A SKETCH OF THE PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

BY JOHN HOLMES.

The history of any people, place, or event is only possible when civilisation has so far advanced mind, as to have arrived at signs and sounds significant of things, and of the arts rendering such signs perceptible upon a definite understanding. This marvellous advance of civilisation may be attained by pictorial representation (hieroglyphics) or by abbreviated symbols of such pictorial figures, or of memorial-knots or signs upon any materials by a rude and barbarous people. They may be the most advanced phonetic systems of paper printing or of telegraphic communication, but without some such arrangement, history, as we ordinarily accept it, is unknown, and in fact impossible. The rude, the crude, and the most perfect mode of representation marks the condition of advance of the arts and the civilisation of any people, but all history tends to indicate and take us back to a period when neither civilisation nor arts were in a condition to make history. But long ere sounds were formulated into meanings or words, or signs into significant sounds, humanity existed, and men associated, lived, acted, and died. As there were men brave before Agememnon and wise before Ulysses, so there was society before history, with components doubtless relatively as characteristic as in the nineteenth century.

In order to live, men are constantly acting with the materials of nature, and whether this be registered by history or not, the remains of their actions exist long after them, and probably will long after any special recorded history. The remains of men's actions are, when understood, a most accurate record of their condition, and a most reliable evidence of both their individual life and social arrangements. The investigation of the remains of humanity before the art of recording, and its correlative influences and conclusions is properly called pre-history, and should be the foundation of history. The pre-historic condition of a people not only throws light upon the history, but without this it is impossible to understand the relations

284 HOLMES: PRE-HISTORIC REMAINS OF ROMBOLDS MOOR.

and sequences fitting in the history, and hitherto students have only studied the conditions of humanity if History; but the advanced masters of philosophy now say that we are likely to profit more by a careful study of pre-historic man, than we can by that of man in historic times. The infancy and childhood, and what we call the barbarism of dawning civilisation are, if properly studied, most significant of what should be the right training for the future; and the importance of a right training of society is of equal importance to society as the training of an individual is to himself.

Affirming the study of the pre-historic to be important, we turn then with interest to those localities where pre-historic remains abound, and so we turn to the remains of Rombalds Moor, as not only exceptionally abundant, but as singularly significant of fact and phenomena in the conditions of pre-historic humanity. Pre-historic remains, as now studied, all over the world are classed less in relation to time and place than to circumstance and condition, seeing that we have to-day rude stone implements in use both north and south, exactly such as were commonly used in the most remote times, in England and elsewhere, when civilised. Broadly classed, the actions of humanity, and so of course their remains, relate first to the conditions of life; second, to the respect of death; and, third, to their regard of a future existence. Under these heads we have pre-historic remains of dwellings, inclosures, mounds for offence and defence, tools, pottery, and miscellaneous implements of war and peace. Under the second we have graves of all kinds; tumuli of earth. and cairns of stone; dolmens, menhirs, and stone circles, in which are found remains of personal ornaments, implements, and objects of memorial or of use in relation to the dead. We have interments of simple burial, of attempts to preserve (rare), and of cremation or burning, in which the ashes are left or they are enclosed in urns specially made and used for the purpose. Over the dead thus placed for honour or regard we have green mounds and remains as instanced. Under the third head, the relations of the future, the remains are much more open to question, but judging from the present, that barbarous peoples, i.e., those now living in the conditions of pre-historic ages and people, we take certain remains to be evidences of

the superstition or worship in the past. These are circles and pillars, and objects of stone, unworked or figured, naturally or artificially placed. To these may be added mounds of earth of considerable size, which though probably at first simple grass mounds, becoming famous, were increased and made sacred to religion, and then utilised as places for meetings, ceremonies, and for legal transactions. Objects and methods originally superstitious might be made available for other purposes, and so cannot well be classed under any specific definition.

This very brief and imperfect classification of objects left by people of and from the most remote antiquity, will not find actual illustration or evidences in any one place or locality. They may be found wherever men have existed, but, wherever found, they are the evidence of both the existence and the condition of the people living, and whatever be the diversity of circumstances they show certain traits of humanity common to the whole. We may thus infer that different objects indicating ideas or habits at one place will have a similar significance at another, however distant in place or time.

Rombalds Moor itself is an elevated track of wild moorland, which formerly must have been miles larger all ways. The district of our especial investigation is bounded by a line north up the Aire Valley from Calverley Station to Menstone, and so on to the Wharfe, say about 250 feet above sea-level, and by another line rising from the Wharfe to Addingham, 1000 feet; and from Addingham to the Aire near Keighley, falling to 300 feet. This moorland, bounded by the Wharfe north and by the Aire south, includes a span of between 6 to 7 miles east and west, and 4 to 5 miles north to south. The extreme height is 1,322 feet, rounding from river to river, rising highest about mid-way between north and south, at White Crag, and falling from Addingham 1000, to 300 feet west to east, at Calverley Station. The millstone grit rises in five or six terraces from the Wharfe to the top, which on the south side is much cultivated, having Silsden, Marton, Hawksworth, and Baildon, all manufacturing villages, at the lower parts. On the north, bleak and bare, the terraces are much more evident, and are only cultivated from the Wharfe for four or six hundred yards up the sides, leaving seven to nine hundred yards bare

286 HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

rock, rough moraine-leavings on inclined beds, covered by bog, ling, bracken, or brushwood in patches, to the cultivated enclosures and the well grown trees common to the district valleys. So far as history records, the centres of Rombalds Moor were never in a different condition naturally, whereas it is evident that at a period relatively recent in geological times the condition of Rombalds Moor was very different to the present. At the very top of the moor, now all bleak, bare, and bog, it is evident the larger trees grew in forests of oak, elm, and birch. The two former were often taken out of the bogs at Lanshaw and elsewhere, in the memory of old people recently living, and the silver birch has been found to be numerous in the bog on the top of the moor.

The evidences of primitive man upon Rombalds Moor exist in its pre-historic graves, in its remains of barbarous life and action, and in its objects of superstition and primitive art.

About 1844, Mr. Edward Hailstone, F.S.A., and Mr. J. M. N. Colls made explorations by digging, and gave an exhaustive account of the results, which was published in the *Archeologia*, vol. xxxi., p. 229. This Mr. Wardell, in his early remains of Baildon Common, thus summarises: "The first excavation was made near the centre of a circle composed of earth and stones, measuring fifty feet in diameter, on the south-east side of Baildon Common. After removing successive layers of peat, earth, and calliard boulders, at a depth of two feet from the surface of the ground, there was found in connection with the remains of a fire, a rude urn of circular or bowl shape, twelve inches in diameter and about nine or ten inches in depth, ornamented in the upper part by incised lines crossing each other at right angles, lozenge-wise. It was in an upright position, and filled with calcined bones, ashes, and charcoal. The bones, some of which were quite perfect, were submitted to medical inspection, and pronounced to be those of a young person of from nine to thirteen years of age. The next examination was made in an earthwork of a peculiar character, situated on the north side of the road crossing the common, consisting of the remains of a circle composed of the same materials, and of the same dimensions as the last, but bound on the south and east sides by a well-defined entrenchment, the form of

which will readily be understood by a reference to the annexed woodcut. It is in the form of an angle or corner of a parallelogram, and measures eighty feet in length on the west, and thirty-six feet on the south side. It consists of a fosse, with an agger on each side. The breadth of the fosse from the top of each side agger is about twenty-seven feet, and the depth about three feet four inches. The length of the two outer ridges or aggers is two feet four inches, and the entire breadth of the interior edge to the exterior edge of the outer agger is forty-five feet. Within the circle, which appears to have been disturbed previously, were found ashes, burnt bones, and charcoal, together with a broken urn. At a distance from these remains, and at a depth of two feet from the surface, another broken urn was found, which when entire had been about seven inches in diameter and nine or ten in depth. It was in an inverted position, ornamented by zig-zag (chevron) lines, and contained similar remains to the last, among which was a flint arrow head, represented exactly by the annexed woodcut. Another examination appears to have been made by other visitors to the common, in a cairn almost reduced to the level of the ground, where after removing stones to about a foot in depth, there was found a small quantity of ashes, charcoal, and calcined bones, apparently those of a young female, amongst which were the remains of a small earthenware urn, reddened by the action of fire. This, judging by the fragments, had been about four inches in diameter at the top, and six or eight inches in depth, of the form represented in the woodcut." Mr. Wardell, in the above account, hopes that these interesting remains may be preserved from the demolition that all the neighbouring cairns have suffered under, by labourers removing the stones comprising them, for repairs to the roads. A visit paid in August, 1883, showed to the Bradford Antiquarian Society the fact that they had remained much as left by the explorers, or at least there certainly had been no systematic attempt to disturb or destroy them. It may be added that a similar urn to the last was discovered in a dish-like circle filled by the evidences of cremation at Hough Hill, on the other side of the Aire, near to Pudsey, about four miles distant, in December, 1879.

