# ON THE PREHISTORIC ANTIQUITIES OF DARTMOOR. 

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Or the several counties of England there is, perhaps, none that affords more varied scenery, each equally beautiful after its kind, than may be seen in Devonshire. On the southern osast, the bold headlands, with intermediate sloping lands, $m$ far out into the sea, while inland fertile valleys and wooded hills afford picturesque loveliness to a landscape that scarcely has its rival. In the more southern "coombs," or sheltered vales, from which Devonshire derives its name,* the zenial climate is so mild that exotic plants live unprotected In the open air. The myrtle, the fuchsia, and the magnolia become large trees, while the lemon and citron, with but ITtle shelter from the keenest frosts, produce fruit that has tont been surpassed in size and flavour. This district was meciently called, and is still known as, the "South Hams."
More inland lies the region of Dartmoor, a vast tract of molulating ground, having its highest points capped with maite tors, rising to two thousand feet above the sea. Bare -al exposed, there is not a tree to be seen, except where the criving hand of man has endeavoured to overcome in a few slated spots the cruelty of nature.
De la Beche describes Dartmoor as "an elevated mass of and, of an irregular form, broken into numerous minor hills, crowned by groups of picturesque rocks, provincially cred tors ; and, for the most part, presenting a wild mixture beath, bog, rocks, and rapid streams."
Troo hundred years ago, Risden wrote, "Between the North oid the South Hams there lieth a chain of hills, consisting blackish earth, both rocky and heathy, called by a name nrcowed of its barrenness, Dartmoor; richer in its bowels

[^0]than in the face thereof; yielding tin and turf, which to save for fuel, you would wonder to see how busy the by-dwellers be at some seasons of the year; whose tops and tors are in winter covered with a white cap, but in summer the bordering neighbours bring herds of cattle and flocks of sheep to pasture there. From these hills, or rather mountains, the mother of many rivers, the land declineth either way; witness their divers courses, some of which disburden themselves in the British Ocean, and others, by long wandering, seek the Severn Sea."

This quaint description of the central portion of Devon appears to be as true in the present day as at the time of which this author wrote. But in order to appreciate, as far as in our power lies, the customs and habits of a pre-historic people, it should be our endeavour, as far as practicable, to ascertain the topographical character of the country at, or as near as possible to, the period at which these people are supposed to have lived.

If we go back to the earliest records, we find that when the Conqueror came, those fertile valleys of Devon, which we are accustomed to hear spoken of as the Garden of England, existed only as a dense virgin forest. Here and there were scanty clearings around Saxon strongholds, near which some wooden shanties roughly built might be seen, while the old Roman road which led from Exeter to Plymouth was probably still capable of being distinguished, though rapidly becoming entombed in the struggle of the surrounding vegetation to regain its dominion. The submerged bays and inlets all round the coast demonstrate that wood once grew even to the water's level, and the Domesday Book tells of the large amount of forest and uncultivated lands that existed at the end of the eleventh century, but makes no mention of Dartmoor. This name appears to be first used in historic records in the year A.D. 1236, in a royal patent, wherein Henry III grants to God and the holy Church of St. Petrock of Lydford, a tenth of the herbage of Dertemore ; and four years after, that is in 1240, the same king Henry, by perambulation, made a certain portion a forest, which is known as the Forest of Dartmoor at this present time.

With the term "forest" we are liable to associate numerous trees, but in this instance the term either applied to such lands as were brought under the forest laws, or else indicated that it was beyond the pale of cultivation, and so a strange or foreign tract of land. But whatever the origin of the term, Dartmoor has always been a sterile district, unless we
go back to the pre-historic period, when our raised sea-beaches were at the present sea-level, so that by lowering the whole country some thirty feet or more, we may presume that the climate was so modified, that the trees, whose roots and trunks are now found preserved in the numerous peat bogs, were then in full luxuriance.

But even supposing this to have been the case, the quantity is not sufficient to induce us to believe but that, when all the rest of the country was densely covered with dark clouds of forest, the region of Dartmoor was a vast undulating district of turf and bog. However changed may be the general aspect of the country, there are some conditions that must be still the same. "The mother of many rivers," the streams flow on now the same as in ages past. In the beds of these many rivers, most of the tin that was supplied to the nations of Europe was found. Along the course of every stream numerous ancient workings demonstrate the eagerness of the search; and the remains of ancient smelting-houses show the various stages in the course of progressive civilization. Ancient moulds cut on the face of hewn and unhewn blocks of granite are frequently found,-the more perfect in connection with the numerous smelting-houses on the moor, and those of rudest form in connection with spots that still retain the evidence of fire. These latter are known, more especially in Cornwall, by the name of "Jews' houses." Here traces of smelted tin are frequently found, sometimes in small grains, and occasionally in large blocks. Some of these have been preserved. One in the museum at Truro weighs about 130 Ibs., and is shaped like a butcher's tray ; ${ }^{*}$ it is two feet eleven inches wide, and three inches thick at the centre; perfectly flat on one side, and curved on the other, and having four prolongations at the corners, each a foot long. It is well adapted for being carried by two men; for being placed at the bottom of a boat; and for being strapped, one on each side, with their flat surfaces against the sides of a horse. This block of tin was dredged in Falmouth harbour, where probably the boat that was exporting it had been lost.

Some information respecting the climate is also necessary to assist us in approximating to a knowledge of the habits and condition of the prehistoric people. Before the time of Diodorus, Hecatæus said, that "there is an island in the Ocean over against Gaul, under the Arctic Pole, where the

[^1]Hyperboreans dwell, so called because they lie beyond the breezes of the north wind; that the soil there is very rich and fruitful, and the climate temperate, inasmuch as there are two crops in the year." This is assumed to be the south of Britain, as being the only place that answers to the description of the old geographer. Thus, as far back as we have records, the climate of Devonshire along the sea-border appears to have but little altered. We must, therefore, conclude, that that of the interior also cannot have much changed.

