

THE STONE ROWS OF DARTMOOR.

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INTRODUCTION.

THE object of this paper is to reconsider in brief the twin questions of the origin and purpose of the most mysterious of the pre-historic monuments of Dartmoor, the rows of stones commonly known as *avenues*, *parallelitha*, or *alignments*—names we shall do well to discard in favour of the simple Saxon phrase *stone rows*, by which we first find them described in ancient documents.

It has been the misfortune of Dartmoor archaeology to suffer from over-individualization. Thus Grimspound has been treated as exceptional in character because of its exceptionally perfect state, whereas it is but one enclosure of kindred type out of many. And so the special attention paid to the stone rows near Merivale Bridge is mainly responsible for the free use of the terms "avenues" and "parallelitha." Had it been clearly seen that while, on the one hand, there were many instances of such structures consisting of single rows, so, on the other, the number of rows at times increased up to two and twenty, the inapplicability of the word "avenues" would have been at once apparent. The essential feature is the *row*, not the *number* of rows; for although two are very commonly found, ones are as numerous on Dartmoor, and twos are really in a minority when compared with the general aggregate. So with the term "parallelitha"; it is correct enough up to a certain point; but there are partially double-membered rows, which never have been more complete; and there are sets of rows in which, so far from parallelism, there is marked and intentional divergence. "Alignments" is better than its companions; but here again the idea of straightness is imported,

whereas some of these rows, as already stated, are divergent, while others are more irregularly curved. The simple word "row," however, has the merit of expressing neither less nor more than the actual facts, and it can be defined without delimitation to express precisely the peculiarities of each individual case. Moreover, it is uncontaminated by hasty speculation or unwise theory. I think it preferable also to the final alternative "line," since it does not include the idea of absolute continuity.

Our special interest as an Association in these "rows" lies in the fact that individual instances are more numerous on Dartmoor than in any other part of the world. Twenty-seven Dartmoor examples are noted in this paper: eleven single; eleven double; one partially doubled; one double continued as a single; one group of three made up of a single and double side by side; one of three; and one of seven. Mr. Fergusson, in his *Rude Stone Monuments*, summed up all that was known up to 1872, and while there have been further discoveries since, I do not think that they have been in different fields. We get these rows in Devon (but not in Cornwall¹), in Somerset, Wilts, Kent, Cumberland, Caithness, Carnac and elsewhere in Brittany, one example in Lombardy, and doubtful ascriptions in Spain and Denmark. They are not recorded for Wales or Ireland, or for any other part of the Continent, though reported from Persia and India. Hence, all things considered, these monuments may be studied most fully on Dartmoor.

DARTMOOR.

We commence by a statement of the facts. I purpose first to give a description of the "stone rows" of Dartmoor and of their kindred elsewhere. The more important and exceptional of our local examples are dealt with most fully; and several of these have hitherto found no record, or have been very inadequately and incorrectly treated. The responsibility of the statements now made, where no authority is quoted, rests with the writer. Description given, we may proceed to draw some definite general conclusions, and pave the way for the solution of the problem, even should it be thought that solution cannot yet be reached.

And I should premise that the destruction of some of the

¹ "Remains of avenues" are indeed said to have existed near Kilmartin, but the Rev. Mr. Lukis could find nothing approaching an "avenue" save the eight stones called the "Nine Maidens," near St. Columb. Moreover, these average 68 feet apart, and bear no likeness to the true "rows."

stone rows of Dartmoor is certain. Those which continue are the remainder of a more numerous—though probably never very numerous—body; nor is it likely that all extant are as yet recorded.² But let inquirers beware of wrong identifications. Some of the old track stones which marked—indeed, still mark—routes across the Moor have ere now been mistaken for these structures; so have mere field boundaries; and the facing-stones of ancient hedges whence the earthen filling has disappeared have been dubbed “parallelitha.” But the true pre-historic stone row is *sui generis*. All the rows in the southern and western quarter of Dartmoor have been specially visited for the purpose of this paper; and I have seen nearly all the remainder. They are found chiefly in the valleys of the Teign, Avon, Erme, Yealm, Plym, Meavy, and Walkham; only casually in the watershed of the Dart; they are as yet unreported from the Tavy and the Okements and the Taw, though there is one notable example near the latter river; and this particular distribution has, without doubt, its meaning.

Drewsteignton.

A very complete system of rows and circles is said to have existed in close contiguity to the Drewsteignton Cromlech. Unfortunately they cannot now be traced; and one may be pardoned a little scepticism as to whether their remains ever fell so exactly and elaborately into place as is shewn on a plan prepared by the Rev. Wm. Grey in 1838, and reproduced by the late Mr. Ormerod, F.G.S., in his *Notice of the Fall and Restoration of the Drewsteignton Cromlech*, as

² Since this paper was read Mr. R. Burnard has informed me of the existence of a hitherto unrecorded “row” at Assycombe Hill; and has kindly supplied me with the following extract from his field notes. Mr. Burnard has a scale plan of this row in preparation:—

“Stone Row, on western slope of Assycombe Hill, which lies N.W. of Warren House Inn, distant about $1\frac{1}{2}$ miles from the latter. (See Sheet 69, N.E., 6” new ‘Survey of Dartmoor.’) The row, which starts from a ruined cairn, consists of 84 standing stones, and extends 800 feet E. and W., running in two rows down the hill towards Assycombe. It terminates towards the W. in a stone lying prone, 5’ 9” long, $2\frac{1}{2}$ ’ wide. The avenue is from 5’ to 6’ wide, inner measurement. The stones composing the row are 18” high, and down to 6”.”

Mr. Burnard, in his presidential address to the members of the Plymouth Institution, called attention to the existence of remains at May’s Newtake, in the Swincombe valley, which may possibly represent a dilapidated “row.” Three small menhirs stand in a line about two feet apart from each other—two $4\frac{1}{2}$ feet high, and one $3\frac{1}{2}$ feet. At an interval of some two hundred yards there are two or three stones in a straight line with them, which suggested that the menhirs “might be portions of a previously existing stone avenue.” I agree with Mr. Burnard in thinking the evidence uncertain; but the fact should clearly be mentioned in this connection.

reprinted in 1876. Mr. Grey stated that 110 yards to the west of the cromlech he found

“two concentric circles of stones, the inner circle having entrances facing the cardinal points, that to the north being 65 paces in length and 5 broad. The outer circle, besides these, has avenues diverging towards north-east, south-east, south-west, and north-west. A smaller circle seems to intersect the larger, of which the avenue eastwards is very evident.”

These remarks, entered by Mr. Grey in his journal at the time, unquestionably represent the impression made upon his mind, and the map as reproduced by Mr. Ormerod was approved by him.

Nevertheless I cannot but feel very doubtful—not of the facts observed, but of their interpretation. A double row leading towards the cromlech is shewn on the plan clearly enough; so is another at right angles to it; the outer circle is also distinctly set forth. But apart from the stones of the “avenues,” the inner circle is represented by two members only; and the materials indicated for the diverging “avenues” and intersecting circle are quite insufficient for such positive deductions; while there are patent irregularities which it is impossible to bring into the scheme propounded. Nothing short of an exact professional survey could supply an adequate basis for the acceptance of Mr. Grey's plan in its entirety; and that has long been an impossibility, for when Mr. Ormerod examined the ground in 1872 he did not find a single stone which could be identified on Mr. Grey's map (the distances on which, by the way, were given only in paces), though others in the vicinity (*not* on the map) were observed! Either they had all been removed in the interim, and others provided, or the plan was excessively inaccurate. Mr. Ormerod, moreover, with all his inquiries, was unable to find more than two people who recollected the remains at all; and they remembered an “avenue” leading east and west in a line with the cromlech, but nothing more. The only other references to these remains are by Polwhele, who says: “At Drewsteignton the Cromlegh is placed on an elevated spot overlooking a sacred way and two rows of pillars, and several columnar circles.”³ While elsewhere,⁴ in describing the

³ *History of Devon*, 154; *Historical Views of Devonshire*, 94.