These positive and characteristic evidences of the dead are

worthy of considerable notice, not only because such remains are very rare in the district, but as shewing the similarity to many others all over the British Isles, of objects, conditions, and stages of art and associations. We have the positive fact of cremations, the remains being left in the fire, and in other cases collected and placed in hand-made urns, ornamented by incised chevron lines upon raised folds or over-lapings at the mouth. The pottery is very rude, sun-dried, and then open fire-burnt, as are so many of the native British urns, wherever that tribe or people lived and settled.* The flint arrow head is exceedingly interesting, and significant of all the facts that such arrow heads are well understood to involve and include. And though no similar urns or remains are known of, they may fairly be assumed to have really been deposited in other cairns and burial places on the moor. Two cairns, known as the Big and Little Skirts full of stones, and one, if not two circles of stones near to the grubbing stones and shooting tower, were in all probability burial places originally, surrounded by upright stones or pillars or covered over by smaller stones for protection, notice, or memorial. About a quarter of a mile north-west of the shooting tower the large Skirtful of stones measures eighty-six feet in diameter, and some six or seven feet high. It has a ring of larger stones set in the ground at the circumference, and from a hollow in the centre it appears to have been examined, without any record of results having been made.† To the north of this, the little Skirtful of stones appears, like the other, as though gathered by hand, and averaging fourteen to eighteen inches in diameter. Legend gives both their names from witches following a giant to pelt him, when after extra strides (from Alrncliffe, four miles off) the strings of their skirts broke, and so the stones were dropped in heaps as we now see them, except much less, from being utilised for roading. Such legends assuredly carry their ages beyond the historic period, and originating when all knowledge of their real purpose had been lost in times still more remote. Other and world wide evidences justify the opinion that these are funeral relicts, and that the numerous mounds scattered from these cairns to Woofa Bank and Green Crag, are the

* See Greenwell's *British Barrows*, 1878.

† Since this was written a more careful examination has shewn decisive evidence of funeral remains.

earth graves of the people of less regard. We have no chambered or dolmen graves upon Rombalds Moor, nor, with a few exceptions, are there any single pillar stones which could fairly be identified with either grave or memorial. The exceptions are Cooper's Cross, on the west, near the old Roman track from Keighley to Ilkley, and the Lanshaw "lad and lass," uprights at each end of the Lanshaw Delves. One or two others are probably still remaining as boundary stones; there may have been more of both stone tumuli, circles, and pillars in the olden times, for over a thousand years we have the fact of clearances and utilisation of stones for any purpose, and that still going on.

But while lacking many of the pre-historic features common in other localities we have an abundance of pre-historic evidence of another character. Thus under the head of religion, or superstition, we may class those incised stones or slabs, known as the "cup and ring marked rocks." In this way for the time we will consider these singular remains of Rombalds Moor, even though we may come to give a much more utilitarian character to some of them.

Stone marking has been common all over the world, whenever men have sought to register objects or ideas that they wished to perpetuate: and people have observed stone markings as long as they have observed anything. We have had observations noted, in a casual way, of what is now called cup and ring incisions, from the time of Borlase, who published a very accurate description of them, as figured upon dolmen top-stones in Cornwall, 1769. Cup and ring marked rocks were noticed at old Berwick, Northumberland, 1825, and at Carnban, Scotland, 1830. Sir Gardner Wilkinson pointed out ring marks upon the Solkeld circle, Cumberland, 1835, but not until the Rev. Canon Greenwell of Durham, and Mr. George Tate of Alnwick, discovered simultaneously, a series in Cumberland in 1851-4, that any especial notice of them was taken. These being shewn at the Archæological Meeting at Newcastle, 1863, it was found that others had seen similar markings in other parts of England, Scotland, and Ireland; and then it was found that such markings had been seen in places all over the world. The cup and rings were first figured as such, significantly, in the London Illustrated News, March 19th,

1863. Borlase and others figured them only as curious marks of remote times. The oldest figuring on record of the cups and rings are upon a Mosaic pavement brought by Adrian from Athens, A.D. 270, but which would be in all probability contemporary with Alexander, B.C. 330, as the subject relates to transactions of his, in the Persian Conquests. Upon the rock regions of Ethiopia, as given in Montfaucon, the cup and ring marks are unmistakably figured. (See Shaw's Travels, London, 1757.) As perhaps among the last of such markings, and to show the range in extent, we have the cups and rings figured upon sacred stones (Lingams) in the Island of Figei. (See Figei and the Figeians, by Williams and Rowe, two missionaries. London, 1858.) Such markings, so much alike as to appear by the same hand, and placed apparently for the like intention or object, have been found in North and South America, very extensively in India, very numerous upon the Dolmen of Moab,* (exactly like a number in Cornwall), they are numerous in Ireland, Sweden, and Denmark, and rare in Egypt and Africa. Indeed they are so extensively placed that we may say it only requires observation to find them everywhere. They are, however, neither uniform in order nor numbers. They are more numerous in Ireland and Scotland than in England, more in the North than the South of England, even under similar conditions of rocks and surroundings.

The cup and ring marked rocks upon Rombalds Moor, or rather the markings upon the millstone grit there, have doubtless been seen for ages, and were perhaps noted by Dr. Call years ago. In 1886, a gentleman named Terry, staying at Benrhydding, was standing at the head of the quarry below the Cow and Calf, and saw the men baring to extend the quarry, and as they took away the turf, towards the Cow rock, he observed the curious markings there, quite fresh and clean cut where they had been covered. Having heard of the cup and rings elsewhere, they took his attention, and he induced Dr. McLeod to refer to Mr. Myddleton, the Lord of the Manor, to allow these beds and rocks to be preserved. This the doctor did, and so we have them there for observation to-day, whereas, if unforbidden, they would

* See Lieut. Condor's Report, April No. of Palestine Exploration Society. London, 1883.

have been destroyed, as certainly many others have been. Upon this bed of rocks, glaciated, smoothed, and striated, we have curious markings, cut clean and deep where preserved by the covering of turf, and worn, so as to be scarcely observable, by frost and weather when exposed. By invitation of Dr. McLeod I saw them early in 1867-8, as did Mr. James Wardell and Mr. Forrest; who both named them in their essays of that year; the one in his "Walks on Rombalds Moor," and the other in his "Historical Notices of Ilkley, Rombalds Moor, and Baildon Common," 1869. Mr. Forrest, in his Walks, figures accurately from a rubbing, the Cow and Calf Quarry markings. But while there were vague conjectures and wonders raised, there was nothing decisively known of their bearing or significance, until I accompanied Canon Greenwell to see them, and a few others, early in April, 1870. Canon Greenwell at once said that they were genuine and interesting specimens of the typical cup and ring marked rocks, and so they took a place which has since been advancing in importance, as observed and investigated, among those curious and even mysterious subjects, the world-wide rock markings.

