

EXPLORATION OF THE HUT CIRCLES IN BROADUN RING AND BROADUN.

BY ROBERT BURNARD.

(Read at South Molton, August, 1894.)

It has long been my ardent desire to dig out the interiors of some of the typical hut circles of Dartmoor, with the view of obtaining evidence which may throw light on the period when these dwellings were occupied. The topography, the known antiquities, and the scenery of this romantic region have been often described, but the time has now arrived for spade exploration, if we are to move forward in the direction of further ascertaining and extending our knowledge of its early history. It has always been a puzzle to account for the large number of hut circles, either in clusters forming considerable villages—which are often enclosed within the remains of walls forming what are locally known as “pounds”—or of the foundations of these ruined dwellings, which are scattered in large numbers over the whole of the granitic area which we comprehensively call Dartmoor.

A brief enumeration of the principal clusters or villages will suffice to illustrate their considerable numbers and localities.

Merivale and under Great Mis Tor.

At and above the rifle range near Princetown.

On the south side of the railway between King Tor and Princetown.

Near Stanlake and close to the junction of the Har Tor Brook and the Meavy.

Between Narrator Brook and Newleycombe Lake on the high ground east of Down Tor. Also south-west of the Stone Row near Down Tor.

From Cadaford Bridge upwards on each side of the Plym, including Trowlsworthy and Ditsworthy Warrens.

Scattered groups on either bank of the Erme above Harford Bridge, and also at Higher Piles.

At Erme Pound and Erme Plains.

On the Avon at Huntingdon Warren.

Between Brockhill mine and the Avon, and also above Shipley Bridge.

Zeal Plains.

Penn Moor.

On the left bank of the head waters of the Yealm, also above Dendles Wood and again opposite Dendles Waste.

On the Bala Brook.

Between Stannon Hill and the Tavy, between Tavy Cleave and Hare Tor, and also between Higher Godsworthy and the Walkham.

Near the Lyd.

On the right bank of the Walkham, on Langstone Moor, opposite Greena Ball.

Around Fernworthy, and from Fernworthy, Batworthy, Scorhill and Endsworthy to Cosdon.

Above Wistmans Wood.

On Beardown opposite Wistmans Wood, and at the forks of the Cowsic.

At Grimspound, and neighbourhood.

On Shapeley Common.

In the neighbourhood of Post Bridge, and Bellaford Tor.

On Reddon Ridge above White Slade.

This incomplete list is enough to demonstrate the fact that at some period or periods these hut circles must have housed a considerable population, and the custom has hitherto been to account for this by connecting these early people with the ancient tin streaming remains on Dartmoor.

This opinion must now be modified, as far as some of these settlements are concerned.

At present we have to deal with the neighbourhood of Post Bridge, a district peculiarly rich in the remains of "pounds" enclosing numerous villages, for there are no less than fifteen of these in an area of a little over one square mile.¹

Some of these enclosures are of a similar type and include hut circles within them, whilst others have now no traces of the foundations of dwellings, and perhaps never contained

¹ For description and map of these, see "Ancient Metropolis of Dartmoor," by A. B. Prowse, M.D., vol. xxiii. *Trans. Devon Association*.

NOTE.—One more "pound" has been found since the above paper was read. It is situated 450 feet S.E. of No. 10 on the map accompanying Dr. Prowse's paper.

them. They may be simply cattle pounds, and possibly of later date.

Last August and September I thoroughly explored the ruined dwellings in two of these "pounds," known as Broadun Ring and Broadun, as well as one hut circle on Whiten Ridge.

In my digging operations, I was accompanied for the most part by the Rev. S. Baring Gould, and I am much indebted to that gentleman for valuable assistance and advice.

The manner of the digging was as follows :

The whole of the turf in the circle was removed by skimming, and was put on one side, to be replaced when the examination was concluded. If the entrance to the hut was visible, the digging started at that point—if the doorway was obliterated owing to displacement or removal of the stones, a commencement was made at the south-west circumference of the circle. From a portion of the circle the "meat" earth, *i.e.* the herbage-bearing soil, was removed, until the "calm," or subsoil of gravel and clay, was reached. All the "meat" earth was carefully examined as it was thrown out, and when nearly on the "calm" the excavated soil and subsoil was passed through a sieve with a mesh of a quarter of an inch.

The whole of the interior of the circle was dealt with in this manner, so that the search was of a thorough description.

