

III.—*Typical Specimens of Cornish Barrows.* By WILLIAM COPELAND BORLASE,
M.P., F.S.A.

Read Feb. 3, 1881.

THE coast-line of the extremity of Western Cornwall has been so often laid under contribution of late by the artist's pencil, that its general features are familiar to many who have never paid the country a personal visit. The fantastic forms which the weather-worn granite assumes as it rears itself in bosses (or "karns" as they are locally termed) between the deeply-cleft gullies down which the streams of red mine-water find their broken way, are the characteristics of that portion of the cliff which, lying between the promontories of the Land's End and Cape Cornwall, are turned most directly towards the setting sun. It is along this line of coast—some six or seven miles in extent—that the stone cairns which formed the burying-places of an early population are found in greater abundance than is the case in any other portion of the district. Along this same strip of sea-board are no less than three of those fortifications known as cliff castles, defended in each case by lines of ramparts crossing the necks of headlands from side to side, terminating at either end in the abrupt precipice of the cliff, and always intended to resist attack from the land side. Within these lines stone cairns are frequently found—a fact which seems to point to the conclusion that the latter are the more recent of the two; since, were it not so, the castle-builders would have availed themselves of the pile of stone already on the spot and ready to their hand. I may here mention that in a bank of stone contiguous to, and perhaps a portion of, one of these cliff castles—that at Kenidjack—a workman recently found and brought to me two remarkably fine bronze socket-celts. With them was a broken paalstab, a piece of bronze cast off from the mould, a quantity of well-smelted copper, and some roughly-smelted tin.

But not only in ancient times was every promontory on this coast crowned by a conical tomb, consisting of a basement of large slabs set on edge, containing and

supporting a heap of smaller stones, which covered in general a chamber within (for such was undoubtedly the pristine form of the cairns along the cliffs); but each natural granite boss was itself surmounted by its group of these little burying-places, while the cliffs and hill-tops above and further inland—(wherever indeed an aspect ranging from south-east to south-west could be secured, for in other situations they are invariably absent)—were studded with lines or groups of larger mounds, of which alone such traces remain as have survived the quarrying powers of those masons and hedgers who have used them continuously for the purposes of their work, from the commencement of Cornish agriculture in the reign of Elizabeth until the present day.

And here the question may well arise, “Why is it that this narrow tract of western land is so much more thickly strewn than other districts with the monuments of the dead?” The same phenomenon is, I believe, to be observed along the western shores in Ireland and in Brittany; and if, as it is much to be wished, the coasts of Spain and Portugal could contribute their quota of evidence as well, it is possible that there also the same would be the case. It can scarcely be accidental. The internal arrangement of the mounds presents, as I presently hope to point out, the same marked preference on the part of their constructors for the self-same side. Canon Greenwell and other English explorers have noted the same result. Does it, it may be asked, mark an intelligent preference, based on a worship of nature—such as was known to the Aryan nations of the East, and is still known to the Maoris and the Red Indians—for the death-quarter—the side of the setting sun? Was it for this object that these primitive people brought down their dead to burn them on the utmost limit of the western shore? Does it, on the other hand, point only to the survival of a superstitious custom, the outcome of an earlier form of worship? A line of four holed-stones in the moorland above this cliff of which I am speaking points due east and west; as does also the well-known Maen-an-tol, with its shadow-stone on either side—both of which monuments Mr. Lukis has carefully planned. Superstitions connected with the sun and with these holed-stones are still prevalent in the country. While I admit that the means are not at our disposal, and probably never can be, adequately to answer these questions, I must add that the invariable recurrence in cairn after cairn of the same arrangement, left in my own mind a presumption in favour of the plan having been dictated by a precedent derived from some more or less definite form of early faith. But, as my object is not to offer a theory, but to present a plain unvarnished record of facts, I will pass from this subject, and proceed to select from among upwards of two hundred sepulchral mounds of

various kinds, which I have examined in the county, a few typical specimens from the district to which I have referred; and I will begin by noticing the structure and contents of a few of the smaller cairns on the cliff.