The first publication upon the significance of the Ilkley cup and ring marked rocks, was in an article furnished to the Leeds Mercury, April 20th, 1870. It may be added that later writers upon the Rombalds Moor rocks are the Telegraph correspondent, and the Revs. Brook Harford and Montagu Conway, 1876, 7 and 8, and that the last discoverers and investigators are J. Romily Allen, A.I.C.E., and C. W. Dymond, F.S.A., in the *Archæological Journal*, March, 1879, and June, 1880, and Fredk. W. Fison, Esq., in his able address to the Ilkley Scientific Club. The last very important discoveries are those of Lieut. Conder, Captain Warren and others of the Palestine Exploration Fund, in Moab, on the east side of the Jordan, North of the Dead Sea. There from Gerasa to Keferin, Raboth-Ammon, Heshbon, to Baol Meor and Dibon, hundreds of menhirs and dolmens are found centered about springs or holy places, some, if not many of these bearing exactly the same cup and ring marks that Borlase found upon the dolmen in Cornwall (1737), and so similar are they to some upon Rombald's Moor and elsewhere that Conder's description and conjectures upon the markings

given in the April and October numbers of Quarterly Statements, 1882, and again in the "Heth and Moab" of Lieut. Condor, October, 1883, might be taken as belonging to each and to all places, viz., to Cornwall, Rombalds Moor, and Moab. In fact, Condor and Borlase, in their word descriptions, may be transposed, without finding out the difference, except in the locality. These cup and ring markings being so widely apart, and so curiously similar, we are impelled to ask why they are so alike? and what they mean? In this, it is as usual, easier to say what they are not, than what they are. Firstly they are not natural figurings, but they are artificial markings. Nor, second (except in a few instances where the pre-historic clearly blends into the historic, in Ireland, France and Sweden), are they the representations of any natural objects? They may be symbols and representations of some thing to which we shall shortly refer. Third, that they are not historic anywhere, is clear, seeing that we have no history nor legend whatever as to what these curious incisions mean, or how, why or when, they were made. Fourth, another fact is of great importance, viz., that they are not Christian. Some are noticed in lands that never heard of Christianity, and while from the first century A.D., the Christian cross has been prominent wherever its doctrines have been preached; there is neither sign, symbol, or evidence that these rock markers ever had any knowledge whatever of it. These facts will place the cup and ring marked rocks of Ilkley in pre-Christian times assuredly, and this must be considered when weighing the opinions of those who, with Ferguson, would make them relatively modern. The artificial placing of menhirs and dolmens, with their markings, are contemporary, and that the placers of the one are the markers of the other, is an inference so conclusive to experts as never to have been doubted or objected to. Of many writers, Ferguson says of these remains, "they are of one people wherever placed, bear one impress, and tell one story of art and object." (*Rude Stone Monuments*, Introduction, p. 28). "One point there will be little difficulty in proving, which is, that the whole form one continuous group extending in an unbroken series from the earliest to the latest. There is no hiatus or break anywhere." Now, as Ferguson puts it, "they are either the work of men

so remote as to be beyond mortal ken, or they are the sepulchral monuments of a people who lived so nearly within the limits of historic times, that their story can easily be discovered," we may ask Mr. Ferguson, in his own words, to give us the story. Who were these people? the dolmen builders? and stone markers? Where did they come from? where and when did they go? His own map shews the distribution, and probable lines of migration, of the stone-markers and dolmen builders, from North Africa, through Judea, and to India, East; to Spain, France, Ireland, Wales and England, and Scotland, West; and Germany, Denmark, Sweden, and Russia, North. The numerical distribution is exceedingly unequal, as shown by the deepening of red spots, wherever they are found upon the map; not knowing of the recent discoveries in Moab, it is left blank upon the map, but in South and North Spain, in France all through, West Wales, and East Ireland, in Germany, East Denmark, and South Sweden, the dolmens are very thickly planted. In Italy, Greece, and Turkey, next to none, and in India but very few, apparently. A correction would now give many in India, many in Arabia, and very many in Moab, and the East of Jordan, North of the Dead Sea. Similar circles and dolmens, with markings, have been found in Peru, and in Australia. Mr. Ferguson's three conclusions are, "that they are generally sepulchral, or connected with the rites of the dead; second, they are not temples in any usual or appropriate sense of the term; and lastly, that they were generally erected by partially civilized races, after they had come into contact with the Romans, and most of them may be considered as belonging to the first ten centuries of the Christian Era." The first two we may pass, but, if Anti-Roman, they could not commence being erected before 500 A.D. We have then but 500 years, i.e. from 500 to 1000 A.D. in which the erection of thousands of thousands of dolmens, including elaborate works such as Stonehenge, Karnack in Britany, &c., and from India, to Ireland, Spain to Russia, Sweden, Denmark, the Isle of Man, and Wales, to Phoenicia, and Moab to Peru and Fiji, and to Australia, all to be erected! how they were placed, by a people nobody knows of, in a period when we have history written everywhere without a record, we leave Mr. Ferguson to reconcile and to account for. Take the

case of Rombalds Moor, (which is one of the most favourable to Mr. Ferguson) to wit. Suppose the Roman Olicana was destroyed in 500 A.D., and that all the following British and Scandinavian settlements and influence were wholly uprooted by the depopulation of Yorkshire, by William, 1068-9. What follows? We had certainly a Saxon (Scandinavian) Church at Ilkley before this depopulation. Witness the, at least, four crosses, three still in the churchyard. But how with these (and the Romans were christianized after Constantine, if not before) could they have been a pagan people, so numerous and so long resident as to dig the graves on the common of Baildon, and erect stone circles, tumuli and the score of rude monuments upon the moor (then not of Rombald?) How could these pagans be contemporary and flourish in time parallel with the art of the Ilkley crosses, leaving neither legend nor record of any kind of their existence? Of all hypotheses of antiquity we submit Ferguson's to be the most incredible, and hence we accept his alternative and refer the graves, tumuli, stone circles and rude cup and ring marks of Ilkley to a barbarian pagan people, and to a very remote period to commence with, coming down possibly to the Roman invasion, and ceasing everywhere with the growth of power and the introduction of Christianity. The rude stone monuments of Peru, of the Pacific Island of Tonga, Victoria and other parts of Australasia are beyond our limit to account for.

Having very crudely and imperfectly glanced at what those markings are not, we may similarly glance at what they are. They may be defined as artificial cuttings and figures upon rocks or ancient stone monuments, always of a rustic period. The simplest are hollow, of from two to three inches in diameter to six or more, and from one inch to six or eight deep, proportionate to size. They are chiefly of the small size, and are marked in lines upon any part of the stone on the side, ridge, or top without any evident order. Secondly, we have these hollows in cups, often surrounded by a ring, whole or broken, or there may be two, three, and even as many as seven rings round a circular hollow. Generally the rings are fairly circular; but some are more or less oval, serpentine, or spiral, and even tending to the square. Thirdly, from one cup-and-ring—hence

HOLMES : PRE-HISTORIC REMAINS OF ROMBALDS MOOR. 295

the technical name—a streak or groove may pass away, or may run towards or join some other cup or circle, and so connect them. Sometimes a streak or groove appears to be the principal, which the other figures, *i.e.*, cups and rings appear to be attached, but generally the circles are the feature, and the connections secondary. Sometimes a rude circle or boundary of other shape appears to surround or inclose cups. The streak or connexion usually goes direct, but occasionally it varies and bends, much like a road or stream. These, which may be called the typical forms, are given by Sir Jas. Y. Simpson as such, along with others of complex order and form, which may be designed to represent some things of order or purpose. No one hypothesis appears to account for or include the whole of the peculiarities of the cup and ring or inscribed rocks. With considerable diffidence, but with a full conviction of the fact, I submit that a twofold aspect of a common feeling or intention can be traced, which may account for all and every figuring that I know of. The general principle or object arises in our common humanity tending to represent externally that which we feel to be of importance, or we deem to be necessary or advantageous.