The climate of Dartmoor, as we know it now, is very different from that of the rest of Devonshire, and is very varied in itself. Its summers are genial and pleasant, and the hottest days are always tempered by a refreshing coolness born of the altitude to which the tors are elevated. In the winter the whole is changed. Rain, frost, snow, or fog, is the daily aspect from November until March. But rain does not fairly express the humidity of the climate. The wet pervades every place and thing; the thickest granite walls will not keep it out, and when the stone has been faced with brick, the moisture seems to rise from the soil within, or is condensed upon the walls, for they seem still to drop with wet. The snow in this wild place is more severe than is known elsewhere in the county. Snow in Devonshire is but a thing of beauty. It comes in a night, and thaws in a day; it is welcomed as a sign of winter, and is enjoyed while it lasts. But on Dartmoor a snowstorm is a fearful thing; the hardest Moor-man dares not venture out, and woe betide the traveller who may be caught in it. Scarcely a winter passes but we learn of some life being lost in this wild place.

But we are writing of this present time, when Dartmoor is comparatively thickly inhabited, when broad, and well-kept turnpike roads traverse the district from end to end in every direction. The time, however, is not so long since, counting by years, when the direct road across the moor was defined by granite pillars with letters on the side, to direct the traveller to the town to which he was journeying. Several of these posts still remain between Hessary Tor and Merrivale Bridge, something like a furlong distant from each other, with the letters $A$ on one side and $T$ on the other, showing that the line of pillars directed the way from Ashburton to Tavistock.

Besides the rain and snow, the mists are among the most disagreeable features of the moor. These are the more troublesome, because of their frequency and of the sudden-
ness with which they come on. A small, unsuspicious cloud may be seen hanging round the summit of a neighbouring tor; anon, in half a hour the small cloud expands and rolls down the mountain slope, shutting out everything from view. Woe to the traveller who, without compass, may be on the moor then!

And, in the bright summer days, the air is so buoyant and elastic that invalids grow strong, and old men young, with that delicious consciousness of life which is rarely to be met with in busy scenes, and never felt in crowded cities. Such was the climate of Dartmoor in the old time, when the early inhabitants of these islands erected those huge and unwrought monuments to which I desire to draw attention.

The exceptionally beautiful summer of 1870 has been most favourable for moorland exploration. This has been particularly true of Dartmoor, where in most years the extensive tracts of bog are very wet and soft. This year a horse could easily pass over the most dangerous places and not be more than fetlock deep, and that more frequently in dust than in mire. The drying of the soil has been visible over every portion of the surface ; most conspicuously in the neighbourhood of the rocks and stones.

Round the base of every boulder a margin of unstained granite marked the action that the vegetable mould has had upon its surface. Disintegration is moreover strongly evidenced in the numerous fragments of granite found round the base of every stone.

These splinters demonstrate the gradual destruction from weather-action of these old moorland monuments; a fact that in itself accounts for the absence of ancient markings (even if such ever existed) being still found.

I think that we should first attempt to arrive at a knowledge of the dwellings which the old inhabitants erected on the moor, and in which they probably lived at least half the year. These are somewhat differently constructed in different parts of the moor; sometimes existing in clusters, and sometimes as solitary dwellings; sometimes in connection with what we call Druidical remains (for want of a better name), sometimes in connection with ancient stream tinworkings, and sometimes associated with enclosures of small tracts of cultivation.

The hut-dwellings were generally built with a double row of stones closely put together, the outer one being about two feet distant from the inner. These hut-circles range generally from nine feet in diameter to five and thirty; and
inside some of those of medium size at the centre, is frequently a small heap of stones which has been supposed to have been the remains of a fire-place (pl. i. fig. 4). The interior and upper portion of the walls of these circles was undoubtedly built with turf cut from the surrounding country. The small heap of stones in the centre that has been described as a fire-place was, I believe, a spot on which an upright pole was fixed for the purpose of supporting the roof; thus the turf was gradually built inwards until it was necessary to support it from within. In larger dwellings no such stones are apparent, and we must therefore assume that their greater span required some other mode of support. Thus we may imagine that the turf roof was kept up by a series of rafters, or poles, resting one of the ends on the external wall, while the others met together in the middle, and here, being tied together by some strips of bark, they formed the apex of the roof, when probably the imperfect connection of the materials allowed the escape of smoke from the fires within (pl. i. figs. 1 and 2).

Some writers have contended that after the first few feet of stone and turf, the huts were roofed in with a thatch of rushes.

Rushes are to be found on the moor in some quantity, but certainly not in such abundance as would make them the easiest material to collect. Neither would they be found the most suitable. The large span of the dwellings seems to contradict the idea of a roof such as would make reed serviceable. A thatched roof can only be practically valuable when it is high-pitched, since otherwise the moisture which is so prevalent in this district, would rapidly penetrate the roof and be continually dropping within; and a steep or highpitched roof in huts of from twenty to thirty feet diameter could only be attained by raising them to so great a height as to preclude their being able to withstand the frequent storms of the colder seasons.

On the Dartmoor there is nothing so convenient and so easy of being procured as the turf of the neighbourhood, and moreover nothing so suitable for the purpose. Peat when fresh cut has a consistency more like that of clay; under small pressure only, it will readily bind very compactly, and, after having been once dried in the sun, will resist with considerable persistence the penetration of the heaviest rain. This would be used most probably for the walls, while turf, locally known as "fag," would be best for the roof, and is still used for that purpose on the moor; it has also the


Fig. 1.
Fig. 2.


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Fig. 5.


