly beyond its reach—and all this permeating its life and being to the core.

From these three races have sprung the people who for centuries have inhabited the British Isles — of which the Orkneys have for centuries formed a part—a race destined to rise to the very highest eminence in science and religion, in literature and the arts ; a people honoured to lead the van in spreading useful and industrial arts over the world ; a people who, by means of their indomitable enterprise, their courage, their heroism, would fear no foe ; a people who, through their vast accumulations of wealth and world-wide commerce, would be used to send Christian teachers everywhere—the instruments to generate in the universal heart of mankind such worshipful reverence for the works and ways of God as would make man a wiser, humbler, and more devout servant of his

great Creator and Benefactor ; a people whose voice would be heard in every part of the globe, and echoed and re-echoed from pole to pole, for the ultimate good of the entire race and the glory of The Almighty Father.



with the use of the microscope. The use of the microscope is essential in the diagnosis of many diseases. The use of the microscope is also essential in the study of the structure of the body.