⁴ *History*, i. 150; *Historical Views*, 61. The full passage is: “Towards the west of the Cromlech I remarked several conical pillars, about four feet high. On the north side there are three standing in a direct line from east to west. The distance from the more western to the middle was two hundred and twelve paces—from the middle to that on the east, one hundred and six—

cromlech, he mentions simply the existence to the west of five conical pillars about four feet high. This was in 1793. Nor could either of *these* stones be found by Mr. Ormerod.

The conclusion I draw from such data is that we have ample evidence of the existence of an east and west double row, or "avenue"; and of concentric circles, of which Mr. Grey's "diverging avenues" and "north and south avenues" may very probably have formed part—but of no more.

Batworthy, &c.

Mr. Ormerod, in his *Rude Stone Remains situate on the Easterly Side of Dartmoor*, described five "avenues" near Batworthy, on the borders of Chagford and Gidley parishes, and mentioned the existence of traces of others. He says :

"The easterly avenue commences near the southern end of the Batworthy enclosure, and can be traced 140 yards in a southerly direction, where two tall terminal stones, one now fallen, mark the place where this avenue joined the triple circle. About thirteen yards to the west of the terminal stones another avenue commences, and runs 140 yards in a N.N.W. direction, pointing on the Gidley [or Scorhill] circle. The triple circle consists of three concentric circles: in the outermost ten stones remain, in the second six, and in the third eight, and three stones stand in the centre. The diameter of the outer circle is twenty-six feet, of the second twenty, of the third three feet. A third avenue commences about twenty-five yards to the south-west of the triple circle, and extends 110 yards to the ruins of a kistvaen. About eighty yards to the south of the kistvaen a fourth avenue begins, and extends 125 yards to a rough stone pillar, 'The Longstone.' From that point [in 1858] the small pits were still to be seen in the turf that marked the places from whence the stones that formed a fifth avenue, 217 yards in length, had been taken, together with two stones of 'The Three Boys,' to build the walls of Thornworthy enclosure. Between the 'Three Boys' and Fernworthy circle, and again on the southerly side of that circle, there are slight traces of avenues. These avenues are from three to four feet wide, and formed of low stones."

In the Rev. S. Rowe's original paper on "Antiquarian Investigations on Dartmoor"⁵ he mentions an "avenue" south of Fernworthy (Venworthy) circle, beginning 360 feet away, and

just one-half of the former; by which it should seem that an intermediate pillar, at least, had been removed. In a parallel line to the north are two others remaining erect, the one from the other distant about fifty two paces, this *Druid* way . . . was intended to inspire those who were approaching the monument, from Dartmoor, with greater awe and reverence."

⁵ *Trans. Plym. Inst.* 1830.

running 124 feet north and south towards a brook, and states that a large portion seemed to have been removed to construct a neighbouring wall. But this finds no place in the *Perambulation*. Mr. Page gives this "avenue" 198 feet of length, and mentions another, beginning 450 feet north of the circle, and running 156 feet in the direction of Gidleigh Longstone. These are, no doubt, the "traces" referred to by Mr. Ormerod.⁶

The map appended to Mr. Ormerod's paper shows three of the Batworthy double rows running nearly north and south, the other two reaching more to the north-east and south-west. The fourth and fifth are practically one in direction, the line being broken simply by the Longstone; and this being so, as Mr. C. Spence Bate, F.R.S., pointed out, and number two being possibly connected with number three, we should really have three double rows instead of five, one beginning with a cromlech, another with a circled kistvaen, and the third with a triple circle.

Mevill.

An "avenue" is described by Mr. B. H. Slade in this vicinity, on Mevill, near Thornworthy,⁷ which so far differs from all others on the Moor, that its claims to be placed in the category must be questioned. A very perfect hut circle, 27 feet in diameter, is described as being approached by an "avenue" 200 feet in length, most of the larger stones being thrown down. At the circle the two rows are 31 feet apart, one running into the circle, but the other widening out, "forming a vestibule or enclosure outside the well-defined entrance." From this point the distance between the rows gradually contracts until at their termination near the river they are only 8 feet apart. This "avenue" points in a direct line from the hut circle to a cairn containing a kistvaen on the south-east, about 400 paces distant. Thus Mr. Slade. That there is a double row of stones forming an approach to the hut circle is clear; but that it does more than mark out a roadway thither—that it is anything, in fact, more than the remains of a double fence—I should not like to maintain. I have not, however, had an opportunity of personal examination.

Cosdon.

What is in several particulars one of the most interesting row groups on Dartmoor will be found on that part of the eastern flank of Cosdon Beacon known as South Tawton

⁶ *Exploration of Dartmoor*, 195, 196.

⁷ *Trans. Dev. Assoc.* xii. 373.

Common. It is set down as a "stone avenue" in the new Ordnance Survey, but, with that exception, so far as I am aware, has never been described or recorded. The two chief peculiarities are that there are three rows and that the triple line has a double head. From the first of very irregular construction, and now much "ruinated," the leading features of the group are, however, still perfectly clear. It can be distinctly traced some 120 yards. For nearly two-thirds of this distance it runs 20 degrees south of east; then it is crossed by a shallow gully containing an ancient track road; and beyond this it suddenly bends slightly to the northward, and runs almost due east. Another peculiarity here is that beyond the gully the stones are all of smaller size, rising a few inches only, as a rule, above the surface. It is true they may have sunk or been overgrown to a greater extent than those in the first section; but that does not seem likely, and the difference between the two portions is very marked. The three rows are roughly parallel, but the lateral spaces between the corresponding stones of each row vary between seven feet and two feet. The tendency to diverge is greatest at the eastern end, but irregularities are patent throughout. Near the head the stones are also placed closer together in line, ranging down to as little as three feet. Over 100 stones can be definitely identified in place, those of the outer rows being individually the most numerous. In addition to the gully, there is a gap of several feet near the head. The larger stones are in the northern row, the smaller in the middle. The largest stone now standing (inclined) is a slab in the northern row 3 ft. 9 in. high, and 3 ft. 6 in. broad at the ground level, placed lengthwise with the line. At the foot of this, inside, a pit has been dug, and there is another pit at the head—both modern. Whether they were dug by way of search or to remove any stone for "practical purposes" is not clear; but they give no distinct clue. The double head consists of a small standing slab stone at the top of the northern row; and slightly in the rear and to one side (on the south-west), in the line of the other rows, of a kistvaen. The standing stone (it cannot be called a menhir) is about as well squared by nature as it might have been by art. It is 2 ft. 6 in. in width, 2 ft. high, 8 in. thick, and stands breadthwise to the row like a headstone. It has been girdled certainly by two rings of stones, probably by three—the outer imperfect, about 23 feet across; an inner, about 12 feet; and perhaps one of about 6 feet wide within, to which sundry fallen stones belonged. The kistvaen is also girdled certainly

by two rings, probably by three. The kist cover lies flat, and is about 3 ft. 6 in. by 2 ft. 6 in. in outside dimensions. Next to this are a few fallen stones which cannot have formed part of the kist, and suggest the existence of an inmost circle 6 feet or so in diameter. Then comes a 15 ft. circle, of which eighteen stones are in place, but partly hidden, and beyond this there are traces of an outer circle, 22 feet wide. These outer circles of the kist and the standing stone must have touched, if they did not actually interfere with each other; but the "workmanship" all through, if I may use that term, is very rude. The conclusion that the whole arrangement suggests to my mind is that we have here, not one monument, but two, which for some reason have been associated—one row for the standing stone, and two for the kistvaen. Precisely the same result would have been shown at Harter⁸ if the orientation of the single row there had been identical with that of the double. Of course it is possible that originally there may have been a single row to each, and the middle row have been added subsequently; certainly the divergent continuation beyond the gully has every appearance of an addendum or an afterthought. And it is not easy to fancy that the middle row was originally an outer one. If it is an original appendix to the kistvaen, then, in all probability, the northern interment was the earlier; or may the middle row be connected with a third burial in a kist, now destroyed, at the place where the pit by the large stone now is? It is possible, though hardly probable; yet there is a midway kist in one of the rows at Merivale, and my first idea was that there had been a kist in the rows at Cosdon, though I quite failed to satisfy myself.