Fig. 6.
aivantage of allowing the huts to be so low that the wildest veather would pass over the villages without injuring them. The remains of these huts are generally found associated groups, sometimes in very large villages-rarely alone. sey are generally found on the sunny side of the torsfrequently in the neighbourhood of a stream which shows signs of having been well worked over for tin. Wherever Sey are found they frequently seem to be associated, more or ass intimately, with other remains, such as circles, parallel, kistvaens, etc., the evidences of past history, of which we have no other record; and if care be not taken to preserve them, these are liable to be broken up to mend our highways, ar become the gate-posts of some neighbouring field. There many instances where these associated villages are, or were, surrounded by a wall of granite stones. These appear 5 possess features varying somewhat in different localities. the side of the hill under Shelltop is one that is enclosed large stones, which built up a wall of considerable ensions round it, still in tolerable preservation. The enclosure is nearly square, with the corners rounded, being ubout one hundred and fifty paces each way, and enclosed on sides except what appear to have been entrances from whthout, one of which is near the upper extremity on the astern side, while the second is on the lower and southern On each side of the lower entrance there are the ins of small huts or chambers, built in connection with wall of enclosure. These appear to have been built the protection of the sentinels placed to guard the adnission to the village camp; two other such sentinel-huts placed one on each side of an old trackway that npproaches the village at the south-east corner, and leaves it izin on the south-western corner, and may be traced for long distance over the moor leading to a cairn on one , and to an avenue and cairn on the other. Within the melosure are nine or ten hut-dwellings, two of which are peoliar from being double. Another enclosure of somewhat milar character is the better known village of Grimspound. was described in Rowe's Perambulation of Dartmoor two-and-twenty years since, and appears to be nearly e same condition now as then. The stones at Grims1 are larger and more cyclopean in character than those the village just described under Shelltop, consisting mostly If moorstone blocks, so large as not to be easily displaced. The average height of the rampart is still about six feet, but the width of the base is fully twenty feet. With the exception
of an opening on the east and west, the enclosure is perfect, surrounding an area of about four acres. The hut-circles in this enclosure are numerous, occupying every space, leaving only one vacant spot at the upper end. A spring rises near the eastern side, and skilfully conducted for some distance below the wall, supplied the inhabitants with pure water. The whole, says Mr. Rowe, presents a more complete specimen of an ancient British settlement than will perhaps be found in any other part of the island. On many parts of the moor enclosed villages may be found somewhat similar in character. There is one near the head of the Yealm, bnilt with rather smaller stones than those previously described, the study of which, I think, may throw a little light on the engineering architecture of the period. The enclosure, or pound, as it is locally called, is about a hundred and forty yards square, and encloses about thirty huts. On the western side extends a second enclosure, but not quite so large. The entrance to both these walled villages is towards the south.

In some parts for a few feet the wall is tolerably perfect; for instance, at the south-eastern corner, for about six feet, the wall has a perpendicular face on the outer side; about half way up the eastern wall it is tolerably perfect for a yard or two on the inner side (pl. iii. fig. 4). I am therefore enabled to show that the base of this old wall, though somewhat irregular, was about six or eight feet in breadth. The wall was first commenced by an internal and an external row of stones fixed in the ground on the edges, so as to stand upright; within these two rows the stones were placed, with a small attempt at regularity, and (judging by the quantity of stones that lie about) to the height probably of from six to eight feet. The entrance to the enclosure was on the southern side, being that which is nearest to the river, which is about a quarter of a mile distant. On the upper, or northern side, towards the eastern corner, there is another opening, which appears rather to have been made by the destruction of the fence than to be intentional in its design. Near this opening there stands against the outer surface of the wall a small hut of beehive shape, built of stones, only the roof of which has fallen in (pl. i. fig. 3), the walls still remaining in some parts to the height of about five feet. Seeing that it stands near a gap in the main enclosure, one would be inclined to think that it might have been erected recently by some loiterers on the moor, but for the following circumstances. First, there are evidently the remains of two
three others on the eastern side ; that is, the side most open to a wide expanse of moor; and secondly, that there is in the plan of the hut a peculiarity of form that I have seen zowhere else except in the moorland chambers. The form approaches that of being straight on two sides, and curved on the third. The walls are about three feet in thickness, and slope inwards. Within this enclosure are about thirty but-circles of different sizes, and within the smaller enclosure at the south-western extremity several more. Outside the wall on the summit of the hill, and on all sides, are a very large number of the remains of similar dwellings, many of which appear to have been built almost wholly with turf and stone. This may, I think, be gathered not only from the circumstance that in some places a few feet of such mixture material may be found, but also from the quantity of small granite stones which remain on the ground within the circles, the remaining evidence left by the debris of fallen zoofs of these old abodes.

At Merrivale Bridge there are two enclosed villages-one upon the plan of that last described, and the other still more cyclopean in character, the entrenchment being formed with lage blocks of moorstone. But these are retained in their position only for about half the circuit of the village. There Is an enclosed village on the Avon, the huts within the circle which are numerous; many of these have in connection with them smaller erections of the beehive construction, some of which are in tolerably perfect condition. That which I figure as fig. 5, pl. i. has only a small hole on the one side near the top broken in. This hut appears to have been built according to the usual plan of these buildings; that is, by mradually placing stones one on the top of another, each scoceeding one reaching still farther in than the preceding; io this way all parts of the wall incline towards the centre, are being taken that the weight of stone balances, so as not topple the sides over; in this way they are raised until the opposite sides of the building approach near enough to each other so as to be spanned by a single capstone which completes the arch on the summit. One such building as this still exists, in very perfect condition, on the banks of a stream that falls into the Erme on the right bank between Staldon Moor and Staldon Barrow. This is shown in fig. 6, g2. iii. It is about six feet long, four wide, and three high; the stones of the side walls overlap each other, and three large capstones form the roof. The outside of the building is much higher, but this is due to the accumulated vegetable
mould of many years. The entrance to this strange little building is up the stream, and one would have supposed it very liable to have been inundated by the floods that must occasionally have poured down the brook. To obviate this, two or three large stones defend the entrance, by being placed upright across the lower portion of the doorway; and about three or four feet distant is a low wall of large granite stones, that was evidently placed to act as a breakwater, and to direct the flood away from the entrance of the building; in this it has been successful, since had it been otherwise, the hut would not have continued to enable us to describe it. This last differs from those on the Avon in being solitary, no such hut or hut-circle being found within some considerable distance. This erection appears to be somewhat more rounded also, but this may arise, as is most probably the case, from the character of the overgrowth of soil and vegetation-the one on the Erme being covered with heather and ferns, while those on the Avon are mostly covered with turf and short weeds.

On the Avon the beehive huts are not only in close connection with the remains of ancient villages, but are in every instance incorporated as portions of a hut circle. That which I have described (pl. i. fig. 5), although standing in close connection with the wall of a hut, yet occupies a place within a circle that is somewhat oval in form, being about thirteen feet long and eight broad, the entrance to which is at the opposite extremity to that of the beehive erection. This appears to be the general character of these buildings, but there is one that varies in its construction from the others. The one that I have figured as fig. 1, pl. ii. has what appears to have been a short passage leading to it, but this which seems to have the inner side of the passage is, I think, the remains of a central wall, which supported the roof of the building; my reason for so thinking is in consequence of a close examination of the stones that remain in position, of which the drawing is a tolerably close representation. The stone which stands as the central portion of the roof, instead, as in the other huts of this description, forming the cap or covering stone of the roof, lies under ont extremity of a long stone that rests its opposite end on the outer wall. To do this, the stone at the inner end must have received support. This stone, to all appearance, was a continuation of the inner wall of the supposed passage. therefore believe that a correct restoration of the hut would show it to have been an oblong erection with a wall runuing


Fig. 1.