All measurements were at once noted in a field book, together with the positions of hearthstones, &c., and the objects found were also duly entered and labelled.

Search was made for "middens" outside the circles, but none were found, although several trenches were dug from the entrances of the huts, in directions which seemed to be favourable for the deposit of domestic rubbish.

It is questionable whether the people who lived in these huts had much to throw away, since they had no shell fish, nor sherds to get rid of, for not a single trace of pottery has been found in all the circles examined. Whatever waste heaps they may have formed were probably composed of material of organic origin, which disappeared in process of time.

After the interior of the circle had been examined, all the soil, &c., was returned and the turf relaid.

No earthenfast stones were touched.

The first circle examined was one of five situated on the southern slope of White Ridge, and lying just mid-way between this point and Stannon Tor (XCIX. N.E).² There appeared to be no "pound" encircling these huts, but attached

² All reference are to Six-inch new Ordnance Survey.

to some are enclosures of rectangular shape, with others partly made up with curved lines of walls. They were probably folds for animals, or patches of cultivated ground or gardens.

From north to south the diameter of the circle explored is 26 feet,³ from east to west 27 feet. The circle is fairly perfect, the foundation stones, some of which are inserted on edge in the ground with others laid on their flat, are of good size—on the S.E. circumference the remains of the wall are five feet thick. The entrance facing the south is in ruins, but from the remains the doorway must have been about four feet square. A whole day was spent in carefully examining the interior, but beyond demonstrating the fact that it was paved with irregular stones laid on the flat, no evidence was obtained which would throw light on the age of the hut. There was no fireplace, nor any evidence of fire. It may have been a store house, for in other groups examined subsequently similar circles were found, amongst what were plainly the remains of habitations.

Since it was desirable that the next diggings should take place in a larger group of circles, further operations were postponed on this site, and Broadun Ring was selected, as it contained within its encircling walls remains of several hut circles which appeared to be of a primitive character.

Broadun Ring lies on the southern slope of Broad Down, and is shewn on XCIX. N.W. and designated the remains of a camp.

It is about 1,400 feet above the level of the sea, on a dry slope, and commands a magnificent view of the valley of the East Dart. The summit of Broad Down rises another 170 feet, about half a mile behind the settlement. It is thus dominated by higher ground, but at too great a distance to be of much service to a hostile attack from the north by a people with primitive weapons.

The nearest water (the modern leat of course excepted) is the East Dart, which flows down on the eastern side of the settlement, some two hundred yards below.

It is not contended that the encircling "pound" is a fortification; the distance from water would render it untenable in the face of a superior investing force for any length of time; but it should be noted that its position in other respects conforms with the idea that the site may have been selected as a place of some security, and a refuge in case of sudden necessity.

³ All measurements of diameters of these circles are internal.

The ruins of the south wall shew that it must have been six to seven feet thick, and some parts of it are still four feet high. In one place the inner and outer faces of the wall are visible. The walls are built with rough blocks of stone, dry laid, and solid through and through. It is impossible now to say how high the wall stood originally, for it has been robbed of stones for newtake walls. There is, however, sufficient in places to show that it must have been at least five feet high, and taking into consideration the abstractions it was probably feet higher than this.

BROADUN RING.

Hut Circle No. 1. Nine feet in diameter, doorway obliterated.

The interior was overgrown with rushes. These and one foot of "meat" earth were removed, and the hard floor of the hut, resting on the "calm," was disclosed. The floor was close down to the level of the foundation of the stones forming the circle, the outside surface being thus about a foot higher than the floor. Three broken "cooking stones"⁴ and some small river stones which had not been fired were sifted out. Two feet from the eastern circumference of the circle, and three-and-a-half from the southern, there was a circular cavity dug out of the hard floor, one foot in diameter and six inches deep. It was probably a cooking hole. This hole was filled with fine loose stuff, very light, and which appeared to be ashes. Close to the cavity were a few little fragments of wood charcoal, a small flint core, and a tiny flake of the same material.

Circle No. 2. The floor was found to be 18 inches below the outside surface. No objects were found, nor were there any traces of a fire place. It is of the same dimensions as No. 1. It was probably a store house.