Challacombe.

Dr. Croker⁹ mentions the existence of "an avenue, or trackway of double stones," on Shapely Common, "leading to Grimspound"; but after a most careful examination Mr. Ormerod was unable to discover any trace.

But query whether this is not the "important parallelithon" described by the Rev. S. Rowe as first noticed by the late Mr. John Prideaux in 1828, on

"the saddle of Challacombe Down, with Grimspound immediately opposite . . . running north and south, much wider than these at Longstone and Merivale, although the stones are of

⁸ *Vide post.*

⁹ *Guide to the Eastern Escarpment of Dartmoor*, 15.

the same size and character. But unlike these, the Challacombe avenue has a third line of stones, so that instead of a single aisle a double one is formed."¹

This was traceable in 1848 for eighty yards, being lost on the north in an old stream work.

Merivale.

We next consider the famous "avenues" above Merivale Bridge, touching which (though after all the fact is not uncommon) it may seem remarkable that no two accounts precisely agree. There are here two double rows, running nearly east and west, roughly parallel with each other. The northern row is the shorter of the two, the southern extending beyond it at each end. The Rev. S. Rowe, in his original description in the *Transactions of the Plymouth Institution* published in 1830,² makes the longer row 1,143 feet, the shorter 792; and, with the exception that "nearly 800 feet" is substituted for the latter, these figures are given in the *Perambulation*.³ Sir Gardner Wilkinson made the longer 850 feet, the shorter 590; while Mr. Page, retaining the latter, has reduced the former to 750. And yet it is quite clear that the terminal stones have remained in their old places all through! The rows at Merivale were, indeed, first described by the Rev. E. A. Bray in connection with a visit on October 7th, 1802. He says they were

"two parallel double lines of stones, stretching south-west by north-east. The remains of a circle are at the commencement of one, where is also an erect stone. This line is 198 paces in length, at the end of which is a stone, now fallen, nine feet long. The stones that form the line are about two feet apart, and the same space exists between the two rows. From this to the opposite double line are thirty-six paces. The last is imperfectly extended to the length of 74 paces more; there are two stones, one erect, the other fallen. Returning from the point opposite the other, where is also a stone erect, after walking seventy-one paces I came to a low circular mound which I conjecture is a barrow, with a kistvaen on the top of it. . . . From this circle, at a distance of forty-seven paces, I met with a small stone, which served as an index to a cromlech fourteen paces distant. Sixty-nine paces further brought me to two large stones; and thirty paces from these I reached the end, where is a stone erect. Thus, including the additional line, this is 217 paces in length. To the other, which it here also somewhat surpasses, are twenty-six paces."

¹ *Perambulation*, 2d ed. 156.

² p. 184.

³ p. 223, 2nd. ed.

The accompanying map, which is clearly of later date, does not quite agree in all the details;⁴ and Mr. Bray's paces total up to 291 instead of 217, if the imperfect part of the row is included. However, taking his paces as averaging about a yard (which they evidently did), it is noteworthy how nearly Mr. Bray's figures approach those of Sir Gardner Wilkinson. For example, 198 paces makes the northern row 594 feet, as against 590; and 291 paces for the full length of the southern gives 873 feet, against 850. How Mr. Rowe got his figures it is impossible to say; but Mr. Bray's description shews that ninety years since the rows were practically the same as now, only that of the two terminal western stones of the longer avenue one was standing, whereas both have long been down. Mr. Page makes the longer avenue 780 feet. I have not measured it myself; but I find that the adjacent menhir, for which he gives the height of 13 feet, is, as Mr. Bray said, simply 10 feet 6 inches!

The special features of the Merivale rows are that the northern commences on the east with a circle and a menhir, and terminates with a menhir; and that the southern, with menhirs at each end, has a circle nearly midway. There is also a menhir in this row opposite the western end of the shorter, as if the imperfect continuation of the longer were an afterthought. Moreover, it may never have been more complete. The stones, as a rule, are two to three feet high—many less—and the sides of the rows some three feet apart. They have a far less imposing effect than some of their kin. Adjacent are the menhirs already noted, a large circle, and remains of cairns, cromlechs, &c., while not far distant is an enclosure with hut circles.

Harter.

There are stone rows at two points in the Meavy valley. The Rev. S. Rowe was the first to call attention to the interesting examples, double and single, below Harter [Har] Tor. described them as

"A pair of avenues which are only 40 feet apart, and run parallel to each other, east and west. They are formed of stones two and a half feet high, and each is terminated at the east end by a circle thirty-six feet in diameter, consisting of fifteen stones, inclosing a cairn. . . . The southern can be traced about one hundred and eighty feet, and the northern, which is more perfect and distinct, three hundred."⁵

⁴ *Vide Borders of Tamar and Tavy*, 2d ed. 153-4.

⁵ *Perambulation*, 2nd ed. 205, 206.

When Mr. Spence Bate examined these rows he noted ninety stones in position in the double (northern) row, and sixteen in the single (southern).⁶ Mr. Page makes the double avenue 396 feet, and the single 80.⁷ The recent Ordnance Map only shows the double row, and omits the single.

Not only, however, do these various accounts differ from each other, but (in some points materially) from the remains themselves; and they altogether overlook certain features which place the Black Tor or Harter rows among the most interesting we have. In the first place, the double row and the single row alike start from cairns of about the same dimensions—from 27 to 29 feet in diameter. The cairn of the double row, however, is enclosed by a stone circle, and that of the single is not. Careful examination shows that this has always been the case, the cairn of the single row approaching the circle of its companion within four feet. Thus the characteristics of the two are distinct. Again, while the double row runs as exactly in the magnetic east and west as may be; the single diverges about 10 degrees to the south: hence they are by no means parallel; and while at the start they are some twelve yards apart, the present end of the single avenue is about double that distance from its neighbour.

The circle round the cairn of the double row contains, by my reckoning, fourteen stones, of which ten are standing; but there are other stones within the ambit which have been used to keep the circle stones in place. Some of these stones are of considerable size, one of the fallen members being over 5 ft. 6 in. in length. The southern stone at the entrance of the row is 3 ft. 6 in. above ground, 3 ft. 2½ in. in greatest width, and 1 ft. 6 in. in greatest thickness.

The space between the lines of the double row next the circle is 4 ft. 3 in., and ranges generally between 4 ft. and 5 ft. Occasionally it is a little wider. The stones in each row vary considerably in size, and are somewhat irregularly spaced—with intervals of from 4 ft. to 6 ft., but as a rule approximating more nearly to 5 ft. The flatter stones are fixed breadthwise with the direction of the row. Some of those in position are only a few inches above the surface—occasionally little more than level with it. Others, however, stand above 5 ft., and the general effect of the double row is far more striking than either of the rows at Merivale, though lacking the terminal menhirs. It is not easy to say what

⁶ "Pre-historic Antiquities of Dartmoor." *Trans. Dev. Assoc.*

⁷ *Dartmoor*, 148.

was the original length of the double row; but it extends close to the bank of the river, and is distinctly traceable for over 100 yards. What is very remarkable is that although its line is cut by a long mining trench, the "avenue" is singularly perfect, most of the stones being on the spot, and the majority standing. Counting from what now appears to be the termination, no less than 102 can be identified with certainty, and of these 69 are still standing. Each side is about equally perfect; but the northern has the greater proportion in place. Allowing for the mining gully, there can therefore be very few absentees.