Flg 2.


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Fro. 4.
through the longer axis, from the summit of which long flat stones sloped to meet the stones that form the outer walls, one on each side, so as to form a double chamber, such as I have given in section in fig. 2, pl. ii.

The form and size of these small huts are strong evidence their not haying been used as dwellings, but of their incorporation as parts of larger huts. There is every reason to think that they were places for keeping stores of food, or other valued possessions in. The hut circles are tolerably sumerous, but all have not beehive erections in connection with them, although there are several specimens of the latter to be found among them. Some of the hut circles are satside, but most of them are within a walled enclosure of solerably strong uncemented masonry. The outer wall of this village affords no variation worthy of remark as distinguishing it from some of those previously described ; but there is one on the western slope of Trowlsworthy Tor that annot be passed over without especial notice.
This enclosure is nearly circular, and measures about one landred and fifty paces each way (pl. iii. fig. 1). The walls are unbroken through the entire circuit, excepting at two entrances, one facing towards the north, the other towards the south. These two entrances I wish to describe. The walls Thich form the circle are about five feet in width, and the entrances are about six feet. The opening on the north side
blocked up by four walls, each wall being diagonally phoed with regard to those of the enclosure, two within and tro without, placed in the form of a cross. The outer walls extend for about twenty-four feet each, running smaller awrards the distal extremity, and larger towards the enchsure, where they approach each other so near that only one ann at a time can pass between them; so also on each side of these walls, between them and the extremities of those of the enclosure, there is but space enough for one person at a me to pass in or out. Within the enclosure, the inner walls ertend-one for about twenty-seven feet, and the other for alove twenty feet. The inner walls resemble those on the moter side, except that they reverse their position, and extend Serther from each other the farther they advance within, where also they as gradually decrease in size and importance. At the southern entrance the arrangement is somewhat EFerent. The walls, which are erected on the outer side, ate not so straight, and have the distal extremities curved, and the space within heaped irregularly with large masses of graite. The inner walls are likewise less straight-more
particularly that which lies most towards the west. The outer and the inner walls are brought so near that it would be impossible that more than one person at a time could pass. Within this entrance to the enclosure is a hut-circle which differs from these relics generally as well as from those within the present circle also, in being placed on made ground; the ground evidently having been built up for making the hut to stand upon level ground.

I think that these two kinds of works at the gateways or entrances to the camp are evidence of the military character of the enclosure, since they are evidently designed to prevent a rush of many men, it being impossible for more than one person to pass at a time. And if the square-like chamber on the inner side of the southern entrance, of which a few stones in line still remain, has been intended as a place for a sentinel watch, a single man might defend such a position against great odds. The whole plan, I think, is an interesting specimen of ancient military engineering.

I know of but one thing at all resembling these gateways, and that is on the same hill, near the ridge, where a wall of about fifteen feet thick extends from Trowlsworthy Tor to near the banks of the Cad, a distance of a mile. About a quarter of a mile from the Tor there is an opening of several feet in width, but the passage is narrowed by two walls on either side. Here instead of the flanking walls being straight, as in the northern gateway of the enclosure, they are curved, so as to widen still more the entrance the farther the distance from the main wall.

On Brown Heath, near the head of the Erme, are two enclosures of about one hundred and fifty yards in diameter, in which are several hut-circles (pl. iii. fig. 2). These two ( $a, a$ ) are connected by, or at all events, lie adjacent to a stone avenue (b), of about 177 yards in length, with a kistvaen enclosed within a circle of stones (c), of which fourteen are still standing. The avenue is a double one, and lies north and south, the kistvaen being at the northern extremity. At about one-third of the length of the avenue from the kistvaen are the remains of a hut-circle (d), which impinges so closely upon the avenue that it, is a wonder that the one has not destroyed the other.

It is a curious question here to consider which of these two was the first in position. If the avenue were first placed, we should have thought that those who built the hut would have used the stones of which the avenue was formed for the purpose of erecting the foundation of their abode. Or even had
the large enclosure been of later date than the avenue, we should have supposed that the stones would have been removed at a time when such an enormous quantity was wanted for the building of these extensive walls. These lying so conveniently would have been first used had the enclosures been of later date than the age of the avenue. I think that this evidence is of value in helping to prove that the two kinds of structures were coeval in date; or at all events that the circles must have been placed in position before the period when the sacred character attached to the avenue ceased to have an influence over the minds of the people who inhabited Dartmoor.

About a quarter of a mile from these enclosures is one of modern date, known as Ermepound. This was erected, as its name implies, for the purpose of impounding stray cattle. A single glance at this is sufficient to show that it is no old village, as we believe the others to have been. It bears all the evidence of a construction carried out for the purpose of forming an enclosure that should at the same time be hastily and inexpensively built. It is irregular in form, and comparatively small in size.

On Shaugh Moor there is one that is circular in form, the walls being built with huge moorstone blocks, probably banked between with turf. Within this enclosure there is but a single hut-circle, and that near the centre. About forty paces distant on the hill-side there are the remains of tracklines, made with huge blocks of granite placed on the ends, some near together, others more or less distant. There is an enclosure of irregular shape under Black Tor, and others under Mist Tor, etc.

Read by the light of the poor records that are yet left to as, and which are daily becoming obliterated, I think that we may conclude that we have in these monuments the remains of walled villages, the inhabitants of which, in times of security and peace, dwelt in the surrounding country, but when an enemy was known to be approaching they crowded within the fortified enclosures. The several stone huts outside the wall at the Yealm Head were probably watch-houses, from whence the sentinels could always keep guard over the outlying enemy without being observed himself.

The village at Kestor Rock is not so enclosed, but appears to have been inhabited by a people who enjoyed peace, for the numerous track-lines that cross the hill-side leave the evidence of a people whose thoughts were given to the cultiration of the soil. So also were probably the tribes who peopled the neighbourhood of Rippon Tor.

The hut-circles in the neighbourhood of Kestor differ from all others that we know of on the moor, in having the surface of the ground excavated, the slope of the hill being cut away so as to make the floor of the huts level; a small fact, but one which suggests that the people endeavoured to make their houses comfortable, and therefore affords evidence of their long residence in the place.

In the neighbourhood of many of these villages (and perhaps at one time near them all) stand the remains of what are known as stone avenues or Parallellitha.