In this way, the sun, moon, and external phenomena of nature may become symbols, and worshipped as the objects significant of production; and the organs of the natural functions may be figured as indicative of the passions, and of their good or evil held to be actual at the time. The phallus or Lingam, and the Yoni, or crescent moon, have everywhere been used as the male and female emblems, and as implying increase, production, and blessing. In the end, the very emblems became themselves symbolised into conventional, simple, or more complex forms. Thus the circle or hollow dot, or cup and rings, are figured as symbols of the sun, as the sun itself was the symbol of increase and production. Growing more complex, the serpent represents the sun for both good and evil, as the action of the sun indicated in effect. It is a most interesting study to follow the order of symbolism or connection, behind the sun and the serpent, for good and for evil; but in result, each and all were used and figured as co-related and often identical. That this form should be common and extend from India to Egypt and as far south as Fiji is remarkable,

296 HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

but the evidences are clear in the similar form and significance. The forms or modes of phallic symbols vary in different countries, although the principles and meanings are identical. In the North, Thor's Hammer and the Fylfot were identical with the Tree and Serpent of India, and of the Bull and Cow or Isis and Horus of Egypt, and of Jumbo in Africa and Fiji. These symbols all typified the ideas of the powers of nature, and of the estimate in which these were held.

It is at this stage of human evolution and art that we attribute the rearing of pillars, and the erection, formation, and modification of "rude stone monuments" all over the world. Feelings in common will naturally generate ideas, and even symbols in common, under given conditions, without any communication or personal associations. We may thus understand that the high monolith of Rudstone, in North Yorkshire, and the Devil's Arrows of Boroughbridge may be erected for the same reason as those of Carnack, in Britany. So we can realise that the circles of Salkeld, near Penrith; of Arberlaw, in Derbyshire; and of Stonehenge, near Salisbury, with thousands of others widely separated all over the world, may originate in a common feeling which naturally exhibits itself in a similar way at times and places most remote. We can trace how a single stone may increase into a circle or vary to a Dolmen or Cromlech. Or we can realise how such memorials may be identified with sacred events, as Jacob's Pillar, or the Stone Ezel of i. Samuel xx. 19, or to the grave stones of this day.

Stone pillars, or other symbolic monuments, would naturally be figured by the symbols further expressive of their own import; and we may thus account for all the cups, rings, circles, ovals, spirals, and serpentine markings found upon pillar stones, of which the figuring upon the Calder Stones, near Liverpool, figures by Sir Jas. Y. Simpson, and the phallic stones in Vol. II. of "Fiji and the Fijians," p. 220, are characteristic examples.* Of their import Mr. J. B. Waring, in his able work on the "Origin and Progress of Symbol Worship," [London, 1874, p. 95] says "Through the unknown ages

* These circles are instanced as significant, but others equally so are found in Ireland, Brittany, Sweden, India, Moab, and Peru.

prior to 1000 B.C. to seven or eight hundred of our era we find no remains of idol worship of any kind, or of carved temples. But ample traces in the way of symbols may be collected of an undoubted nature worship, in which, necessarily, the sun and moon form the principal features. Nature worship in the primitive form, to the great Giver of Light, Heat, and Life, has ever been in the open air, although the places of meeting may at times have been marked by upright stones." To which we may add, as before, that the stones themselves would become marked by the symbols expressive of their use. Upon Rombalds Moor we have met many such pillar stone erections, but some of them exhibit unmistakeable symbols of this type of marking. Of the second class or type of incised stones upon rude monuments, Rombalds Moor is rich, indeed contains more perhaps than any other place within the same limits, say three miles E. and W. by one mile N. and S. On the first recognisers of these cup and ring stones in Northumberland, viz. Canon Greenwell and Mr. Geo. Tate, both at first sight thought that they could trace the idea of a ground plan of forts or dwellings, or a chart of a district with roads. Sir Gardener Wilkinson, Dr. Graves and others held the same idea, and the former states that such markings were made upon the sand by the Arabs in times of danger to guide the forces in their routes. This plan or chart idea was for a time given up, but upon the Cow and Calf rocks Mr. Wardell says, 1869: "I can form no idea of their import, but they bear a strong resemblance to lines of earthworks and mounds of the earliest periods," and that "such markings in Northumberland and other northern counties are of frequent occurrence," p. 33. In the April number of Chambers' Journal, 1883, under the usual monthly glance at the arts or discoveries of the month, a paragraph states that these incised stones are very numerous and well known in Switzerland, and that in one canton Professor Rudriger has found so many that by placing them in connection he has found the whole to be a chart of the pre-historic condition of that canton, as to roads, stations, settlements, etc., of times very remote and prior to all history. In order to trace this remarkable feature further, I have applied to the Messrs. Chambers, but failed to

298 HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

obtain any further information. Still this hypothesis accords so much to features common and striking, as I believe to be the most feasible yet started of the complex styles of figuring. At present it is but hypothesis, but bears probabilities such as, 1st, being like what charts or ground plans of rude works would be worked upon stones with such tools as these evidently have been; 2nd, these curious or chart-like markings are chiefly found upon stones placed horizontally, or so inclined or placed as to be well seen, if not to court observation. All those at Ilkley show signs of being surrounded by a wall or large stones, as though to note or protect them. It is true that some have been found covered over, as at New Grange, and one at Craigie Hill [Sir J. Y. Simpson, p. xv.] formed the covering stone, with the circled face down. But these were clearly incised stones, re-placed or re-used, and were not in original situ, or were, in fact, carved for ornament or memorial. So we have these singular chart figurings upon the tops of huge dolmens in Cornwall, [Borlase, p. 174] and exactly similar markings upon the dolmens in Moab [See illustration and description of dolmens at Hesbon, Heth, and Moab, 1883, pp. 190-293, and in April and October Quarterly Reports of Palestine Society, 1882]. In Claperton and Denham's explorations in Central Africa a chart is given of King Bolino's domains, 5 to 15 lat. and 10 long., which, if placed by the side of stone on plate 5, and of Long Meg, p. 7, by Sir Jas. Y. Simpson, it will be seen that they are very similar in form and apparently identical in intention. Or place the chart of Thorsby's Course of the River Aire, 1715, with the district map of the Ilkley Guide, 1882, or any illustrated railway chart of any advertising railway route, and place them upon stones, and they will be found to be as much alike as possible. Were we to figure on first, second, and third class towns or stations by the actual number of circles round a dot or cup, we should get the actual figurings as upon our Ilkley stones, at the Panorama rocks; and taking into account that ancient forts had from one to several circles, and that ancient Babylonian towns had from three to seven walls—Ecbatania to wit—and that towers had seven stages, and chart these upon rocks we shall have the reality of the stone puzzles plain

from bygone ages. For similarity to particular figures upon various stones, apparently exceptional, just take the general plate of British Barrows near Stonehenge, given p. 543 in Fosbrooke's *Antiquities*, 1843; and the similar plate of forts, earthworks, tumuli, circles, and camps, p. 557, and outline them upon stone, when every feature of the figuring given by Sir James Y. Simpson in his work may be seen, only often plainer for comparison upon paper.

This stone marking would be the way they would do them, and they could do no other, or at least in no better way. That in other times, with a country so sparse of inhabitants and difficult to track through, there would be a need of guide posts is evident, and there could be no plainer or simpler way of direction at the time, than to figure places according to these peculiarities and relations to each other in roads and ways. The subject—cup, ring, oval, or serpentine forms—say of symbol worship, or supersition, being inscribed upon stones, serving its purpose, would be naturally followed by similar incisions to indicate other purposes than such worship, and hence stone marking would become common for all purposes for which it could be used. But where the purposes varied the signs would be local. We thus find that the simplest form of nature worship, is the most extensive, in fact everywhere where men have felt the influence of nature and the desire to worship. But whether the advanced and more complex figurings be charts, ground plans or not, they are much more circumscribed in extent and much more confined to special localities.