The single row is by no means so continuous. I could only trace seventeen stones as being certainly in place, over a length of some fifty yards, including the gap caused by the mining gully already mentioned, and two breaks, one of some ten yards, and the other of four. But my impression is that the greater part of this row has disappeared. So far as I am aware, this is the only place on the Moor where distinctly double and single rows are so associated. The respective cairns, too, differ, but a circled cairn is quite as commonly connected with a single row as with a double.

Down Tor.

There is a very fine single row on the ground between Combshead and Down Tors, which, like the preceding, runs nearly due east and west, but with a slight tendency north of east and south of west. Though evidently meant to be straight, there is a very slight curvature where it dips into a shallow depression. Presumably this is the row mentioned by Mr. Spence Bate⁸ as first observed by him, and as lying "mid-way between the sources of the Plym and Eylesborough," which, if he regarded the *Meavy* as the *Plym*, might pass. There is so much correspondence in his description that it seems evident this is the row referred to; and there is no row in the position actually indicated. As, however, Mr. Bate's account is inaccurate in several particulars (even to more than doubling the length of the row), and the row has never been described elsewhere, I give the results of a recent examination, pending a full and detailed survey.

At the western end of the row is a circle of stones of widely-varying height, enclosing a barrow, which possibly once covered a kistvaen, but has been opened. The diameter of the circle varies from 34 to 37 feet. It is difficult to reckon the members forming the circle, as the stones vary

⁸ "Pre-historic Antiquities of Dartmoor." *Trans. Dev. Assoc.* iv.

very much in size, and some have been used simply to support others. There seem, however, to be at least twenty-six, of which nineteen are standing. About twelve feet from the circle the row commences with a very fine menhir, now in a sloping position, having fallen to the eastward, and resting on the next stone in the row. The base of the menhir—its smallest part—is still partially under the turf; but its total length is upwards of 13 feet, its greatest breadth being 2 ft. 6 in., and its thickness 2 ft. It differs from other stones in the row in having its breadth transverse, the rule having been to place the more tabular stones—of which there are many—edgewise to the direction of the line. The stones next the menhir are also large; but the row is very irregular in this particular. Some stones range up to nearly seven feet above the ground, but the average is much less, and some are only a few inches above the turf, while others are all but wholly concealed; nor does it seem that they have sunk or been encroached on to any material extent. The length of the row is given by Mr. Bate as 800 yards; but it is not half that distance, being, as nearly as could be measured at my visit by pacing, between 330 and 340 yards. The first half from the circle is more than fairly perfect—in fact, exceptionally so, but in the further portion there are several gaps, real or apparent, the latter certainly in some cases, for careful sounding showed that several at least of the missing stones, though out of sight, were in place. Near the end, however, the row is interfered with by a moorland cart track. It is single, but here and there are places, especially towards its eastern end, where stones lie so far out of the direct course as to suggest a partial doubling, particularly since bringing them into line would range these particular stones closer together than the usual five to six feet interval. However, these are fallen stones, and their present aspect may be due to displacement. The row now terminates on the east in a small fallen menhir, 7 ft. 6 in. in height, by 3 ft. broad. (There is another stone further east, a little out of line, which may also have belonged to it.) Including some half-dozen doubtful instances, I counted 126 stones; and no doubt more of the 160 or 170 stones which originally formed the row still exist in place. Both the spacing, however, and the size of the stones are as irregular as in any row with which I am acquainted.

This row points directly to a large, ransacked cairn, over 50 ft. in diameter, at a distance of about 300 yards from its termination (Mr. Bate has 100). The Ordnance six-inch

Map is equally inaccurate in another particular, for it makes the row point to a large pound on the north of the cairn, which is roughly circular, and about 130 feet in internal diameter. There do not seem to be any hut circles in this enclosure; but there are several on Combshead Tor, to the west of the row; and near the row are remains of an old boundary bank, running roughly north and south. It is doubtful whether some mounds in the vicinity are barrows or relics of ancient mining operations, which were somewhat extensively carried on here.

Drizzlecombe.

The only Dartmoor rows which, so far as published, have been surveyed with absolute accuracy, are some of those described by Mr. R. Hansford Worth, C.E., in his papers on the valleys of the Plym, Torry, Yealm, and Erme, in the *Transactions of the Plymouth Institution*.⁹

At Drizzlecombe, in the Plym Valley, there are three rows associated with tumuli, kistvaens, a large cairn, an enclosure with two hut circles, and other antiquities, the whole forming a most important and interesting group. Two of these rows are roughly parallel to each other; and the third is nearly in alignment with one of the other two.

The general direction is east and west, with a variation slightly north of east and south of west.

The row group commences on the eastward with three small barrows in a line about equidistant from each other, the southern being 68 feet from the central. Each of the barrows is of about the same size, 29 to 30 feet wide at the base, and surrounded by a circle of stone slabs, of which respectively 13, 12, and 9 remain, supported by smaller stones.

From the central barrow there extends for 491 feet a single row of 76 stones, terminating at the west in a pair and a fallen menhir 9 feet 5 inches long.

From the southern barrow there extends for 296 feet an incomplete single row of stones (eleven now) terminating in a fallen menhir 17 feet 10 inches long, with a width of four feet at its base. This is the largest recorded on Dartmoor.

Continuing westward, fairly in the line of this row, some fifty yards is a barrow eighteen feet in diameter, which apparently covers a kistvaen, and forms the commencement of a row 488 feet in length, consisting of stones about 1 foot 6 inches above ground on the average, in some places arranged singly, at others in pairs. Mr. Hansford Worth

⁹ Part iii. vol. x. 1889-90.

remarks, "An examination shows that this has at no time been an 'avenue' throughout its entire length, but that the work of doubling the row of stones was never completed." It terminates in a fallen menhir 12 feet 6 inches long by 5 feet wide at the base.

Neither of these rows is shewn on the Ordnance Map.

Trowlesworthy.

There are two rows on the slopes of Trowlesworthy Tor; the first 426 feet long, consisting at present of 114 stones, arranged for the most part in pairs, though in some cases, where stones have been removed, standing singly. There seem originally to have been a pair of stones to each six feet in length, and the width out to out is also six feet. This double row runs nearly north and south, with a slight tendency north-east and south-west, and curves at the middle of its course slightly to the east. It begins on the north in a circle twenty-three feet in diameter, eight stones, all standing, and averaging about three feet high. 112 feet from the south end of the row, and a little out of alignment with it, is a menhir.

The other Trowlesworthy row consists of a single line 254 feet long, bearing 15° S. of E. magnetic, pointing very nearly to the circle at the end of the double row just mentioned, being slightly convex to the northward. There are now 38 stones. At its western end the row begins with a small menhir. Then for 160 feet it is fairly continuous, including 31 stones originally spaced about five feet apart centre to centre. Then comes a gap of 58 feet, after which the row is imperfectly continued by six more stones of a small size, and ends in a circle of about 20 feet diameter, of which only one stone is left standing.

Cholwich Town.

There is a very fine single row at Cholwich Town, some 230 yards long, but imperfect. It runs nearly north and south, with a westward tendency. It begins on the north with an eighteen-feet circle of six stones, standing; and originally terminated in a twelve-feet menhir. Many of the stones in this row are of unusual dimensions.