These ancient megalithic remains are peculiar to Dartmoor, at least as far as this country is concerned.

In the island of Lewes there is an avenue of nineteen stones leading to a circle of twelve others, known as the temple of Classerness, and Mr. Stuart, in his memoirs on stone circles and allignments, says that in Scotland the cairns have lines of pillars leading from them.
In Brittany an avenue of large stones leads to the Dracontium of Carnac. But the avenues on Dartmoor appear to differ from either of these, and, although they have been described as Vice Sacra, I think we have little evidence to show that they were more than burial places for the honoured dead.

Of these avenues the most extensive are those found on Shuffledown Moore, near the Kestor Rock. Here they extend for about half a mile in length. They consist of five separate avenues, and have been described by the Rev. Mr. Rowe and Mr. Ormerod in the Transactions of the Plymouth Institution. All the avenues in this neighbourhood have a more or less north and south direction. The first lies almost due north and south, and terminates in a triple circle of upright stones at the southern extremity.

The northern limit is not clearly defined, and is imperfect, but can be traced for about one hundred and forty paces. A second avenue, running S.S.E., is about the same length as the preceding, from which it is distant about thirteen yards. This second avenue has no apparent termination in any circle or cairn, but this may arise from its destruction through the passage of a tack-line traversing it at the southern limit.

A third avenue commences a little to the west of the triple circle of stones, and runs in a S.S.E. direction, and terminates in a circle of stones, of which eight remain, enclosing a kistvaen, the covering stone of which is gone. This avenue is in tolerable condition, though some of the stones are missing, and others have fallen; and is about one hundred and ten
paces long. A few paces to the south a fourth avenue commences, in small stones, and runs in a direction almost due south, and is lost before it reaches its supposed termination in the Longstone Maen. Beyond this Mr. Ormerod says that there was another, the stones of which have been removed for the purpose of building a wall, and only the pits remain in which the stones stood. This avenue is supposed to have reached a stone about two hundred and seventeen yards off, and which a short time since, with two others, was known as "The Three Boys." These stood in a triangular position, and were about four to five feet in height, the one that remains being about four feet six inches: they were probably the remains of an old cromlech. It will be observed that each of these five avenues has a feature peculiar to itself:-That which is the most northerly, and which we have called the first, terminates at the south extremity, in a triple circle of stones, circumscribing three central ones. These circles consist severally of ten, six, and eight stones. The second avenue appears to have no defined termination at either extremity. Mr. Ormerod is of opinion that it made a sudden curve to join avenue No. 3; but it appears to me rather as a recommencement of No. 3, which would, had it continued, have interfered with the triple circle belonging to avenue No. 1. Avenue No. 3 terminates in a circle that enclosed a kistvaen. Avenue No. 4 terminates at the southern extremity in a rock-pillar, while that of No. 5 ended in a cromlech. Avenues Nos. 4 and 5 are continuous, and it is not improbable that No. 4 is a prolongation of No. 5. All the avenues therefire commence toward the south and terminate towards the aorth, commencing in one with a cromlech, in another with an encircled kistvaen, and in the third in a triple circle, each being a different mode of sepulture. Under Black Tor, near Princetown, there are two avenues, lying nearly east and west, the more northerly being a double row, the other connisting of a single row of stones. The first is nearly a furlong length, and has on the right side forty stones in position, aod on the left fifty, while the latter has but sixteen, and many of those very distant from each other. Both avenues terminate at the eastern extremity in a barrow encircled by ones. The stones that surround the more northerly barrow are larger than those which enclose the barrow of the less zoportant avenue ; in each case the barrows have either fallen 2 or been excavated. About midway between the sources the Plym and Eylesborough is a single row of stones. It mens from north-east to south-west, and has a circle of stones
tolerably perfect, at the northern extremity, of about thirty yards in circumference, and about three feet in height. There is a cairn within, the centre of which has fallen in, or has been rummaged by the treasure-seeker.

The line of stones consists of but a single row, and extends for eight hundred yards. The first two were about ten feet above the ground. The first had fallen so as to lean against the second, and both were on the incline. The first eight or ten stones declined in size until they reached, in the greater number, but one foot in height. Sixty of these were standing, with but little interception, about six feet apart, when came a hiatus of about thirty yards, after which we counted about sixty more, but from these many were missing in the row. A large stone seemed to mark the termination of the avenue, beyond which, at about a hundred yards, was a large cairn that evidently had been ransacked, and a portion of the stones carted away. This relic has never previously been observed, as I can find no record of it in Rowe's Perambulation of Dartmoor. From the large size of the stones at the northeastern extremity, and the importance of the cairn within the circle, I look upon this as being one of the most interesting specimens of the kind in the locality.
On the western slope of the hill, the summit of which is crowned by the Great and Little Trowlsworthy Tors, in a line almost direct between Lee Moor Cross and the larger Tor, stand two parallellitha. The longer and more important is about seventy yards in length. The avenue consists of a double row of stones, of which fifty-three are standing on each side. But in Rowe's Perambulation it is spoken of as having sixty on the east side, and fifty-five on the west. The stones are generally about a yard apart. In many places the stones are missing, if the number is given correctly in Rowe's Perambulation (1830). A leat has been cut, dividing it in two near the centre of the avenue. This no doubt has been the cause of some being removed, and when we visited it a few weeks since a line of sticks was placed so as to suggest that some undertaking is likely to proceed that shall still further interfere with its entirety. The direction of the avenue is nearly east and west ; it consists of stones about a foot or eighteen inches high, and terminates near a stream in a stone about five feet high. The opposite, or eastern extremity, terminates in a circle of eight stones, seven of which remain standing, and one has fallen. This circle is about seventy-five feet in circumference. All the stones are large, the largest being about five feet above the ground, and