Upon Rombalds Moor we have two specialties, the ladder or step-like forms, leading up to cups or rings, and the fylfot form upon the Addingham side ridges. Upon the hypothesis that the stone marking upon Panorama rocks are the charts of a district, and the representation of things, I should for illustration refer to the arched circular mounds of Algeria, pp. 398-9, 400-1-2 of Ferguson's *R. S. Monuments*; and to those in India, pp. 490-1 of the same work. The New Zealand bure, or temple, could not be figured better upon stone than the two, three, or four ringed cups, with the well marked steps up to them, seven in number, upon twelve of the romantic rocks of

300 HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

Ilkley. Of these bures we are informed, p. 221, Fiji and the Fijians, that nearly every town has one bure or more, many of which are well built, no pains being spared upon their erection or finish, which is generally placed upon a raised foundation, thrown up to the height of from three to twenty feet, in steps or rises, with dry rubble work of stone. The ascent is by a thick plank, having its upper face cut into notched steps. See cut p. 222, Fiji and Fijians, London, 1858. As proof, and positive as such proof can be made of two propositions, we cannot do better than place the cuts figured at pp. 220 and 222, along with the letterpress explanations.

“Rude consecrated stones are to be seen near Vuna, where offerings of food are sometimes made; another stands on a reef near Nalow, to which the natives came; and one near Thokova, Ne Titi, Levu, named Lovekaveka, is regarded as the abode of a goddess for whom food is prepared.” This, as seen in the engraving, is like a round blank mile stone, slightly inclined, and having a liku tied round the middle. The shrine of O. Resoun is a large stone; he has also two large stones for wives.” “Nearly every town has one or more bures, &c. Years ago I tried, without success, to obtain specific information upon these stones. Missionaries would do well, both for their own work and the extension of scientific ethnography, to ascertain and register carefully what the living natives think these things to be, as well as to obtain all possible knowledge of what they have been thought of and held. As it is, we cannot but see that they are phallic, and connected with phallic rites. We see that one stone has three well defined cup and ring figurings upon it, associated with their special rites and objects, and so far bears out our surmise of that form of “cup and ring marking.” The cut of the bure or temple in Fiji gives the step-like figuring we see so clearly marked in the Panorama stones instanced on Rombalds Moor.

It is at present, perhaps, too much to expect that we may now account for or explain all that is peculiar in the rock markings, but it is only fair to the subject to explain all possible. Lastly, we will consider the two fylfot marked rocks of Ilkley, of which only one other illustration is known. The fylfot, or crux grammata, form is

that of a true cross, with a streak from the top to the angle of each arm, bending to the right of each arm from the centre, making, so far, the whole of a square. Except the circle and the angle this is, perhaps, the most widely distributed figure in existence, and as figured at Ilkley and Tossine, on the Swedish coast, it combines both circle and angle, and forms the line of beauty crosswise. Whatever may have been its original import, we can trace it perhaps first to India, where it remains as a survival figured upon the footprints of Buddha. [See Ferguson, Schlieman, and exhaustively in Wareing]. The word itself is old Norse, *fiol*; Anglo Saxon, *fela*; German, *veld*; English, full, or many; and foot means many footed, or, perhaps, firm, stable, or abiding. Repetitions of the form are most numerous in Scandinavia. It is found upon very ancient British pottery. Schlieman finds it the most numerous figure upon the oldest whirl stones and pottery markings. It is common in Tartary, Thibet, Etrurea, in Greek, Roman and early Christian art. It is assuredly pre-Christian, but brought into Christian monuments from the third to the twelfth centuries, and has come down as a brassfounder's bell mark into the 17th century. [See Llewellyn Jewitt, *Reliquary*, 1881.] The *fylfot* is a prominent mark upon gold weights, brought from Coomassie, 1873, where it is evidently a survival along with other archaic figurings still in use. It ceased to be used upon Christian crosses with the decline of the Scandinavian runic figurings; but it has latterly been revived, without any other significance than an easy and effective form in mosaic, stone, or parquetry wood work. The *fylfot* figure usually stands along with others, as either significant of something or as an ornament along with other carvings; but at Ilkley, in two cases, and at Tossine in one, the figures exactly similar stand alone, or with the least possible connection with others. It does not look like a Christian symbol in any of these instances, being much more complex, difficult to construct, and is besides in each case connected with cup markings in the figure, so that a Christian cross can scarcely be meant. At Ilkley the outcurved line is say three-quarters of an inch in breadth, and three-quarters deep, the cups being about an inch and half in diameter and

302 HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

depth. Stephens says that in Scandinavia this figure means Thor's hammer, or power; Cox, in Aryan mythology, recognises the male and female symbols, in which idea Inman agrees. In China it is worn as a charm, and one Italian antiquary says "it is an emblem of Libitina, or Persephone, the awful Queen of the Shades." Others say it signifies fire, water, and the union (?) of the two, etc. [See Wareing, pp. 10-40.] The fact is, while doubtless it had a meaning wherever first used, it has now lost all meaning to us. But there it stands at Ilkley, by whom brought, or with what intention, is alike a puzzle and a mystery. The conclusion that certain of these mysterious rock markings are the emblems of ancient superstition—and the symbols of nature or sun worship, appears to be as well ascertained as the relations of the subject and the conditions admit of. No other solution is equally tenable relating to that class of cups and rings, which, as before indicated, are frequently found upon upright or pillar stones. Upon those more complex or chart-like figurings the conclusions are not so definite nor so generally accepted. But believing that it has the best both internal and external evidence of probability, we are justified in accepting it for the time being, and until a more extended observation, if not positive investigation by pick and shovel, shall demonstrate the fact or disprove the hypothesis. The position of the stones bearing figures upon Rombalds Moor may be described negatively as having no fixed inclination. They lay at all angles of the compass, and in various degrees of inclination from horizontal to vertical. Only ten groups of figurings are known on the south side of the central ridge of the moor. Two stones, figured by Mr. Glossop in the Bradford Antiquary, Sept., 1882, are near to the Baildon Moor grave mounds, described on a previous page; and two or three others are upon Bracken Hill Green, at the top of Shipley Glen. They are evidently of the chart type. All else that I know are upon the north face of Rombalds Moor, at elevations of from seven to eight hundred feet above the sea level. They will extend from Addingham to Menstone, near four miles, in a direct line; and though a few are or have been covered, and one was evidently not in situation, the figures may be generally described as being cut upon good sized stones in important positions.

Indeed most of them have evidence of other stones being placed in circles round them. One, near Backstone Beck, characteristic but not very prominent stone, has a wall distinctly traceable all round it, at a distance of many feet from the cup and centre stones. There is generally a good look out from the top of the principal stones. Mr. Romily Allen numbers twenty-five only, while Mr. Fison says there are at least forty that he has seen. The most eastward are in a line from Woofa Bank to the "Skirts" tumuli; and those most western are the sepulchre stones upon Addingham Moor.

Taking them from east to west, the following may be given as a rough sketch or description of the principle of the cup and ring and chart figurings, modified from the papers of Messrs. Allan, Fison, and others. "Near to the pancake ridges there is a large ark-like block of sandstone, standing detached. It measures east to west 16 feet, by 8 feet 6 inches broad, and 5 feet 6 inches in height. The top is ridged houselike north and south, and is full of carvings upon each side. There are at least between forty and fifty cup hollows, and at least nine are surrounded by single rings or circles, having no connecting grooves." Castings of the top are in the Leeds Philosophical Museum. This is one of the stones shewing evidence of having been surrounded by other independent blocks; of which it is the principal or centre.