Erme Valley.

In the Erme Valley there are three stone rows. One at Yadsworthy commences on the south at a circle about 33 feet in diameter surrounding a barrow, and is well defined until interfered with by a newtake wall. Another near

Erme Pound and Hook Lake has a circle at its northern end, and then extends southwards until it is lost in the wall of a pound, which we must assume, therefore, is of later date.

Stalldon.

The third is very remarkable, far exceeding in length any other on record, not merely in England, but in Europe. Mr. Hansford Worth has a detailed survey in hand; but the main facts are as follows. It begins on Stalldon Moor with a circle 45 feet in diameter, consisting of 26 stones. There are the remains of a barrow in the centre, and a ditch has been dug round the whole. From this circle the row extends to the N.N.E., passing a little to the east of a cairn nearly 40 feet in diameter, about a third of a mile distant, crosses the Erme a little above Erme Pound, continues along the low land, crosses Red Lake, and ascends Green Hill, finally terminating in a tumulus at a distance of *two and a quarter miles* from its commencement—surely the most extended monument of prehistoric times that has come down to us. At its southern end the row is very perfect; at its northern the stones are few and far apart; but wherever its course is crossed by a turf-tye the stones, though well beneath the surface, are found to be substantially in place, the apparent gaps being formed not by the removal or non-existence of the stones, but by the encroachment of the peat. Without pretending to absolute accuracy, I may say that I have counted 798 stones of the row in place; but that there must have been originally at least three times that number, many of which, no doubt, still exist beneath the surface.

Butterdon Hill.

The oldest reference to any Devonian stone row is pictorial. It will be found in the ancient map of Dartmoor reproduced by Mr. C. Spence Bate (and which he assigned to the date of the Perambulation of 1240, or even earlier, but really much later) in the *Transactions* of this Association for 1872. A series of 14 circular marks are there shewn running north from and over Ugborough or Harford Moor, in the centre of which stands Hobajons Cross. Mr. Bate identified this with a row mostly of small stones reaching "from the slope behind Butterdon, passing over a hill above Pile's Wood that I take to be Sharp Tor, and terminating a little beyond it"; and he suggested that the appearance of the cross in connection with the row was due to the fulfilment of the command

of Pope Gregory—"the heathen relic was furnished with a cross, in order that the channel of worship might be changed from the false to the true symbol."¹

This identification is, I believe, correct—with the speculation I have nothing to do—and the row is still the boundary between Ugborough and Harford Moors. "Le Rowe rew" (? reeve = boundary) is mentioned in the finding of a jury in 1557 as one of the boundaries of Brent Moor—extending from "Glase Head ascending towards the north—by a long conger of stones called Le Rowe rew to a certain great heap of stones by the name of Tryberie Boroughs."² And one was very much tempted to connect this also, but Mr. W. Crossing regards it as the large track line which runs from the East Glaze to the centre cairn on Three Barrows, and which is still the boundary of Brent Moor; and no doubt this is so. I am very much indebted to Mr. Crossing for details of the Butterdon Hill row, a sudden Dartmoor mist having stopped my investigations while on a special visit. There is no doubt that it is a genuine row and an adapted boundary. It starts from a circle of fallen stones enclosing a dilapidated cairn on Butterdon Hill, and runs about 15 deg. east of north 1791 yards, crossing the depression where the Butter Brook rises and running a little up the hill, terminating in a tall stone to the south-east of Sharp Tor. Near the circle the stones, now fallen, are longer; but the average height of the remainder is 1 foot 4 inches (ranging generally between two feet and one), and their average distance apart 3 feet 6 inches. There is a cairn on the east, approaching midway, and near this there are traces as if part of the row might have been double, but this is by no means clear.

Glazecombe.

Mr. Crossing kindly called my attention to the fact that "to the north-east of Butterdon Hill, on the brow of the hill overlooking the Glazecombe, there is another row, much dilapidated, running parallel to the last. It starts from a small cairn, and there is another cairn hard by." This row has a very interesting feature in the fact that, while its western portion, where clearly traced, is distinctly double, to the east it is as distinctly single. The stones of the single row do not start in line with either line of the double one, but from a point between them; and they are much bigger and further apart. No "structural" difference in such very

¹ *Trans. Dev. Assoc.* v. 638.

² *Rep. Dartmoor Pres. Assoc.* 50.

simple works could well be more clearly emphasized. The single row contains fifteen stones in place, averaging about 6 feet apart, and ends in two fallen stones, each over 4 feet long. Apparently five stones are missing, making 22 in all. The double row can be made out in continuation with the single for 170 to 180 yards, but there are gaps, and some of the stones are difficult to trace beneath the turf. At two points in the double row extra stones occur, fallen, which may be casual, or may represent small interlineal circles, as at Merivale.

Coryndon Ball.

Mr. Spence Bate has described a group of rows in the vicinity of the fallen cromlech and cairns on Coryndon Ball, mentioned by the Rev. S. Rowe in the *Perambulation*. He says:

“It evidently 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.”³

Mr. Bate also speaks of this group as “extensive,” and says that it reminded him of the “Sarsden stones” of Berkshire.

I cannot, however, at all agree in this estimate of the “extensive” character of this “avenue,” or in being reminded of the “Sarsden stones.” The stones are so small, and structurally the whole affair is so unimportant, that after unavailing search I was gladly indebted to the kindness of Mr. W. Crossing for a more exact clue to its whereabouts than Mr. Spence Bate affords. The remains, however, are, so far as I know, unique on Dartmoor; only instead of one monument they consist of two.

There is, first, a “row” connected with a low cairn, which may originally have been some eighteen feet in diameter. The first standing stone now remaining in this row is about thirty yards from the cairn (there is apparently a covered fallen one nearly midway in the interval); and thence to the present end of the row there are fifteen more, four apparently being missing. This row runs a little north of east and south of west, and extends at present about ninety yards.

Just four yards to the south and east of this cairn are the

³ “Pre-historic Antiquities of Dartmoor.”

remains of a stone circle. Six stones still stand, forming its north-eastern quadrant; and there seem to be three others, fallen ones, in place, the diameter being about 27 feet. Westwards from this circle, and parallel to the cairn row, there run seven rows of stones. Only the more northern, however, really start in line from the circle, the others overlapping to the southward. The stones are very small—mostly just on a level with the turf, or rising but a few inches above it; and the lines are imperfect and irregular. Still with care and patience the seven may be traced, extending in all some eighty yards, containing in one instance over twenty stones, and ranging down to a row in which I could only satisfactorily identify half-a-dozen. At the points nearest the circle where the complete series can be traced the distances between the rows, proceeding from south to north, ran (not to be too minute) 5 feet, 5 feet, 8 feet, 7 feet, 2 feet, 3 feet. At the points furthest from the circle which admitted of similar measurements the figures were—6 feet, 5 feet, 6 ft. 6 in., 3 ft. 9 in., 3 ft. 10 in., 3 ft. 10 in. Irregular as the rows seem, they were therefore evidently intended to be straight and parallel. The most important, *i.e.*, that which contains the largest stones, though the biggest barely exceeds two feet in height, is the fifth from the south, and this, from its position and importance, seems to have been the principal, if not the primary, row connected with the circle, to which the others appear additional or accessory. A single stone, which may have formed part of another row that has otherwise disappeared, stands near the head, between the cairn row and the circle series. It is rather difficult to understand why the more southern rows are beyond the line of the circle if they were original. If, however, they were added at a later time, either in connection with subsequent interments⁴ or to emphasise the importance of the memorial, though it is hard to see how this latter could be hoped for from such wretched materials, the problem is solved.

The other examples known of this class of pre-historic monument are as follows:—

ENGLAND.