Fig. 2.
two feet in breadth. A few hundred yards to the west is a maller and less important parallellithon. The direction of avenue is nearly north-east and south-west, being in a Ee that leads direct to the sacred circle at the eastern entremity of the longer avenue. It consists of a double row stones, of which sixty are on the northern side, and fortyTro on the southern. Rowe says that there were forty-six each side. At the southern extremity is a large stone albout four feet high; the opposite extremity is terminated ir another stone somewhat higher, and the only one that is manding of those that enclosed the sacred circle; most of Stem are, however, still lying where they once stood. The Ercle is about fifty-four feet in circumference.
On the southern side of Shell Top there stands a large aim (pl. ii. fig. 4), that either has never been completed, or mes been disturbed. From this cairn run southwards several zuirs of stones, the remains of an old stone avenue. This aim is not surrounded by a circle, and unlike many of the whers is very distant from a stream, though it is not far from fortified village previously described. There are other avenues recorded from other parts of the moor; one Fernworthy circle, another under White Tor, ShaverDown, etc.; but of all that I have seen, the most , the most interesting as being associated with other and the most in danger from the ruthless hand of ern enterprise, are those of Merrivale Bridge (pl. vi. fig. 1). parallellitha are to be found at the distance of about half a mile from the river. They are situated on a broad open nanse, and where the turf is singularly free from heather ar bush of any kind. The two run parallel, or nearly so, each other. The shorter is about nine chains, or twentyany yards less than one furlong in length. It lies slightly to 5 sorth and south of due east and west, and terminates in $u$ dicle at the eastern extremity; the stones of the avenue $\mathrm{z}=$ about one foot to eighteen inches above the surface, and $m$ in pairs through the entire length. The western extremity aminates abruptly, and appears as if some portion had been monved. But a little out of the direct line, and beyond the mination of the existing avenue, stands a small circle, which 1 probably on one side, since it would require a curve in arrangement of the stones to enable the two to meet. mo soch curve is known to exist in any of our stone avenues, and there is no reason to suppose that it did in this instance, func by comparison with the other, there is every reason to lifiere that it did not.

The second avenue lies to the south of the one described, at about the distance of twenty-eight yards. It lies nearly parallel, inclining imperceptibly a little more to the north and south. It is about eleven chains, or one furlong and twenty-two yards in length. It consists, like the former, of a series of stones in pairs about a yard distant from each other. In this avenue there is a circle, in the centre in which are the remains of a kistvaen, and another, some have thought, at the western extremity. The eastern extremity terminates in one large stone, being about five feet high, much larger than those that form the avenue (pl. v. fig. 3).

Towards the western extremity, and about five-and-twenty yards south of the longer avenue, can be recognised the spot on which a cairn once stood. Rowe, in his Perambulation of Dartmoor, writes of it as dilapidated in 1848. It is now entirely removed; a few stones marking the circumference demonstrate the proportion that it once occupied. The stones of this ancient relic were removed for the purpose of metaling the neighbouring highway. Nor is this the only instance of a similar depredation.

I recently observed that a cairn on Warren Tor had been almost carted away, the stones that formed the kistvaen being left, though displaced in the centre, and a few cartloads of stones at one extremity. Seeing a newly-built house at a short distance, I presumed that the stones were removed for the purpose of being used in the erection, although, like the cairn at Merrivale Bridge, they may have been used for mending the roads.

Also a cairn near the ruins marked in the Ordnance map as Kingsoven has been almost all removed, leaving the kistvaen in a broken and dilapidated condition exposed to view. The side stones still stand, the one upright, the other fallen inwards. These are about three and a half feet long and two and a half feet broad.

Stones still mark the site, and show the circumference to have been about sixty yards. The removal of these relies, without any record of the contents that may have been observed, is a thing to be deplored and protested against.

I think I am correct in my observation that all these avenues lie either in a direction north and south, or east and west; that those in the same locality generally point in one direction; that one has characteristics distinct from the otherthat a kistvaen is generally connected immediately with the avenues, covered by a cairn or exposed; and that there is always a cairn detached and not very distant from them.

Reading their history by the poor light we have, they appear to speak of people of common habits, the uniformity of which is varied somewhat in the different tribes, and the intimacy with which they were associated.

Thus the several avenues on Shuffledown all have a north and south direction, and differ from one another only in the arrangement of the kistvaen at the southern extremity.
At Merrivale Bridge both the avenues lie nearly east and west: they differ from each other, the one having the circle in the middle, and the other at its eastern extremity.

On Eylesborough Common the direction of the avenue is north and south. The stones are arranged in a single row. A cairn stands at the northern extremity in a circle, and another still larger some forty yards to the south.

The cairn at the avenue under Shell Top is very large in circumference.

Under Trowlsworthy Tor, like one of those at Merrivale Bridge, the kistvaen, if there be any, is sunk in the soil, and no cairn has been raised over it.

Here also the two avenues vary more than anywhere else, one running north-east and south-west, the other nearly east and west; and under Black Tor the two avenues differ in one baving a double, the other a single row of stones.

It would appear that connected with each there are two places of sepulture, the one within the sacred circle, the other in a distinct, separate, and much larger cairn at a little distance. I take it that the kistvaen within the circle held the zemains of the honoured dead, their priests, their counsellors, their successful warriors; that whenever they opened the kist to receive their ashes, they planted a single stone, or a pair of stones, according to the custom of the tribe, to commemomate to posterity a fact so worthy of record; and fortunate تill be those modern worthies whose monuments will endure so long.
It will be observed that many of the avenues are longer than others, in those avenues some stones are larger than others, and that many of the cairns are larger than others.
The larger stones, though not invariably, stand near the circle. I have thought that these important stones may commemorate the deaths of the first interred, or founders of the tribe, and that the others are evidence of the merits of the bividual. The length of the avenue therefore records the aumber of individuals interred, and to a certain extent the dration of the tribe. The large cairn that stands apart is the burial place of the many. Their bodies were burned, and with
each interment each mourner added his portion of stones to the common heap. In this way, I think, we may account for the many cairns that lie scattered over Dartmoor in an incomplete or apparently disturbed condition. The deep hollows in the centre of many may perhaps be the evidence of their progressive condition rather than that of their desecration. Many of these cairns entomb a kistvaen, but this is not invariably the case. On the south-eastern slope of Penbeacon there stands a dismantled cairn, the centre of which contains an oval chamber, which is six feet broad by twelve long. The wall that surrounds it still stands five feet and a half high. The passage leading to it, though partially destroyed at the entrance, must have been five-and-twenty feet long by four broad. A few feet from the entrance, on the right side, is a second chamber, having two sides at right angles and the third rounded. There is a small shelf in the middle of the curved or third side. There were probably other chambers where the stones have been removed, and some may still be under the undisturbed portion of the cairn.

The kistvaen is generally found beneath a cairn, but sometimes it is found uncovered in different parts of the moor. There is one under Hound Tor, about one furlong towards the south, within a circle of closely placed stones, of which a few only are missing. One side and one endstone are all that remain of the kist. These are, one six feet long, the other rather more than two feet.