Circle No. 3. 22 feet in diameter. The hearth was an irregularly, square-shaped stone of about 12 inches. It appeared to have a back and sides, for the stones forming a part of these were in situ. It had evidently been fired, and charcoal lay between and around the stones. Near the fire-place a flat granite stone was found, slightly indented on its flat surface and scored with thin lines.

The stone feels smooth in the direction of the lines, but is "furry" across same. Some edged or pointed implement has evidently been rubbed on it.

⁴ "Cooking stones"—river pebbles which have been fired and used for cooking purposes; they are sometimes termed "pot-boilers."

In excavating this circle there appeared to be a larger number of loose stones in the interior than usual. They lay in a heap, which commenced seven feet from the south circumference, and extended to the north circumference, with clear spaces on either side. By carefully excavating these spaces it was found that the bottom course of stones were square-laid, and formed a sort of platform. By building the loose stones on this definite foundation it made a dais or platform 15 feet long, 7 feet wide, and 2 feet high.

Around the platform the floor was trodden hard, but under the platform the stones were laid on untrodden "calm."

Circle No. 4. Small, irregular, and very ruined, 6 feet in diameter, gave no evidence of occupation, and was probably a store house.

Circles Nos. 5, 6, 7, and 8. These form a very curious group. The foundations of these huts are in such a ruinous condition that the doorways or communications which may have existed between them are now obliterated.

No. 5 is fourteen feet in diameter. On removing the "meat" earth the floor was, as usual, found resting on the "calm." In the centre was a flat stone. Underneath this was another, 20 inches square and 3 inches to 4 inches thick. The latter stone was on a level with the floor, and formed the hearth, for around it were found fragments of wood charcoal, and close by two flint scrapers, a small fragment of the same material, and ten "cooking stones." The upper flat stone was doubtless the back of the hearth.

At the south-west circumference of this circle the remains of the wall are 5 feet high, and here there is a stone platform as in No. 3, but formed of larger blocks, and probably quite perfect.

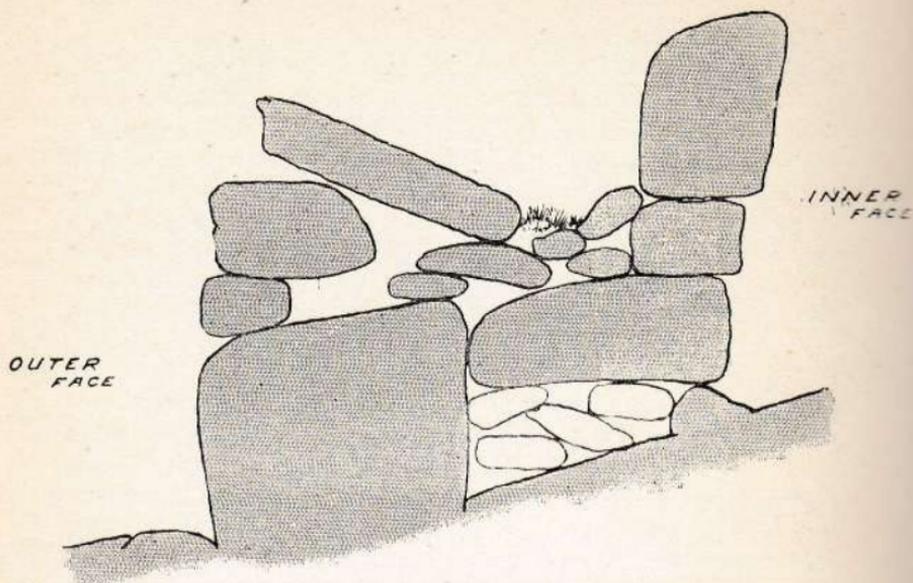
Circle No. 6 had the usual floor, and yielded three "cooking stones." There was no trace of a fire-place.

Circle No. 7 gave a flint flake. No signs of a hearth.

Circle No. 8. The hearth stone 2 feet \times 1 feet 5 inches was in the centre, and around it were fragments of wood charcoal. There were also the remains of another stone platform, as shewn in sketch. This circle is 12 feet in diameter.

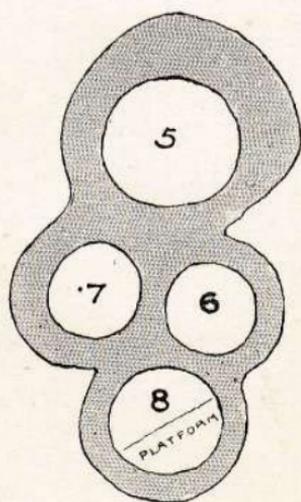
Circle No. 9 was also explored, and gave some charcoal only.