Westcote describes, evidently from personal knowledge, the existence of a stone row and menhirs on "Maddocks downe," on Northcott Farm, East Down, "four or five miles from the

⁴ The analogue of the circle and its rows would in this case be the modern family vault, the inscribed memorial lines of the one representing the lapidarian memorial lines of the other.

[Exmoor] fforest." Two menhirs, one $9\frac{1}{2}$ feet high, the other $5\frac{1}{2}$ feet, stood 147 feet apart. "Sixtie six foote on the side of these are layed a row or banck of 23 great vnformed stones alsoe, but not equalling the other two by much, reaching from one of these stones to the other in direct lyne." In the Portledge MS. of Westcote there is a figure of the arrangement, reproduced by Polwhele. There were several other groups of stones in this locality. A correspondent of Dean Milles in 1751 says he "counted more than a hundred clusters," and they included at least one circle. A correspondent of Polwhele also notices what was evidently the remains of the fallen row as the "Gyant's Quoits."⁵

The great "avenue" at Avebury, in Wiltshire, extended in a perfectly straight line north-easterly 1,430 yards, "apparently from the centre of the great 1,200 feet circle." This is the "Kennet avenue," of which some very fine stones are still standing—13 to 16 feet high.

Dr. Stukeley speaks of another, which he calls the "Beckhampton avenue," *but it did not exist in his day, no one mentioned it before him, and no one has seen it since!* Its existence, however, was needful to Stukeley's serpent theory; and so it got upon paper. Mr. Fergusson is very sceptical. I certainly could see no trace of it on my visit to Avebury, though the Kennet avenue was clear enough. This is 51 feet wide. Mr. Lukis has suggested that there may have been a circle with rows of stones on the Beckhampton side, but independent.

Another double row led from the circles on Hackpen Hill, hard-by, towards Silbury Hill, extending, it is said, for a quarter of a mile.

There are no rows in connection with Stonehenge, only the low earthen alignments dubbed *cursi*, which Mr. Fergusson compares for position and purpose with the rows at Merivale Bridge. Hereon we need but note that *earthen banks* are not *stone rows*, and that, even if they were, they have no such connection with Stonehenge as the "Kennet avenue" with Avebury.

There are portions of two double rows connected with the two large circles at Stanton Drew, near Bristol. The largest circle here had an estimated diameter of 368 feet, according to Mr. C. W. Dymond, C.E., to whom we are indebted for the most accurate plans and descriptions of these singularly interesting remains. It had an "avenue" on the east, of

⁵ Vide Westcote's *View of Devonshire in 1630*, printed edition, 90; Polwhele's *Historical Views of Devonshire*, i. 62, 63.

which only five stones now remain. The second (adjacent) circle is 97 feet in diameter, and its "avenue," also on the east, contains ten stones. No "avenue" is recorded in connection with the third and last of the circles.

Near Kits Coity House and the "Countless Stones" at Aylesford, in Kent, was a line of great stones running north-easterly about three-quarters of a mile.

At Ashdown, in Berkshire, there are remains of rows of Sarsen stones, running north and south some 1,600 feet.

At Shap, in Cumberland, there are remains of a stone row partially double, which Mr. Fergusson traced for a mile and a half (commencing with a circle) but which local tradition carries five miles. There are several small sepulchral circles in the vicinity.

SCOTLAND.

Connected with circles and a cairn at Callernish, in Lewis, a double row extends northward 294 feet, southward a single row 114 feet, while there are two east and west arms, extending altogether 130 feet.

Appendix C to the *Rude Stone Monuments* of Mr. Fergusson contains a letter from Sir H. Dryden describing sets of stone rows in Caithness: (A) Yarhouse Moor, running north and south. (B) Battlemoss, near Yarhouse, eight lines running north and south, 44 feet broad at the south, one line 384 feet long, one 170, the rest 133. (C) Garrywhin, six lines running north-east and south-west, 50 feet broad at the north-east, spreading to 107 at the south-west, central line 200 feet, a kist at the head. (D) "Many stones," running north and south; 22 lines, 118 feet wide at north end, spreading to 188 feet at south; present central length 145 feet; probably a cairn once present on the knoll where the lines commence (Sir H. Dryden treats as the head of the sets of rows the point which has the narrowest intervals and the highest ground). (E) Canister, six lines, north and south, 105 feet present length, width at north 30 feet, at south 53 feet, cairns in vicinity. The stones are not so large as in many of our Dartmoor rows.

FRANCE.

We now turn to the Continent. The stone rows of Carnac, the most important in existence, run for nearly two miles in a direction fairly north-east and south-west, but they are not of that total length; forming three sets. They begin at Menec with a set of eleven rows stretching 1,000 yards to

the eastward from a circle 290 feet in diameter. These rows are converging—330 feet in breadth at the western end, and at the eastern 195; and they begin with big stones, which generally diminish to an insignificant size, the biggest being 14 feet high. Six hundred yards to the north-east of Menec, and almost in the same line, is the Kervario group of ten rows 1250 yards long, and also converging, the breadth varying from 323 feet at the western end to 180 at the eastern. Here there is no terminal circle, though one may have existed; and some of the stones reach 20 feet in height. Four hundred yards distant is the Kerlescant group of thirteen rows (starting with an enclosure, horse-shoe shaped rather than circular, of 300 feet diameter), extending 285 yards only, but extremely convergent, the breadth diminishing from 450 feet to 205. Two miles north-west of Carnac, at St. Barbe, is a group of which three rows can be traced, running 300 yards; and two miles to the north of these is the group of Erdeven, ten rows nearly parallel, extending 2680 yards, with a diagonal row at the north-west, and having a gap about the centre. Thus Captain Oliver, from whom these descriptions are taken⁶; but Mr. Fergusson regarded the group as formed of two divisions, with the larger stones at each end. Tumuli and dolmans or cromlechs abound in this locality.

Other groups in Brittany are (and these include all the principal): St. Pierre, five rows 210 yards long, with a stone circle 180 feet in diameter 290 feet to the south-west of the head; Plouhinec, eight rows; Crucuny; Kerdouadec, a single curved row ending in a "swastica-like" cross⁷; Leuriè, a single row of 172 yards, with a slight elbow in the centre, from which starts a short branch at right angles; Logatjar, a long row of 267 yards with two short ones at right angles; Cojou (imperfect), two parallel rows 140 yards long.

INDIA.

To this I need only add that Sir Gardner Wilkinson says that one is stated to exist near Hit, on the Euphrates, leading to a circle of upright slabs; and that in India "there are avenues at the village of Mushmaie, near Chinra Poonjee, and others leading to the latter place, on the Cossyah, or Kasia Hills."

⁶ *Prehistoric Remains in Brittany.*

⁷ So the plan, but the table given by Captain Oliver says two rows 350 yards long.

SPECULATIONS.

These being all the facts connected with prehistoric stone rows that I have been able to gather, I proceed to consider the leading speculations put forth touching their origin and purpose.

The Rev. Samuel Rowe, in his original paper on "Antiquarian Investigations in the Forest of Dartmoor," remarks:

"These ancient erections, when near streams, were probably intended for the procession of the consecrated boat; in situations remote from waters, it is more probable that they were constructed for gymnastic performances in connection with the celebration of religious worship."⁸

This is practically repeated in his *Perambulation*,⁹ in which Mr. Rowe states that no sooner did he and his co-investigators mount the slope at Merivale Bridge in search of the remains there, to which their attention had been directed under the trivial name of the Plague Market—

"than Colonel Hamilton Smith instantly detected this interesting and characteristic feature of aboriginal worship, and pronounced the rows of stones to be nothing less than avenues, constructed for the performance of some solemn Arkite ceremonial—probably in connection with the river below, to which their direction evidently pointed." (The course of the stream renders it practically impossible that they should point elsewhere!)