About a quarter-of-a-mile below this stone, north-west, we have a high mass of rock, called the Cow, from which a large block has fallen called the Calf. At the foot of the Cow the surface of the stone is relatively smooth, and the hill falling abruptly leaves these as cliff, the beds of which were being quarried for building purposes to the west. Up to 1886 the turf had grown from the moor to the edge of the cliff ridges, and this being bared to extend the quarry, a visitor at Benrhydding, as before said, saw markings upon the top of the bed as though fresh cut. The surface of the stone is glacially smoothed, running south to north. Mr. Allen gives a cut, in part i., vol. 35, of the Journal of the British Archæological Association, in which he says: "that the design cut upon the smooth surface consists of twenty-five cups of various sizes, from one to six inches in diameter.

Seven of the cups are surrounded by incomplete rings, many of them connected by an irregular arrangement of grooves. The plan and execution are so rude as to suggest the idea of these being in an incomplete state. The sides of the grooves are not smooth, and would seem to have been produced by a process of vertical punching, rather than by the means of a tool held sideways." This is the largest continuous sculpture upon the moor, and runs some 20 feet from the west, which was covered up, towards the east; bare, exposed, and walked upon, from deep and clean cuttings, to being weathered and worn until scarcely perceptible. This will account for the imperfection suggested by Mr. Allan, while the general bearing of the design suggested to both Messrs. Wardell and Forrest the idea of a ground-plan of forts, earth-works, and huts. That this idea is justified see figs. i., ii., and iii., in plate 4 of Wareing's *Rude Monuments*, 1870; and the ground-plans of old British villages on the Cheviot Hills and in Cornwall (figs. i., ii., iii., and iv., plate 12). It will be observed that what may be called the entrances open nearly all one way in the plans, and so they do in the Cow and Calf figurings, supposing the chart idea to be assumed. It was the uncovering of this rock that led to all further investigation, and when at first noticed there was evidence of a sort of rock wall or line towards the moor, as though for protection. This stone may assuredly be classed as chart-like. About midway betwixt the two stones now instanced there was up to 1871 a loose stone which had evidently been removed. It lay promiscuously among others, but it bore finer and deeper cut figures than any other upon the moor. Before noticed it had been halved by a mason, but a cast (in the Leeds Museum) shews the remaining cups and rings, cut as described. There were no grooves, and this stone might be fairly classed as one symbolic of the sun or nature-worship. In 1873 we regret to say that this, with many others, was cut up, and improved away for wall-stones, as many other similar figured ones have been. Higher up to the south, in a line with the Bakestone Beck, there is a stone with a number of cups upon it much weathered, only one or two shewing signs of rings. This is the one surrounded by a wall, which runs east and west down to

the beck, and at one part of the wall there is the appearance of a hut building(?).

Mr. Allan says that on a ridge of ground betwixt the two streams feeding the old baths, S.W., there is an isolated block of stone, 6 ft. by 6 ft. broad and 2 ft. high, on which are carved 16 cups, 6 of which are surrounded by rings. In the centre of them are two grooves which cut at right angles. Height 700 feet above sea level. Near to Grainings Head, some 1200 feet high, Mr. Allan notices a stone of great interest. It is a block of native grit 12 feet long by $7\frac{1}{2}$ feet wide and 4 feet in height. The longest side faces S.E. and slopes at an angle of 40 degrees to the horizon, and upon it are nearly 50 cups, 16 of which are surrounded by single rings and 3 with double rings and radial grooves. At the other side or end near to the top is a curiously formed pattern of double grooves somewhat resembling the Swartica emblem discovered by Dr. Schlieman. At the highest part of the stone there is a rock basin 9 inches wide and 8 deep. On the vertical end of the stone are cut four cups, three of which have rings. This, says Mr. Allen, is one of the few instances of the cup and ring marks being cut on a vertical surface. Upon this we may say that such figures (the simplest) are very common upon vertical pillars. See Long Meg, at Salkeld, the Calder-Stones near Liverpool; in the tumuli of New Grange, and Douth, Ireland; in caves of Morbihan, Normandy; upon the rocks in Ethiopia, in the palerstini mosaic, Italy; and upon the phallic stones in Fiji. A careful rubbing of this so called Swartica figure gives the size to be 21 inches by 18. Rising from the village of Ilkley S.W. we pass by a villa erected by Mr. Joseph Lund, whose southern boundary wall crosses a large block, smooth topped, sloping N., having upon it, much worn down, a series of cups and rings, and one or two connecting grooves. Near to this stone Mr. Lund turned up with his spade a beautifully cut "thumb flake," $1\frac{1}{4}$ inches in diameter. It is in perfect preservation in the Leeds public collection. Betwixt this and the Panorama rocks there are several incised stones which we pass as having no special feature, except being of the chart types and horizontal in position. Rising the hill S.W., about a mile from Ilkley, we come to the Panorama rocks, upon the top of which there are a

series of slabs and rock-cut stones, which, Mr. Fison says, are the most beautiful of any yet discovered. Mr. Fison further notices that the arrangement of the surrounding stones, one of which may be a rocking stone, suggests the idea of an ancient enclosure; and he states that there he found two or three flint flakes. Mr. Allan states that the Panorama rocks, 800 feet above the sea, command a very magnificent view over Wharfedale. "Here there appears to be a rude inclosure, formed by a loose wall of low stones, within which are three of the finest sculptured stones of Ilkley. They lay almost in a straight line E. and W., the second being about five feet from the first, and the third 100 feet further. The first stone placed horizontally near the present level, is well preserved, being covered by the turf until recently. It measures 10 feet by 7. The sculptures consist of 35 cups, 18 of which are surrounded by concentric rings, varying from one to five (query six) in number. The most remarkable feature in the design is the very curious ladder-like arrangement of lines by which certain of the rings are intersected and joined together. I do not think that this peculiar type of carving occurs anywhere else besides Ilkley." Place these beside the Bure figured upon page 222 of "Fiji and the Fijians" and the significance of the figuring as a chart or plan will be seen at once. John S. Phene, Esq., F.G.S., F.R.G.S., &c., a distinguished traveller and expert in antiquarian researches, tumuli and mounds, on a visit in 1873, said at once, upon seeing the figuring of the circles and ladder shapes of the Panorama stones, that they were typical representatives or plans of many of the circled tumuli, and he had often seen in India steps intended, and, indeed essential, to reaching the sacred tops. Tumuli circles, such as figured from pages 398 to 431 in Ferguson's rude stone monuments of India, could only be figured on stone in the way these Ilkley sculptures are. This stone is one of the most curious and interesting, yet it bears no feasible hypothesis except that of a chart or ground plan, thus considered it is significant and singularly indicative and explanatory.

The second stone, 15 feet by 12, has a piece of the surface shelved off, measuring 6 feet by 4, the whole covered by cups and rings, many cups having no rings; several with one, and one with

HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR. 307

two rings. As indicative of a barbarian village, or settlement, it is significant; otherwise we have no explanation to give. It has been exposed, and so is much weather worn. The third stone, 10 feet 9, by 7 to 8 feet, is slightly inclined to the north, has upon it twenty seven cups, fourteen of which have concentric rings, and four having two circles. It is a good deal worn, but shows in one or two instances, the grooves or ladder like steps so clearly marked upon the first or most eastward stone.

About a mile to the west of the Panorama rocks, on the very edge of the cliff forming the northern ridge of Addingham high moor, overlooking the Wharfe, is a large block of gritstone in situ, measuring 19 feet long, by 7 wide, and 4 feet 6 inches thick. At the West end are two rock basins, 1 foot 3 inches across, and at the other facing South, the very unusual figure of the fylfot, or swartica emblem, is clearly and deeply carved horizontally. This, Mr. Allan, (and I agree with him,) considers to be the most interesting of all the Ilkley sculptures. Except the similar, but less clearly cut figure upon the rock near Grainings head, (p 27) no other marking identical has been made known, except one carving found at Tossene, on the coast of Sweden, north of Gottenburg.