The semi-circle No. 10 *may* be a more modern erection. It yielded nothing, and No. 11 was not examined.



BROADUN RING, SECTION
OF S.E. ENCLOSURE WALL

Scale 2 ft to 1 in



BROADUN RING
GROUP V, VI, VII, VIII.

Scale 20 ft to 1 in.

BROADUN.

The ruined walls, which may be traced almost continuously, enclose an area of more than twelve acres. This makes it the largest known prehistoric enclosure on Dartmoor. It lies south of, and distant one hundred yards from, Broadun Ring.

It contains the ruins of a large number of hut circles—there are at least seventeen which may be easily recognised, and probably the remains of more than twice that number exist, but owing to spoliation by the newtake wall builders, some are mere heaps of stones and cannot now be definitely recognised.

With Broadun Ring, the habitations and storehouses must have been something like fifty in number, so that these settlements were of an important and populous character.

Broadun has a pleasant southerly aspect. The huts were built on a dry slope. Water could be obtained from the Rough Tor Brook, which flows about one hundred yards below the settlement.

Circle No. 1. Diameter 14 feet. The entrance is fairly complete, 2 feet 2 inches wide with jambs 2 feet high. Digging was commenced at the entrance, where the foot stone was found in a perfect condition. Fragments of wood charcoal occurred on the floor, between the entrance and the hearth, and also in and around the fire place.

Just inside the entrance on the left hand side, and close to the foundation stones of the circle, a nest of a dozen "cooking stones" was found.

This circle yielded the following:

60 "cooking stones."

5 pieces of schorl.

9 small rounded river stones of white quartz—about the size of walnuts. These had not been fired. They may have been used for some kind of game, or query, sling stones.

1 smoothing or rubbing stone of altered grit.

1 flint scraper.

In the circle was a large stone which had evidently fallen in from the north wall; on removing this a piece of remarkably clear quartz was found underneath. It is an irregularly shaped fragment, which may have been treasured as an ornament, a charm, or a plaything. It lay on the floor of the hut.

Circle No. 2. Diameter 12½ feet. The hearth stone is very plain, 2½ feet × 1½ feet.

Objects found:

3 cooking stones.

3 flint fragments (one a rude scraper); and some fragments of charcoal.

Circle No. 3. Diameter 15 feet. The hearth stones, which are decidedly the feature of this circle, are 6 feet \times 4 feet. Fragments of wood charcoal were observed around the hearth and in the joints between the stones.

This circle yielded:

4 "cooking stones."

1 piece of altered grit not smoothed by rubbing.

1 small fragment of slaty stone.

Circle No. 4. Diameter 15 feet. There was no hearth, but the fireplace or cooking hole near the centre was a similar circular cavity in the "calm" to that of No. 1 circle, Broadun Ring. Both these holes gave wood charcoal and ashes.

Circle No. 5. There appeared to be no floor to this large circle. No objects were found. It was probably a store house of some kind.

Circle No. 6. The diameter, north to south, is 10 feet 8 inches, from east to west, 8 feet. There were a few "cooking stones," one piece of flint, one rubbing or smoothing stone, and fragments of wood charcoal. No hearth visible, but as the whole circle was roughly paved, the fire was probably placed on the floor. Two other imperfect circles joined these—they were not explored.

Circle No. 7. 11 feet in diameter. This circle was well paved. Signs of fire and wood charcoal in right-hand corner as one entered the circle.