This is essentially a variant of the hypothesis of Polwhele, who spoke of the rows in connection with the Drewsteignton cromlech as a "sacred way"—consisting of "two rows of pillars which mark this processional road" of the Druids.

As, according to Mr. Rowe's own shewing, the parallel lines in the Dartmoor double rows average only some four and a half feet asunder—sometimes less—the processions must have been of exceedingly attenuated dimensions.

Stukeley, by giving the "Kennet avenue" at Avebury a curvilinear outline, and by creating "entirely out of his own head" a companion in the imaginary Beckhampton avenue, made them into portions of temples connected with serpent worship.

The chief pair of parallel earthen banks near Stonehenge have been assigned the name of the *Cursus*, and it has been suggested that the space between was used as a racecourse. From this some very speculative antiquaries have gone so far as to transfer the same idea to the Dartmoor "avenues."

⁸ *Trans. Plym. Inst.* i. 184.

⁹ *Op. cit.* 2d ed. 31.

Occasionally therefore we find the rows at Merivale Bridge called the "cursi," by way of relief from the vulgar "avenues" or the more euphonious "parallelitha." Of course the absurdity of any races taking place in so confined an area is seen at a glance; though Mr. Page in his *Exploration* has possibly helped to give it a longer lease of life by supposing that the suggested course lay in the space between the double rows, and not within the rows themselves.

Mr. Fergusson's view of the matter is that the rows which conduct to circles "represent externally the passages in tumuli which lead to the central chamber"; that "those which are *not* attached to circles and do not lead to any important monuments" [such as those at Merivale Bridge—his own most unfortunate illustration] are "intended to represent an army or two armies drawn up in battle array"¹—that they are lapidarian records, in short, of fights and victories raised by the conquerors.

Mr. Lukis concluded it possible that "groups of pillars arranged in lines and in circles and associated together may have served a purpose in some way connected with the funeral rites or solemnities that preceded interment," which Captain Oliver modified by suggesting that "the avenues may be looked on as approaches of a ceremonial character connected with funeral rites, not necessarily only those which *preceded* interment, but for *subsequent* visitations"; adding that as in China clans and families annually revisit the tombs of their ancestors, so through the alignments of Brittany, descendants of those buried in the sepulchral circles may have passed at stated times to do honour to their forefathers.²

Another proposition is that the rows were roofed in to serve for dwellings—a curious procedure, either in the case of a single row or with stones a foot or two feet high, and persistently irregular. They have been also treated as the foundations of cattle shelters; and then again it has been argued that they are mere "casual assemblages of stones moved in the course of agricultural operations," which surely needs no comment.³

Such then are the leading hypotheses, more or less widely held, put forth to account for the origin and to explain the purpose of these mysterious structures. Though one or two

¹ *Rude Stone Monuments*, 51, 54, 55.

² *Op. cit.*

³ Seeing that Stonehenge has been dubbed a "planetarium," is it not rather strange that no one has suggested that these rows are pictures of comets, some with one tail, and some with many, the circle being the nucleus?

come very near to what I regard as the solution, I do not think that either can be accepted. Whatever theory we form must be inclusive, and this canon seems absolutely fatal to the whole of these suggestions as they stand. Account for all these remains, or you account for none. The notion of a processional path, for example, whatever form it takes, could only be accepted if all the rows were double and definitely parallel. To say that there are such things as avenues of approach to structures elsewhere is in itself no argument, but simply a begging of the question. Where there is but one row there can be no path; where there are more there are too many paths—labyrinths, in short. The accident that attention was first called to Avebury and Merivale is entirely responsible for this avenue or processional idea.

The suggestion that the rows were race-courses is, as we have seen, open to all the "processional path" objections, with the addition of its own inherent absurdity.

The serpent hypothesis was admittedly evolved from Dr. Stukeley's "inner consciousness," and has few backers now.

Mr. Fergusson's twin proposals are mutually destructive. The same thing is made to represent two wholly different ideas. One might be true, but not both; and I do not know of a single instance in which these rows are not, or may not have been, associated with circles or tumuli. Certainly that is the case with those at Merivale. And the battle theory is wholly inconsistent with the frequency of single rows. The "army" must have been drawn up on parade merely in such a case—clearly there was no enemy.

Mr. Spence Bate threw out the idea that the long row in the valley of the Erme was intended to guide the inhabitants from the "sacred circle" to the village where they mostly dwelt, in foggy weather. But his "sacred circle" is clearly sepulchral, and the village is a kistvaen!

Mr. Bate's general view, however, was at one time that the "avenues" were sepulchral, though later on he adopted Mr. Fergusson's battle-plan hypothesis. In 1871 his conclusion was that a kistvaen was generally connected with the rows; while there was always a cairn detached and not very distant, and he proceeded:—

"I take it that the kistvaen within the circle held the remains 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 pair of stones, according to the custom of the tribe, to commemorate The larger stones,

though not invariably, stand near the circle. I have thought that the 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 individual. The length of the avenue, therefore, records the number of individuals interred, and to a certain extent the duration of the tribe. The large cairn that stands apart is the burial place of the many. Their bodies were buried, and with each interment each mourner added his portion of stones to the common heap."⁴

Unfortunately for Mr. Bate's suggestion, there is no evidence that a kistvaen ever contained the remains of more than one body—it is only a stone coffin; and all analogy is against the assumption. Nor is it possible that the rows could have been customarily erected piecemeal—the indications of structural design are too clear. The second suggestion, touching the cairns, has this much in its favour, that we have ample proof of joint burial in such stone heaps and barrows elsewhere; and clearly the people so buried would be of less importance than those for whom the kistvaen was formed and the circle reared, to leave for the moment the rows out of the question.

I do not feel certain, however, that all these cairns were burial places. One under Shell Top, to which Mr. Spence Bate referred as a chambered cairn, is neither more nor less than a hut cluster—a group of chambers formed for residence in a pile of stones, with a long common passage; and it surely could not have stood alone.

GENERAL FEATURES OF THE ROWS.

In the absence then of any accepted and satisfactory solution of our problem, we proceed to inquire what are the essential features and common characteristics of the "rows." We find:

A. That the universal principle of these monuments is the existence of a row of isolated stones, arranged with some approximation to regularity of position and commonly of size.

B. That the number of rows associated is not essential—there may be one, two, three, or any number up to three and twenty: the variation not being in style or purpose, but apparently either in the direction of the importance of the structure; or signifying additional interments—on which latter head the fact that there are several groups of these monu-

⁴ *Prehistoric Antiquities of Dartmoor. Op. cit.*

ments on Dartmoor, and that some have certainly been the subject of additions, is noteworthy.

C. That the bulk of the stones is also a non-essential. They are of all sizes from twenty or more feet above the ground to a foot, and even less. The same desire for appearance commonly shown in the regularity of the spacing is, however, commonly though not invariably indicated in the proximity of those approaching the same proportions. The best seem, as a rule, to have been used first.

D. That the spacing is non-essential, since on Dartmoor alone it ranges generally between two and six feet, though fairly regular in the individual examples.

E. That while commonly or approximately straight, the rows occasionally branch; and while parallel when double, when in more numerous groups frequently diverge, as at Caithness, or converge, as at Carnac. These variations are therefore non-essentials.

F. The direction of the rows is also a non-essential, but one which seems to have a meaning, seeing that something like system is apparent. On Dartmoor they have a more general easterly and westerly bearing in the southern quarter, and a more general northerly and southerly in the northern, though with exceptions in both. Still the distinct agreements can hardly be accidental. The Kennet "avenue" at Avebury runs nearly north-west and south-east; those at Stanton Drew east and west; the line at Aylesford north-east and south-west; the Ashdown row north and south; the Caithness ditto; the Carnac east and west. The point to be noted here is that agreeing directions are, as a rule, characteristic of special localities—the bearings were clearly not taken haphazard, but with a definite object, whatever that object may have been.