The significance and mystery of the swartica or fylfot we have before instanced, ranging from the foot of Buddha to Greek spindle whorls, and to the early Christian martyrs catacomb dresses, contemporary with similarly figured Roman Altars, both in England and Italy. But these three Ilkley carvings are explicable on a much less profound hypothesis. The fact is, the figure with its spots in cups constitutes a common school boy's puzzle play, showing how far rude men could build a wall which would exclude four poor men from the use of a well whose houses were nearer to it than was their own. However simple and ridiculous the latter solution may appear, it is equally a puzzle to account for figuring at Ilkley or Tossene as a puzzle, as to account for the fylfot been so widely figured in remote times as a sacred emblem, the facts are impossible to deny, and so we must for the present leave the puzzle. "The Addingham crag stone situated further west, is at the foot of the cliff; measures 9 feet 6 by 8 feet 6 inches broad, and stands detached about 4 feet in

height. Upon the top surface are cut twenty-three cups, twelve of which are surrounded by single concentric rings, which in two cases have connecting grooves. On the West side of the stone is a sort of pocket, which may be natural or artificial, and ten long grooves run across the stone in the direction of the grain." There are many others scattered upon the moor, and a careful investigation would doubtless develop others unknown. These stones are being constantly cut up. Three or four described as good ones, were cut up by the labourers in making the new road up to the panorama rocks, 1882. Another very large one below the Cow and Calf series, which must by description have been exceedingly fine, was cut up a few years ago. It is to be greatly regretted that from the neglect or supineness of the residents of Ilkley, no attempt is made to preserve objects of such superlative interest to both archæologist, student of humanity, and the ordinary visitor for health and recreation.

The subjects of the dead and memorials of worship and superstitions forming so small a part of modern life had, probably, in the semi-barbarian stages a much greater influence, and occupied more attention and time. It is clear by the evidences that men must have lived long upon Rombalds Moor to dig graves, make burial urns, erect mounds and stone circles, and carve upon the rocks the symbols we have so imperfectly described. Yet the evidences of their living and of how they lived, are singularly rare, or altogether wanting at Ilkley. We have no indisputable evidence of a British village upon the north side of the moor, where other works requiring time and labour are most evident. And upon the south side there are but two very probable settlements of huts evident, viz.: near the urn burials upon Baildon Moor, and from these another group going towards Shipley Glen.

Numerous hillocks of stone upon Green Crag, and upon other parts of the moor may have been huts, but examination fails to show it. Some of the hillocks excavated by Mr. Jon. Hainsworth, in the Lanshaw Delves, were in all probability huts for the lime-burners, yet in all these Mr. H. could find no actual proof of their being houses at all. But the life of hunters, or nomad cattle-tenters as the pre-historic people must have been, does not induce them to erect very substantial or permanent structures for living in.

HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR. 309

In the recent discoveries of Dolmen and incised pillar stones in Moab, they find no corresponding "house property," while they do find rock caves, which were in all probability used as dwellings, and then utilised as tombs. But at Ilkley, with plenty of rocky crags, and lines of vertically exposed rocks, nooks and cracks, we find none that can be positively claimed as dwelling places. This negation of dwellings, where there must have been at one time a considerable population living, does show positively a very rude, crude, and in fact wretched condition of living. Even if the moor was then more covered by foliage, the trees found in the bogs of oak, firs, &c., prove that the winters would be at times very severe. And how they lived through them without coal and no means of clothing is a problem well worth the attention of our present prominent social reformers. It is certain, however, that they did live, and that they worked, and, therefore, they must have had dwellings and implements for work. But of these latter we have really very few remains. Flint flakes are not rare on the moor, they may be found on the bare places after wet windy weather, which tends to wash out and expose these characteristic objects. A few rude, and one or two fairly formed arrow heads have been found, and one well formed thumb-flint, as previously named; but of the knives, saws, drills, daggers and other objects of more perfect art in flint, we have as yet no instances upon Rombalds Moor; nor is there any instance found of hole-drilled large hammer heads, not uncommon in Yorkshire, both in flint and sandstone; nor is there one single evidence of bronze, or of any other metal being found upon Rombalds Moor, while bronze celts have been found at Keighley, and at Yeadon; where also some years ago there was a very valuable twisted Torque discovered, of fine gold. A very rare, but unmistakeable pickaxe, of Red Deer's horn, was dug up at 16 feet deep in cutting the sewers in Groove Road, Ilkley, about 1860. This implement, found by Mr. Hainsworth, is very significant. It is clearly before the time of iron, the use of which the Romans knew and made extensively at Ilkley; witness the various large slag-heaps still existing, or being just carted away for roads. The horn which was used as the pick was well worn and cracked by working, having grit-sand bedded

310 HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR.

in the hollow surface. The handle was worn smooth where it had been held by the hands, as were those found by Canon Greenwell, at Grims Graves in Norfolk, all proving that this stag-horn pick had been used for digging or in all probability cultivating the soil. There is evidence of land culture upon the moor, especially in the little heaps of stones, the evidence of clearings both at Green Crag and at the Panorama Rocks. So the old names of Ryeley Wheatley, and Oatley are still surviving evidences that they had grain and pulse in ancient times, and several querns found upon and about the moor proves that they ground the grain, thus, or otherwise obtained. The pick was probably a horn of the red deer, then roving wild over their native hills, but the flint from which tools were made must have been brought a distance of fully sixty miles from the East-riding wolds. Most of the objects instanced are in the Leeds Public Museum, and Mr. Fison has a collection of flint-flakes, and a few more advanced objects obtained from the moor. Baking and roasting meat in earth ovens, heated by fire-stones, is relatively easy to savage men, while we have little evidence even of this, here in pre-historic times. At present we have no evidence of kiln-burnt pottery before the Roman occupation, so that boiling or even hot water must have been a rarity then among the natives. So we may here properly name that almost all the relics instanced must have been in use before the Roman civilisation. It is incredible to suppose it to be after the fifth century.

There are two other evidences of antiquity upon Rombalds Moor which may be called pre-historic, in the fact that there is neither history nor legend remaining indicative of either use or period. One is the long walled enclosure, one side of which is sheltered or bounded by the hollow and ridge of the Green Crag. This enclosure Mr. Allan describes as an irregular rectangle, 30 feet broad by 40 long, the two sides being prolonged for some 70 feet east to west. The walls scarcely rise a foot above the ground, and are composed of small stones. There is nothing to indicate the purpose for which this was used. Mr. Fison's remarks supplement the above thus :—"I am told by the old inhabitants that within their memory the walls of this enclosure were of considerable height, five feet or so, and that

large quantities of stones which comprised the walls were carted away. . . . I am inclined to think from its shape that it has been really an enclosure for cattle, which were driven in at the open mouth west, and were secured in the inner inclosures." Mr. John James, the historian, of Bradford, held this to be an enclosure for cattle. He thought it was constructed by the Romans for the purpose of protection or shelter at nights in the feeding seasons upon the moor. As figured upon the 6-inch ordnance map, the enclosure looks very like those animal mound forms, such as we have figured in the Smithsonian transactions as frequent in Central America, North and South, and such as in serpent forms Mr. John S. Phene has proved to exist in various places in Scotland and the Hebrides. [See British Association Transactions, 1870-1.] There may be clearly traced the forms of heads to the east, body and tails to the west, the latter curving into an imperfect circle at the end, all being fitting for use as enclosures. In plate vii. Borlase figures a very similar enclosure upon Karnber Hill, having an irregular circle or head, a large body, and a continuation like a tail having a curve, just like the one on Rombalds Moor. This is composed of stones set upon edge, with smaller stones and earth filled in between. It appears to have contained cup and ring marked stones, and to have held tumuli or mounds, which might be a village of huts, of which the figured stones are a chart or plan. While this singular and still easily traceable object may be of a very remote period, it may also be of historic time and application. That caution in hypothesis as to use, time, and meaning of such relicts is necessary, we may instance in the other and last of our illustrations of the remains upon Rombalds Moor.