Four specimens on the estate of Boscregan, which in Cornish signifies “the dwelling by the ‘crigs’ or cairns,” will perhaps best serve for the purpose of description, since they are situated within a few yards of each other, are all of different type, and have all been thoroughly explored.

Figs. 1 and 2 are on the summit of a natural granite boss known as Karn Leskys,—that is to say, “rock of burning,” so called, as we may suppose, not on account of any survival of a tradition of the funeral piles which once were lighted there, but from the beacons which have blazed there since. The two little circles given in the plan are contiguous; they lie in a direction due east and west, and the faint traces of a third are to be found at the distance of a few paces to the south. The westernmost circle of the two consists of a ring of earth and stone eighteen feet in diameter, but only twelve inches in height above ground. It enclosed an area slightly sunk, in the centre of which was a little hillock eighteen inches high. On cutting through this circle nothing was found in the outer ring, but the remains of a low wall were brought to light surrounding the central heap, which proved to be a pile of small round pebbles from the beach below. The other

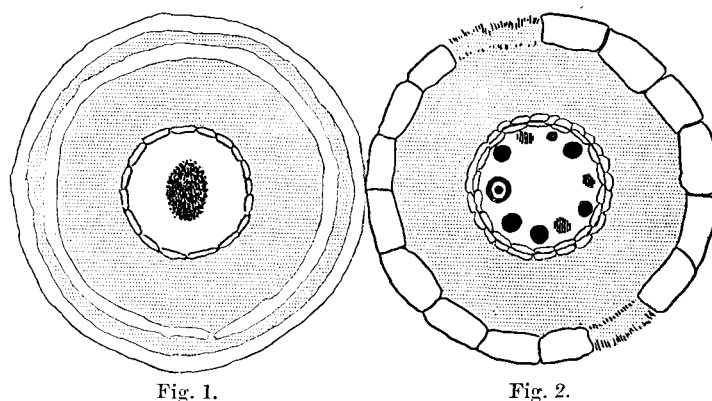


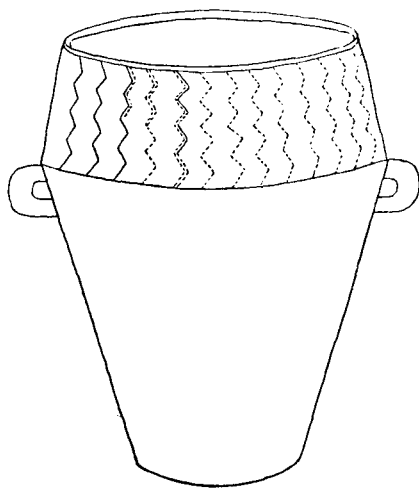
Fig. 1.

Fig. 2.

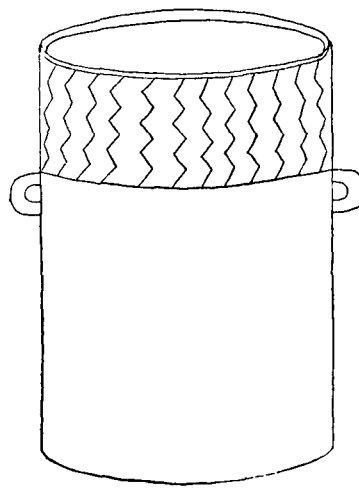
KARN LESKYS.

circle, however, which joined it on the eastern side, had been hedged round, as is the almost invariable rule, with a ring of contiguous granite blocks, most of which were still in their place. They inclosed a bank of earth and stone two feet in height, the upper portion of the tumulus having been removed by stone carriers. The diameter was, as in the adjoining circle, eighteen feet. I drove a trench to the middle, and laid bare the rough wall of an inner ring, six feet in diameter.