G. We now come to an essential of the first importance. The rows of Dartmoor (and, so far as I am aware, those elsewhere) are invariably connected or associated with stone circles, kistvaens, barrows, cromlechs, cairns, and other indications of sepulture.

H. Another general rule is that Dartmoor rows begin with a circle or barrow on higher ground and then trend downward. (Coryndon Ball is the only example I know that follows along a hillside.) The point of the compass for the commencement seems immaterial. Thus with the east and west rows of the Plym, Meavy, and Walkham valleys, the head of the row is on the east or west, according to the level. The circle of the great row in the Erme valley is the highest point

at that end, though the kistvaen at the other is higher still. Here, however, we have a double slope to the river, and such a result was inevitable.

Deduction G clearly establishes the character of the rows. If they are always associated with definite indications of sepulture they must in some way be sepulchral likewise. It has, indeed, been customary to call the larger stone circles with which they are not infrequently connected "sacred circles"—simply, I take it, because they are specially important. Certainly not because there is any authority for such assignation, or any evidence of such purpose. But Dartmoor alone supplies instances of undoubted sepulchral circles of considerable size. For example, that at the head of the great row in the Erme valley, which is 45 feet across and encloses a distinct barrow, while they range down to five or six feet in diameter about a kistvaen. Minus the barrow, the Stall-don Moor peristalith would have been dubbed a sacred circle without doubt—indeed, it has been. The well-known circle at Penrith had also traces of sepulture, and with the pyramids in view, we need not be in a hurry to exclude the most gigantic from this category.⁵

So at Avebury, Stanton Drew, Shap, and Callernish, and partially at Carnac, the rows are connected with circles; at Caithness and elsewhere with cairns and tumuli. Circles, no doubt, once existed where they cannot now be found; but it is absolutely certain that these rows have always sepulchral relations of one kind or another: and that in the immense majority of cases the association with circles—some of which still do, and the rest probably did, enclose barrows or cairns and kistvaens—is clearly evident.

There might thus be something to be said in favour of Mr. Fergusson's idea that the rows connected with circles represented externally the passages in tumuli which led to the central chamber, *if* the double row was invariable. We have seen that it is not.

I do not think, however, our quest for the purpose of these rows, if we accept their sepulchral origin, is at all hopeless.

⁵ So WESTROPP (*Prehistoric Phases*) cites Colonel Ross-King as stating that "the Todas, a wild and rude tribe of the Nilgiri Mountains," at the present day burn the remains of their dead within a circle of stones, and afterwards bury them there. And the late Mr. W. J. Henwood, F.R.S., described the existence at Agur and other localities in the Northwest Provinces of India, of a people who rear cromlechs, some flat and some inclined, on the first of which flowers are often placed; while within the enclosure formed by the latter lamps are burnt, clearly in honour of the dead, whether ancestor worship is actually involved or not.

We must bear in mind that they are a *distinctive* form of interment—that in the immediate vicinity of the barrows and kistvaens and circles connected with them we find barrows and cairns and kistvaens—even circles, presumably of much the same period—which are not. The rows clearly indicate special elaboration, and therefore special honour; and by all analogy they should mark the burial places of persons of importance—such as the head of a family or a village, or the chief of a tribe.

So far as we can judge, in its complete form this class of "rude stone monument" consists of a "row" connecting a circle and a menhir. At least this is the case in so many of our Dartmoor instances that we are fairly entitled to suggest the absence of circle or menhir as probably due to accident or mutilation. If so, and the perfect structure consists of circle, row, and menhir, the similarity of the arrangement to the Egyptian "Key of Life" is equally striking and suggestive, as indicating a possible association with the widespread worship of the productive powers of Nature, which in forms more or less disguised finds place, in symbol if not in doctrine, in all the elder religions. How far this cult was present to the rearsers of our Dartmoor rows is, however, a very difficult question; and the rows would rather seem to represent an engrafted expansion of the original idea. Circles and menhirs are very commonly associated where the connecting row is not found. Moreover, it is one of the commonest experiences of humanity that customs and symbols long outlive their meaning. The urn retained its place as a funeral symbol, while cremation had been abandoned for centuries; the obelisk and the headstone are the old menhir; and in parts of Yorkshire you may see miniature modern cromlechs by the score in parish churchyards, as, for example, at Skipton and Bolton Abbey—slabs supported above the ground by two or four supports. But we do not think of associating these with the original idea of the cromlech builders, and it is quite possible the circle and menhir on Dartmoor may equally have reached the habit stage.

In Professor Max Muller's *Gifford Lectures on Anthropological Religion*, recently published, we get accounts of Vedic funeral ceremonies taken from the Aranyakas (about 600 B.C.) and the Sûtras.⁶ In case of death, says the Sûtra, let someone have a piece of land dug up, south-east or south-west (of the village), inclining towards the south or the

⁶ pp. 241 *et seq.*

south-east; others say towards the south-west." This serves alike for burning or burial. Then in his Sixth Appendix⁷ the Professor gives rules for Vedic burial collected by Rajendralal Mitra from other Sûtras. Here the *road* from the house to the burning ground is said to be divided into three stages; the urn containing the burnt remains to be surrounded with brick bats and covered with a mound, around which finally a few holes are dug.

It seems to me that this passage contains hints which may be worth considering—the importance, for example, attached to the burial path; the direction of the place of interment from the place of decease; and the setting apart the burial ground by an imperfect cincture. Where stones were scarce a circle of holes would be more easily formed, and be quite as symbolical as a ring of stones.

Then again we find that among the Khassia tribe, in India, in the present day, menhirs are erected to the memory of dead ancestors who are supposed to have answered prayer, the number corresponding to the estimation in which they are held.

So, too, it is a well known custom to honour the memory of deceased friends by adding stones to their cairns.

CONCLUSION.

Without attempting to enter too closely into detail, it appears to me, therefore, that these stone rows are purely sepulchral; that the burial places with which they are connected are those of people in their day of position and authority; and that the length of the rows and the number of the stones indicate with more or less precision the number of what I may call active mourners, the leading members of the tribe or family, or perhaps, in Highland phrase, "the chieftain and his tail." Whether the multiplication of the rows had any special meaning, or whether it was not rather a matter of convenience, is a question which probably never will be solved (though Cosdon certainly suggests the connection with separate interments, and possibly Coryndon likewise); but we shall have reached fairly definite conclusions if we can get to look upon the circle, with its barrow or kistvaen, and appendant row or rows, as representing heads and their following, whether the family tie is distinctly indicated or not.

Hence there may be so much in Mr. Fergusson's battle

⁷ pp. 436 *et seq.*

theory as would enable us to regard the standing stones at Carnac, as such memorials to leaders who fell in conflict on a site where the abundant traces of interment may fairly lead us to infer that great slaughter must have taken place; but I do not think we can assume that each stone is itself a personal memorial—the kist or circle containing the dead chief, and every stone in the row commemorating a fallen follower. Victories so commemorated must have been worse than defeats.

Perhaps it will help advocates of the sacred circle idea to look with more favour on my hypothesis if they will regard the larger circles as the burial places perchance of a household or sept, rather than of an individual—nay, even of a tribe. And in that connection I would direct their attention to a passage in a Saxon MS. referring to Avebury, “along the stone row [Kennet avenue], thence to the *burial place*,” with which *burial place* it is hardly possible to avoid identifying the Avebury Circles. Moreover, at least a dozen kistvaens were found within one circle in the Isle of Man.