Another of similar description exists in Longeombe (pl. ii fig. 3). Here the kist is three feet long by two feet nine inches broad and four feet deep. All the stones are in their places, except that the coverstone of the kist has fallen in. It is enclosed within a circle of nine upright stones, placed a small distance apart from each other. Within the circle the kist appears to have been surrounded by smaller stones, so as to form an even surface on a level with the mouth of the kist.

Another uncovered specimen stands near the high road, between Princetown and Swincombe, which is in a tolerably perfect condition.

Under Hessary Tor is one much dilapidated, and remarkable for being double kisted.

At Merrivale Bridge, associated with the avenues on the southern side, a few yards to the west of the centre, and a yard or two from the line, are the remains of a cromlech ( pL . v. fig. 1).

This relic, although it has long had the capstone or quoit removed, probably by the yielding of one of the side stones,


Fig. 2.


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Fig. 3.

CROMLECHS MENHIR\&C. ON DARTMOOR.
had all its parts perfect until the last summer, when upon visiting it I found it had been cleft in two by the experienced hand of skilled labour.

It is hard to believe that it has been done for any other object than that of wantonness, for the poor and discoloured quality of the stone is so apparent that its uselessness must have been visible to those who are accustomed to work on granite. The two halves remain on the spot, having fallen but a few inches asunder, and it may not be difficult to restore them to their original position, and so preserve this fast-disappearing relic. Beneath the stones is a deep hollow, that may have been the result of exploration, but I am inclined to believe that it has been occasioned by the frequent presence of cattle seeking shelter, beneath the covered structure from the inclemency of the weather. The moisture settling in the hollow renders the soil so soft that it has been readily beaten down; the foundations of the supporting stones of the cromlech have been weakened so that they have given way sufficiently to throw the quoit from its place.

The size of the quoit before it was broken was about ten feet and a half long and four feet and a half broad, supported on three upright stones about four feet in height.

This cromlech in its relation to the avenue is one of those specimens that it is hard to believe were ever entombed beneath a mound of earth.

Tumuli, or earth mounds, although common in Devonshire and Cornwall, are rare on Dartmoor, where stone being abundant is universally used. This cromlech stands on the same grassy plain as the stones that form the avenue. No change in the relation of the one to the other appears to have taken place in the long ages that have elapsed since their erection, while the small stones still stand upon the turf and around the hut circles; the small embankment that supported the stones still remains.

Cromlechs on Dartmoor are not numerous. It may perhaps be that many, like those at Merrivale Bridge, have been thrown down and destroyed. This was the fate of the finest specimen in Devonshire. In Frebruary, 1862, the Drewsteignton cromlech (pl. v. fig. 2,) was blown down by a heavy storm, and probably, like that at Merrivale Bridge, would have so continued, until the farmer might have found it to be his interest to break it up and cart it away to mend the road or repair a cowshed. In 1862 the cromlech fell, and in 1863, in the month of November, it was restored through the zeal of Mr. Ormerod.

As now standing (pl. v. fig. 2) two of the upright stones are placed under the quoit, near the margin, while the third is outside of it, the edge of the quoit resting in a notch about eight or ten inches from the top. This, I believe, is not the original position, but when it had been raised to this point, the firmness of its bearing, together with the difficulty of moving so great a mass, induced the restorer to let it rest. The quoit or capstone is estimated to be about sixteen tons in weight, and is about fifteen feet long, and ten feet wide, and stands about six feet from the ground. It is a fine specimen of the kind, and is, I believe, the only one in Devonshire that is still in a state of preservation. It is off the moor-land, and stands in a cultivated field which belongs to an estate that is known by the name of Shilston, which Polwhele considers and shows its derivation from Shilston, or Shelving Stone, the word "shelf" being commonly pronounced in Devonshire as "shelv."

This Cromlech is known in the neighbourhood as "Spinster's Rock," in consequence of the tradition that it was erected by three spinsters one morning before breakfast. These, Rowe, in his Perambulation of Dxrtmoor, poetically interprets into the three fates who are doomed to weave the thread of destiny.

There are two or three other cromlechs on the moor, but they are in a more or less dilapidated condition. Besides the one mentioned in connection with the parallellitha at Merrivale Bridge, there is another in the same locality, which Rowe in his Perambulation of Dartmoor considers to be the ruins of a cromlech. "Within an imperfect circle, consisting chiefly, though not entirely, of upright stones, with the advantage taken of the natural position of some huge blocks to enclose a space of nearly one hundred and seventy feet in diameter. At the upper eastern end is a vast block, large enough to form one of the interior sides of an enclosure, having remains of walls at right angles, suggesting the idea of a resemblance to the adytum within the Druidical circle near Keswick. Thirty feet from this enclosure a large quoitlike stone (sixteen feet by nine feet eight) and three others, have all the appearance of supporters with their impost." The place to which this refers is traced all over with the remains of ancient hut dwellings, and other enclosures,-so much so, that it is difficult to believe but that every stone has its unwritten historical relation to the rest.

When many stones are scattered about of all sizes, it is easier to select those that will fulfil the conditions necessary
to erect a cromlech, than to assert with confidence that they were once used for the purpose. Another specimen of the kind Rowe describes, with rather more show of probability, as being the remains of a dismantled cromlech.

About a hundred yards from the gate which separates that portion of Dartmoor, which is known as "Corydon Ball," from the cultivated lands through which a road leads to South Brent, may be observed several massive stones in which the investigator will have no difficulty in discovering unequivocal evidence of a cromlech once standing on this spot, but now in ruins, and apparently overthrown by intentional violence, as the supporters are not crippled under the imposts, as if pressed down by the superincumbent mass, but are lying in situations where they could not have accidently fallen. The third supporter stands erect in its original position; it is of a pointed form, only four feet high and five feet wide in the broadest part. The impost, or quoit, is eleven feet long, five feet at the widest end, and fourteen inches in average thickness. There are no other stones scattered around, so as to lead to the supposition that these are only large masses of granite, among many others, naturally thrown into these positions. The height of the supporters of the overthrown cromlech appears more adapted to the purposes of a kistvaen than of a cromlech, and it may also be observed that the monument stood on the verge of a large cairn, about sixty yards in circumference, which probably entombed it. A few score yards S.S.E. are the evident remains of another cairn; both were removed, doubtless to assist in building the boundary-wall adjoining.