Within this,—arranged all round the area, for there was nothing in the actual centre,—were no less than ten separate deposits of pottery, comprising the greater portions of seven sepulchral urns. Their bases, most of which were perfect (the vessels having been crushed in by pressure from above, at the time probably when the stones which may have formed cists round them were removed) rested on the natural soil, though it is probable that in a few cases (where the bottoms were not found) the urns themselves had been inverted. The largest vessel had been placed on the western side of the ring. When perfect it cannot have been less than from nineteen to twenty inches high, with a diameter of fifteen inches at the mouth, being therefore the largest sepulchral urn (with one exception presently to be noticed) yet found in Cornwall. The pottery is five-eighths of an inch thick, and it is hard baked: the clay is full of the decomposed granite of the district; it is black in the centre, but of a yellowish colour externally. On either side, three inches below the rim, is a perforated handle three inches broad, and the same in length. On a line with this handle (which feature I may here say is the most distinguishing characteristic of Cornish urns) a bulge runs round the vessel,—not of the heavy type known in Dorsetshire, but giving additional symmetry to the whole—and from this point downwards the urn tapers away to a base nine inches in diameter. The whole of the upper portion of the urn was ornamented with a laureated chevron pattern arranged perpendicularly, and this pattern, as is usual, extended over the handles as well. Adhering to the interior was a quantity



TAPERING TYPE.



CYLINDRICAL TYPE.

of burnt human bone—the remains of an adult,—mixed with charcoal and ashes. While separating the fragments in order to restore it, I made the interesting

discovery that a second urn had, at some period subsequent to its interment, been thrust down into it, apparently splitting it to pieces. The height of the inclosed urn, whose upper rim was on a level with that of the outer one, was sixteen inches, and the diameter at the mouth twelve inches. The pottery is half an inch thick, dark-coloured throughout, not so well baked as that of the larger vessel; but, like that, filled with small angular pieces of quartz. It had two perforated handles, each two and a half inches wide by three inches long; and over them, as well as around the upper band of the vessel, was a double chevron ornament, made, as it appears, with a stick, and not displaying the care used in the laureated or twisted-cord pattern. The base was seven inches in diameter; and the interior was full of burnt human bones. The shape was much more *cylindrical* than that of the larger urn, and a rim had taken the place of the bulge. Both these forms of urn are common in Cornwall, and if this was a secondary interment, it must tend to show that the *tapering* type is not the more recent of the two. Two flints—one with a naturally formed hole in it, and the other a chip used perhaps as a strike-a-light, were found amongst the ashes in the second urn. A parallel example of one urn having been found pressed down into another occurred not long ago in an adjoining parish. The other fragments found in this prolific cairn presented the following characteristics:—(a) the base, six inches and a half in diameter, and some other portions of a coarse dark earthy vessel, half an inch thick, and full of burnt human bones; (b) the handle (two inches broad) and other parts of a vessel bearing the usual ornamentation; (c) five pieces of a very prettily ornamented cylindrical vessel, five inches in diameter, and probably six inches high, the pottery fairly well baked, of a reddish tinge, and a quarter of an inch thick, the sides covered with a series of laureated chevrons, which, from a fragment of the base, seem to have reached (as in the case of the drinking cups known in other parts of England) to the bottom of the vessel; (d) portions of a rough hard-baked urn (size uncertain), the interior of the rim ornamented with chevrons; (e) five pieces of rough dark earthy pottery, having an attempt at sand glaze on the inside. Besides this pottery, there occurred in the earth thrown out from this mound numerous beach pebbles, one of which, a flat one, one inch and three quarters long by one inch and a half broad, had been artificially perforated, and splinters of flint, common to the downs of the locality, but most frequently met with near tumuli and within the lines of the cliff castles. The next cairn (fig. 3) lies on another natural granite elevation one hundred and fifty paces south of the last, known as Karn Creis or the “Middle Karn,” consisting of two peaks twenty-six paces apart. The diameter in this case too was eighteen feet.