The Lanshaw Delves have always attracted notice, and have been characterised as a Roman camp or a British village, as the ideas of the investigator inclined. They were thus Roman to Whitaker and James, and British to Banks, Wardell, and Forrest. Mr. Forrest was very positive, as a few extracts will show: "What is called the camp is simply a British village, consisting sometimes of a double and sometimes a triple row of hut dwellings, upwards of a mile in length by about 40 yards in breadth, narrowing to the western ex-

tremity. All within this area is honeycombed with pits of a circular form, of from 10 to 20 feet, by about five or six feet in height at the centre. . . . These pits we look upon as the foundations of our British ancestors, 'the blue shielded brigantes.' Over these holes thus delved into the soil they erected a covered roof of poles or branches of trees, which they covered with thatch or with sod so as to be weather proof, like the dwellings of the charcoal burners, only more substantial and permanent. At each end is one of a larger size, as though for halls of reception. That at the west end is upwards of 30 feet in diameter, and more than 10 in depth. Along the front of the main body of the village is a line of mounds of a different character; they are twelve in number, and about 10 feet in diameter. Instead of being pits, as the others, they are hillocks, nearly all having an opening in the south-east, which opening discloses a mass of stones, some of which have been exposed to so fierce a fire as to be pulverised or vitrified so as to closely resemble ovens, which we conjecture these to have been, the common bakehouses of the community. There the game, whether wild boar or venison, was cooked, and the bread, if they had any, was baked." After a concise account of other such ancient and modern ovens and of the methods of cooking, Mr. Forrest concludes that "when the savoury morsel was done to the bone, then the door was opened, the meat withdrawn, and the feast at once begun," and for drink, why "water might be obtained from the springs above the swamp immediately in front." This really admirable description of certain present appearances, along with others, were duly placed before Canon Greenwell on his visit on that misty April day. The Canon listened as he looked, and then shrewdly said, to an appeal for his opinion, "I would try it with the pick; that would clear away all doubts." Thinking that there was something in that, and that actual opening out would be as satisfactory as supposition, I engaged Mr. Jonathan Hainsworth to explore the Delves satisfactorily. In October, 1871, he did so, and on November, 13, 1871, the following was published as the result in the Ilkley "Guardian":—

Thus away went all theories of British village halls, of audience and venison feasts, in the certain evidences of these being lime-kilns,

HOLMES: PRE-HISTORIC REMAINS OF ROMBALDS MOOR. 313

and lime-kilns only. Mr. Fison, in his Ilkley address, admitting the certain fact of these delves being lime-kilns, asks, why did they burn lime in such an out-of-the-way spot in such quantities and in permanent use? What did they do with the lime so burnt, and where did they get the limestone, or fuel? Relative to the last, we may state that experts in geology have demonstrated that upon Rombalds Moor there runs a line of glacial drift limestone leavings, reaching from Lanshaw, north-west, to Hawksworth, south-east, which drift appears to have hit against the elevations in that line, and Lanshaw being highest, 1100 feet, would probably first catch the importation of Skipton limestone, and so on to the Whinhill, 800 feet, and Intake Delves, 700 feet. In that case there might have been a considerable quantity of lime drift at Lanshaw, to be utilised and burnt. The large turf bed at the south side of the delves has been well-known to yield large trees of old, and in times more remote would be full of fallen timber. There would thus be fuel. The particular covering of the front of the kilns and their facing south-east would catch the wind, which has always been blowing in that direction when I have been there, and so would make a natural "blast," enabling bog and wood to raise heat essential to fuse the limestone. Speaking of copper mines and smelting at Wady Maghara, Sinai, Lepsius says, (p. 102, Letters): "Hence it appears that this open spot was probably selected for melting the ore on account of the keen draught of wind which, as we were assured by the Arabs, is here almost incessantly blowing." We thus see that at Lanshaw, supposing a drift of limestone to be there, would have both fuel and a blast to work the burning. That they would use the lime thus laboriously made is pretty certain. We trace its use both by Romans, Saxon, and Normans in building, and as the lime would have to be brought down by animals in panniers, so when the drift failed they would be likely to take river boulders up and latterly coal, the cinders of which have been undoubtedly found in the bog and lime ashes of the Lanshaw kilns. Truck-ways, in one case near a dozen parallel, may be yet distinctly traced from the Wharfe to the delves, and the Wharfe yields limestone boulders yet for burning at pits now stationed near to the river. Formerly the facility for lime burning would be at the

top of the moor, and so they placed the kilns at Lanshaw, or Long-Riddings as best.

One might suppose that history would say something about the Lanshaw Delves, the enclosures for cattle, or the tracks and standing stone guide posts upon the moor. But it is silent, even upon the many lime-kilns of Lanshaw. Old men have heard older tell of big trees having been fetched from the bog there, when the kilns were wholly unknown. So the legend of the witches dropping their aprons full of stones forming the big and little Barrows will take us very far back in historic time, but of their real origin we have legend. The period is too far remote. So of the graves of Baildon, (the hill of Baal), the fuller circles of Rombalds Moor, and the cup and ring or chart incised rocks, we have neither whisper nor word, legend, story nor history. That they exist now is certain, and like the dry bones of Ezekiel's vision, it is certain that bone once knit to bone, and sinew to sinew, in the relations of ancient life. By the facts of savage life still existing we may dimly see in the grey dawn of times most remote that a tribe, probably similar to the Fins and Laps now, once lived upon the fringe of retreating glaciers on Rombalds Moor. We still find traces of the flint flakes, with which they scraped the bones of animals they had trapped on the hill or killed in the chase with their flint arrows, or found floating in the then extensive lochs. We can realise with a change of clime how they formed their huts, and then bred cattle. We can surmise of how they began to dream of the infinite, raise pillars to their gods, and dig graves for their dead. We can see how they interred their loved ones, placed the ashes of their dead in costly urns, and covered over their chiefs and heroes with earth or stones, and then circled them round to preserve their remains.

We can realise how they carved symbols upon their monuments, and figured what they thought or felt upon the rocks they held to be sacred. We can reasonably suppose how they grew into families, clans and tribes, associated with friends, and quarrelled with foes, and fought for wives, slaves, territory, or their gods. We can see how they might agree upon tribal boundaries, and construct common roads for transit or travel ; and then, as they thought, fixed them for

ever upon the indestructible rocks in elaborate and painfully cut lines, circles and figures for record. We can trace how they began to clear the soil, stones and weeds, and sow rye, oats and barley, and grinding grain by hand process ; then increasing their flocks, tending them on the hills, and sheltering them in folds and hollows ; they would gradually but slowly rise into domestic comforts. We can see how they dressed the hides of their cattle, and formed them for garments, and so evolved slowly and painfully from primitive barbarism to the semi-civilised condition that the Romans found them in. The valleys were then lakes or dangerous morasses, and the hill sides were covered-by dense forests. The tops of the hills held wood huts and villages, such as the New Zealanders still stockade. They became rich in cattle, had solid canoe boats or wicker coracles. Latterly they had framed wooden carts, and in some places chiefs had the use of chariots; they had acquired the use of metal tools of copper, bronze, gold and even iron. In some instances they traded with foreign countries, and copied the mediums of barter in metal and money. Foreign Missions had visited barbarian Britain, had advanced savage superstition to semi-civilised Druidism with divination, rude morals, and crude social organisation. It is common to stop at these patent inferences from these ascertained facts. But the intelligent antiquary may be permitted to look to the future as well as the past, and to conclude that as progress marks the past, it prefigures the future, or to "indefinite progress for the race—to state of being yet without a name."