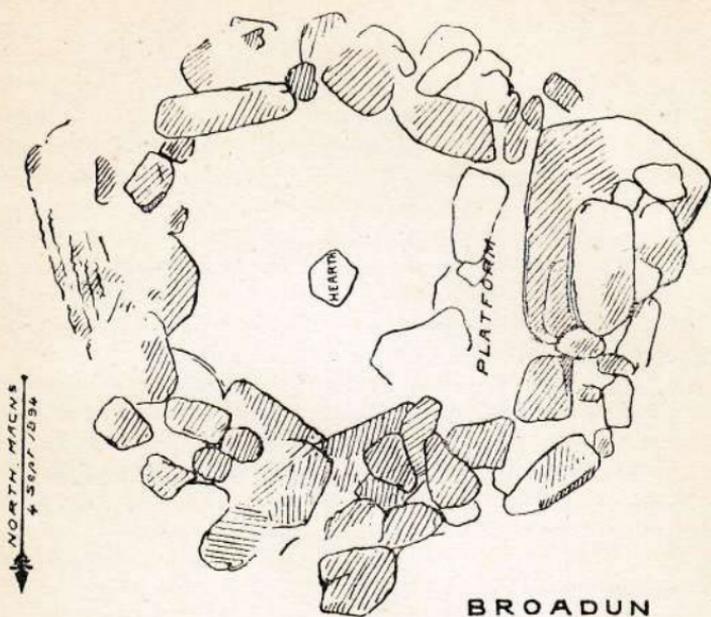
Circle No. 8. The only object found was a flint flake. It possessed a hearth stone.

Circle No. 9. Diameter 14 feet. The hearth in good condition, 2 feet \times 1 foot. The only find here was a "cooking stone," and charcoal in and around the fireplace.

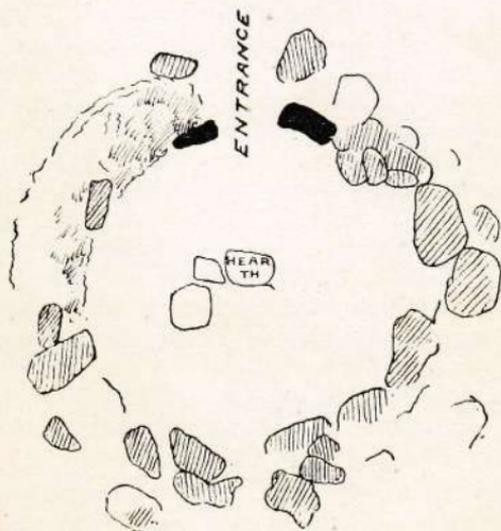
No. 10 was not a circle. It was a heap of stones like a small cairn, near what appeared to be a short piece of straight wall. It might easily be mistaken for the ruins of a circle. On removing the stones a pit was found underneath dug in the "calm." It was filled with stones. In the bottom of the pit was a mixture of wood charcoal and bone ash. The pit was 4 feet deep and $4\frac{1}{2}$ feet in diameter.

Circle No. 11. Diameter 9 feet. Yielded one "cooking stone" and charcoal. The hearth stone was very plain, an irregular square stone of 20 inches.

This then is the result of nearly three weeks of thorough



BROADUN
HUT No. 2.



BROADUN
HUT No. 1

Scale 8ft. to in

exploration, for the complete investigation of these circles requires both time and patience.

Both in Broadun Ring and Broadun frequent search was made for kitchen middens. Standing at the entrance of the circles one imagined the direction in which the dwellers would throw their refuse, and trenches were dug accordingly, but without success.

Their huts were not of the stone bee-hive pattern. If they had been, more of the stones which formed the roofs would have been found as debris in the circles.

The huts appear to have had stone walls of about four to five feet high, doubtless supporting poles of wood which formed a low bell-tent shaped roof, which was most probably thatched with "vags" and rushes, the handiest and best materials available for such a purpose.

The apex had a hole for the emission of smoke.

When the hut was well warmed and the fire clear and smokeless, or damped down with ashes, this hole could have been closed by a "vag." With a skin curtain over the doorway the interior would be as warm as an oven, for the walls were backed with soil and growing turf on the outside, and the eaves of the roof were doubtless made thoroughly tight with the same materials.

The floors were from nine inches to a foot below the outside surface. In most cases they were simply the "calm" trodden hard, in a few instances rough stones laid on their flat formed the bottom.

A layer of rushes on the top of either made matters much more comfortable.

The remains of the stone platforms found in circles Nos. 3, 5, and 8, in Broadun Ring, are very interesting. They doubtless formed a lounging dais by day and beds at night. Covered with dry grass or heather they made comfortable couches.

Similar platforms, but of wood, are used by the Eskimo at the present time.

None of these platforms were observed in Broadun, but this settlement is in a much more ruined condition than the Ring.

The wood charcoal found in and around the fire-places in the huts appears to be mostly from oak.

Peat may have been burnt as well, but the presence of oak charcoal clearly shews that trees of this wood flourished in the neighbourhood. This is borne out by the evidence of the neighbouring bogs in Gawler and Stannon Bottoms.