A ring of stones surrounded it, and a second and concentric circle had been drawn round the immediate centre, in which was a dismantled cist, lying east and west,

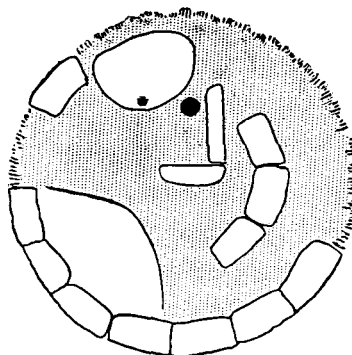


Fig. 3

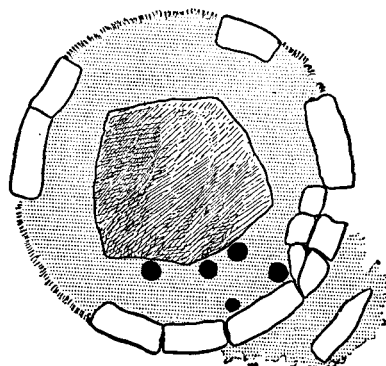


Fig. 4.

KARN CREIS.

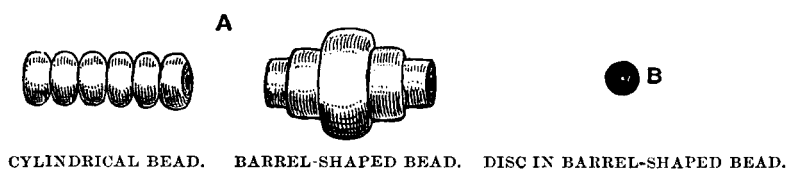
four feet long by three feet wide. In one corner of this lay a single fragment of pottery, marking perhaps the position of an urn. In its general arrangement and structure this cairn resembles many others on this coast, nearly all of which, like it, have been previously rifled.

On the other peak at Karn Creis lay the last of these cairns to which I propose to advert. The construction of this little burying place deserves attention. A large natural granite rock *in situ*, of a square tabular shape (fig. 4), measuring eight feet across and four feet in height, had been surrounded by a ring of stones eighteen feet in diameter, and the whole had probably been covered in by a heap of small stones. Similar arrangements in the same locality have been previously noticed by Dr. Borlase and others. One such occurs at Karnmenelez, near Camborne, and another at Tresco, in Scilly; and, to judge by the results of previous explorations of my own in a cairn in the parish of Morvah, in which such a rock containing an artificial cup-basin occurred, I venture to assert my conviction that in cases where such rocks are found they were purposely selected to form the bases of the funeral piles on which the bodies were burnt. On the south side of this cairn some two feet of filling still remained between the central rock and the outer ring. On removing this some interesting discoveries were made. Resting immediately against the side of the natural rock was the greater part of a plain barrel-shaped urn. The pottery was thin and earthy, copiously mixed with gravel, and averaging from a quarter to three-eighths of an inch in thickness. It possessed two cleats or embryo handles, each