Between Shavercombe Head and Trowlsworthy there stands a dismantled cromlech, or large stone kist. The stones that built the kist are all there, but the huge coverstone has been thrown off and rests on its end. The cromlech stands within a circle, some of the stones of which have been removed. Near this stand a circle and other remains of interest; but the granite of this locality is compact and good, much of it being worked for exportation, and woe to the pre-bistoric records that stand in the quarryman's path.

Returning to the associated relics at Merrivale Bridge, there exists still farther to the south, at about one hundred and thirty yards from the large avenue, a circle of stones, about sixty-six feet in diameter; these stones are now only ten in number, and are about eighteen inches above the surface of the ground. The turf within the enclosure is level and smooth; being desirous of ascertaining whether or not the
place had been used as a burial place by our pre-historic ancestors, I had a trench cut from the centre southwards to the circumference without discovering any signs that there ever had been any previous disturbance of the soil, although we went as deep as what is locally termed the pan,-that is, the ferruginous deposit that immediately overlies the unbroken granite rocks. About five-and-twenty yards still farther to the south stands a tall obelisk, or maen-hir. This stone, an upright pillar of unhewn granite, about twelve feet in height and about two feet in diameter, of an irregularly square form, stands in the centre of a circle of upright stones, most of which have been removed. When examining the place some time since, I observed two stones in such peculiar proximity to each other that I expected to have found them to be the sides of an entombed kistvaen; I therefore had an excavation made until I came to a flat stone that from its relation to the others appeared to be the coverstone of the kist, but its removal shewed the subsoil of the country.

Circles of stones such as these are to be found on several parts of the moor. That on Scorshill is one of the most perfect. There are thirty-one stones, all of which are in position excepting two which have fallen. Rowe says that there are thirty-seven, two of which have fallen.

At Fernworthy the circle is in a good state of preservation (pl. vi. fig. 1), one stone only being absent from the perfect number of twenty-seven stones.

Under Sittaford Tor there are near together two circles of stones, about five feet in height, known as the Greywethers; of these many are gone, some having been recently removed, the places on which they stood not being yet grown over with grass, for the purpose apparently of repairing the sides of a leat that runs a few yards off; some stones still lie upon the ground where they once stood; but in the two circles which once comprised twenty-seven stones in each, nine only remain in one and eleven in the other.

This double circle bears a resemblance to the Hurlers near the Cheesewring in Cornwall. They are the only two approximating circles in the locality. On the right bank of the Erme is a circle, of which nineteen stones are in position (pl. vi. fig. 2). They are mostly about two feet in height, with the exception of one that is about five feet. From this circle, which is evidently one of those recognised as "sacred," a single row of stones, about three feet distant from each other, extends northwards for about two miles. Over the moor in a direct line it leads, and in its path crosses the river


Fig. 1.

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\text { Fig. } 2 .
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in a diagonal course, and goes up the side of the hill straight to the summit. The object of this long line we supposed to have been for the purpose of guidance in foggy weather from the sacred circle to the village where the inhabitants mostly dwelt. Other lines of stones, more or less resembling this, and always leading to a cairn or circle, but neither so long nor so important, are to be seen on Butterton Hill, between the Erme and the Avon; these are generally much dilapidated, mostly from weathering. There are others of the same description under Belstone Tor, known as Nine Stones, besides probably some that as yet have heen unrecorded. These circles have long been known as temples, or sacred places, but Mr. Stuart has of late endeavoured to overthrow that belief; but surely if these old inhabitants had any sacred or mysterious rites, such circles were probably the sites.

In the neighbourhood of Corydon Ball there are the remains of an extensive avenue of which I know no similar one on Dartmoor. It evidenly consisted of seven or eight rows, and extends at least for a hundred yards. Many of the stones are missing, and of those that remain many are small and unimportant, being almost entombed within the surrounding soil ; at the eastern extremity about seven stones lie in a position relative to each other, which suggests the idea of their having been a portion of a circle of which the greater part has been removed. These stones more than anything else reminded me of the Sarsden stones of Berkshire. A short distance from these stones are the remains of what must have been a huge cairn, beneath which must once have been hidden several large stones, evidently the parts of the fine cromlech or kistvaen previously mentioned; itself lying prostrate, while the stones that formed the cairn were used to build a neighbouring wall. This fallen cromlech as much as anything else tells us that beneath the numerous cairns that are scattered over Dartmoor many such relics still lie entombed, the contents of which it would be desirable to have examined, as they may yet assist us to read an unwritten page in the history of the old people of Dartmoor.

## EXPLANATION OF PLATES.

## PLATE I.

Fig. 1. Section of restored hut-dwelling on Dartmoor.
Fig. 2. External view of restored hut-dwelling.
Fig. 3. Hut built in wall of enclosed village at Yealm Head.
Fig. 4. Hut-circle, with central group of stones, on Saddleborough.
Fig. 5. Beehive hut on the Avon.
Fig. 6. Beehive hut on the Erme.
PLATB II.
Fig. 1. Beehive hut, with short passage leading thereto, on the Avon.
Fig. 2. Sectional elevation of beehive. (Supposed restoration.)
Fig. 3. Kistvaen.
Fig. 4. Ground plan of cairn under Shell Top.
PLATE III,
Fig. 1. Plan of ancient military encampment on western slope of Trowlsworthy Tor.
Fig. 2. Plan of Parallellithon, and two walled villages near Erme Head.
Fig. 3. Structure of wall at Erme Head.
Fig. 4. Structure of wall of walled village at Yealm Head.
PLATB IV.
Fig. 1. Parallellitha at Merrivale Bridge.
Fig. 2. Cromlech near Trowlsworthy Tor. (Supposed restoration.)
PLATE V.
Fig. 1. Cromlech at Merrivale Bridge. (Supposed restoration.)
Fig. 2. Cromlech near Drewsteignton.
Fig. 3. Menhir, circle, and parallellithon at Merrivale Bridge.
PLATE VI.
Fig. 1. Circle at Fernworthy.
Fig. 2. Circle on Staldon Moor.


[^0]:    * Dammonii-"Men of the deep valleys." Devon-Dyvnaint, Deuff-neynt, "p or dark valleys, from which Devonshire derives its name."

[^1]:    * A model of this block of tin may be seen in the Museum of Practical Geology in Jermyn Street, London, where it is exhibited in association with some specimens of the so-called "Jews'-house tin" in wall case 10.