The peat cutters in the turf-ties situated in these places are continually coming across bog oak, hazel, furze, and alder. There is so much wood in these bogs that it is clear that these valleys were in a remote period covered with thickets in which was a goodly muster of oaks of a respectable size.⁵

The most striking feature of all is the entire absence of pottery or metal in any of the circles examined.

Not a single scrap of either was found.

Considering the evidence afforded by the examination of the two settlements, the absence of the latter is not to be wondered at, for it all points to a pre-metallic age, but it is extraordinary that a people who could build fairly comfortable dwellings, which were peculiarly suitable for a Dartmoor climate, should have apparently pursued the even tenour of their ways without a cloam pot or pan to assist them in their domestic economy. Something is to be said for the absence of suitable clay, but these people imported their chalk flints, and the one might as well come as the other.

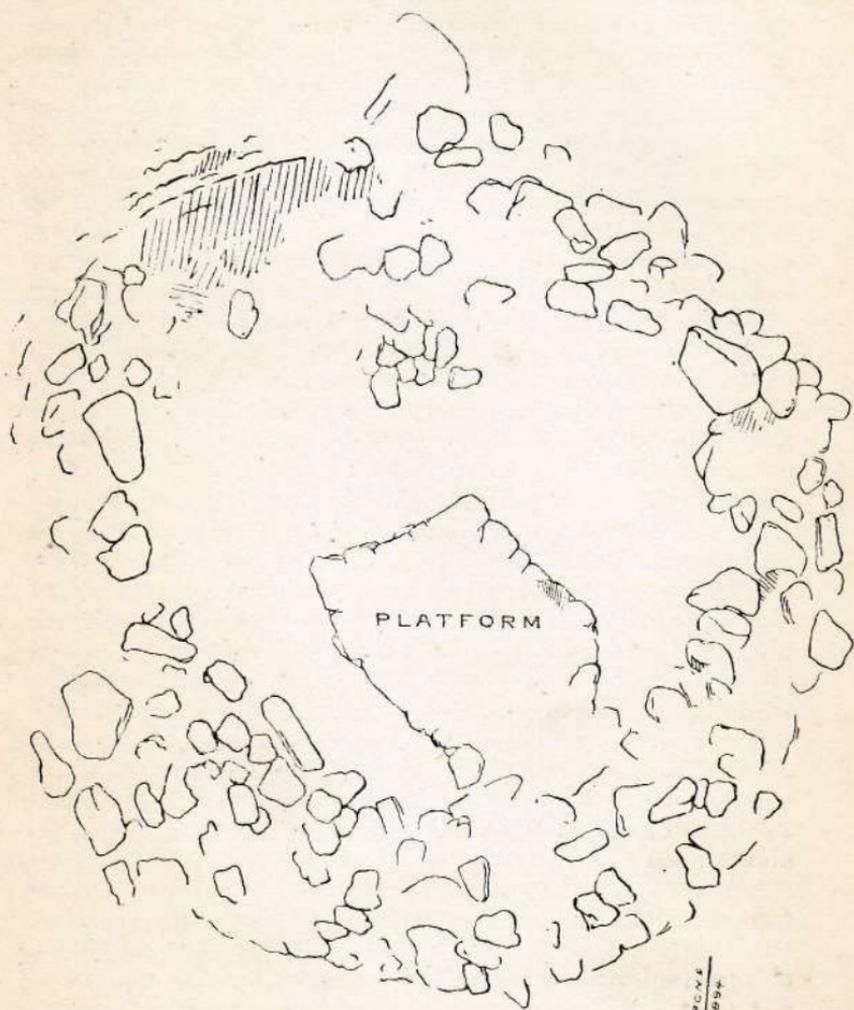
But this wonder is lessened if we examine the proceedings of modern savages.

We can then understand that skins and "cooking stones" could be made to do duties which we usually associate with vessels of pottery or metal.

"There is a very curious custom amongst the Assinneboins, from which they have taken their name, a name given them by their neighbours, from a singular mode they have of boiling their meat, which is done in the following manner: when they kill meat a hole is dug in the ground about the size of a common pot, and a piece of the raw hide of the animal, as taken from the back, is put over the hole, and then pressed down with the hands close round the sides and filled with water. The meat to be boiled is then put in this hole or pot of water; and in a fire, which is built near by, several large stones are heated to a red heat, which are successively dipped and held into the water until the meat is boiled; from this singular and peculiar custom the Ojibbeways have given them the appellation of Assinneboins or stone-boilers. This custom is a very awkward and tedious one, and used only as an ingenious means of boiling their meat, by a tribe which was too rude and ignorant to construct a kettle or pot.

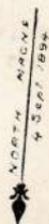
"The traders have recently supplied these people with pots, and even long before that the Mandans had instructed

⁵ The author exhumed one specimen in Gawler Bottom, which had a bole circumference of 3 feet 4 inches, and was 10 feet 8 inches long.



BROADUN RING
HUT N^o III.

Scale 8 ft to 1 in



them in the secret of manufacturing very good and serviceable earthen pots, which together have entirely done away with the custom, excepting at public festivals, where they seem, like all others of the human family, to take pleasure in cherishing and perpetuating their ancient customs."⁶

This was the condition of a tribe of Indians during the present century. They existed without metal or pottery, although neighbouring tribes used both these materials.

The Assineboins represented the primitive condition of the Indians, and compare with the neolithic state of early races in Europe.

The evidence yielded by the diggings at Broadun Ring and Broadun clearly shows that the inhabitants existed in a neolithic condition. They may not have been early neolithic, for it was possible for them, perhaps a poorer race, to have existed on Dartmoor without pottery, whilst their richer and more advanced contemporaries flourished in more favoured places with superior implements and utensils. They were evidently a people who possessed cattle.

The enclosures surrounding their dwellings harboured these at night, so as to secure them from the predatory animals which must then have existed among the fastnesses of the Moor. The upland of Dartmoor was probably a desirable pastoral country, for although many of the valleys were timbered thickets, the great slopes running up to the summits of the tors were open and afforded plenty of rough pasturage.

The in-country, although much more fertile, must have been covered with a large amount of forest and with dense growths of furze—rendering pasturage scarce.

This more open character of the Moor and its retired position may account for the large quantity of the remains of the dwellings of a neolithic people, which are scattered over its surface.

Some of the hut circles which yielded no evidence of human occupation, may have been used as store houses, or as places in which the younger domestic animals were housed.

There is no reason for doubting that these settlements were occupied all the year round.

The picture of pre-historic Post Bridge reveals no less than fifteen of these enclosures, of more or less area.

They were built in such a permanent form that notwithstanding the ravages of time and the spoliation of man,

⁶ CATLIN'S *North American Indians*. London, 1841, p. 54, vol. i.

their foundations may still be traced with comparative accuracy.

They are apparently not all of the same period, nor in many of them can any remains of dwellings be now found.

Some of these, however, have yielded considerable numbers of flint flakes and scrapers.

The ancient trackway leading to Broadun must have been well used in pre-historic times, for it has yielded a large number of flint objects, including two small broken arrow heads.

The cattle owned by these people were doubtless a hardy race, and although fodder is scarce on Dartmoor in the winter, there is sufficient for a limited amount of stock.

Experienced moormen have expressed the opinion that, with large areas for grazing, modern cattle could be maintained all the year round on the Moor.

No stones for grinding grain were found.

It is possible that some rough corn, such as "spelt," was grown, which may have been parched, or boiled in skins with the "cooking stones," but flesh was apparently the staple food, and this was supplied by domestic cattle, and the products of the chase.

The striking features disclosed by the exploration are—the utter absence of metal or pottery, but the presence of considerable numbers of "cooking stones," and a few objects of flint; the stone dais or platforms found in circles Nos. 3, 5, and 8; the hearth stones in nearly every case where the hut was the abode of man; and the cooking holes in Nos. 1 and 4.

As a rule the hearth stones were at or near the centre of the hut; in no case were they placed against the walls of the circle. Unfortunately the walls of the circles have been very much robbed of their stones, by the newtake wall builders, but happily the floors of the huts, protected by a layer of "meat" earth, and grass turf, remained intact.

I believe this is the first systematic exploration of Dartmoor Hut Circles, and it is to be hoped that further diggings will take place in other hut clusters, so that the neolithic character of Broadun Ring and Broadun may be confirmed.⁷

⁷ This has subsequently been done in the commencement of the thorough exploration of Grimspound, by a Committee of Dartmoor experts. The result of this is that the Grimspounders are also shewn to have been a neolithic people.