one inch wide, perforated by holes only three-eighths of an inch in diameter, or just large enough for a cord. The diameter of the vessel was eight inches, and it was one foot high. Amongst the ashes and bones with which it was filled were a few rough chips of flint and a fragment of a globular vessel of glass a quarter of an inch thick, of an olive-greenish hue when held up to the light, but the surface covered with a blueish-black coating of an iridescent appearance. The globular portion of the vessel from which it came must have been three inches in diameter. As in the case of some beads described by Professor Buckman and found in Wiltshire, this piece of glass has been found on analysis to contain no lead, but much iron. Whether articles of glass were of native manufacture in Britain, or were imported (as seems to be implied by a passage in Strabo. lib. iv. c. 5) is, I believe, a point still undetermined. Eighteen inches to the east of this urn, and still under the brow of the natural rock, were discovered the fragments of a second urn of a somewhat more globular form than the others. The pottery averages from half an inch to three-eighths of an inch in thickness; the base measures seven inches and a half in diameter, and the mouth eight inches. The inside of the rim is ornamented with a series of parallel lines of the twisted-rope pattern placed diagonally, and the outer band of the vessel below the rim is decorated, as usual, with the chevron laureated device—never found on domestic vessels—ranged in series of acute angles placed horizontally. The handles are two inches broad, pierced with holes half an inch in diameter. The texture of the pottery is finer than usual, though black and earthy. Close to the side of this last lay the bottom and several fragments of the rudest urn I have yet met with in Cornwall. It was filled with burnt human bones, some of which had become so firmly imbedded in the clay that, when removed, they left their stamp in it—a fact which proves that they had been placed in the vessel while the clay was still wet, and probably also that the only baking the urn received was what it got from the flames of the funeral pile. The bottom was five inches in diameter, and it belonged not to the cylindrical but to the tapering type, expanding to nine inches near the top. The pottery was from a quarter to half an inch thick. Opposite this urn, and hugging the inner face of one of the stones of the ring, stood a little vessel three inches and three quarters in diameter at the base and four inches and a half at the mouth. The rim is gone, but it is otherwise perfect, and is four inches high. It presents a slight bulge below the upper rim and what are handles in the larger vessels are represented by two unperforated knobs. It belongs to that class of vessel which probably in Cornwall took the place of the more elaborate “drinking cups” or “food vessels” of other districts, and to which,

since they are models of the larger ones, I have given the name of “miniature urns.” That they did serve the purpose of food vessels, I think, is pretty clear from the fact that, in one which accompanied four other larger vessels in a cist at Busvargus, in this same district, I recently discovered that the contents consisted chiefly of the bones of small birds. The pottery in this instance was of a reddish colour, half an inch thick; a few burnt human bones lay near the mouth, but the bottom was filled with snuff-coloured powder.

One foot further to the east of this little urn, in an angle formed by a turn in the encircling ring, were found three pieces of black hard-baked sand-glazed pottery, three-eighths of an inch thick. One of these is part of a plain bevelled rim, and on another can be traced a rude pattern made by the incision of a pointed instrument. Together with these last fragments my trowel brought to light twelve peculiar beads made of glazed earthenware. The colour of the glaze is bright blue, such as that of the finest turquoise. Ten of them are *cylindrical* and fluted, but the two others are larger and *barrel-shaped*, though fluted like the rest (A). The length of the cylindrical ones, when perfect, is five-eighths of an inch, and the diameter nearly one quarter of an inch. Similar ones to these have occurred, though very rarely, in other parts of England; those found by my friend Mr. Woodruff, F.S.A., together with urns of a remarkably Cornish type, in a Kentish barrow, and figured in the *Archæologia Cantiana*, vol. ix. pl. ii. p. 24, being perhaps the most like them of all. The barrel-shaped ones are of the same length, but their diameter is double that of the others. Owing to this, when worn on a chain, it is

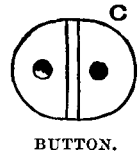


CYLINDRICAL BEAD. BARREL-SHAPED BEAD. DISC IN BARREL-SHAPED BEAD.

clear that the cylindrical ones would have run into them, were it not that this is obviated by the insertion at each end of little discs of what I take to be Kimmeridge clay, each perforated with a tiny hole, scarcely large enough for a pin to pass through, but through which the thread of the necklace was clearly meant to run—to such minuteness in detail had the necklace-makers' art been brought (B). The discovery of personal ornaments, as also of articles of intrinsic value, in Cornish cairns is a very rare occurrence. The gold cup found near Liskeard is the exception which proves the rule in this respect. The fact may be variously interpreted. Either

the people were not in possession of them, or their burial-places have in general been rifled, or while actually possessing them, Cornishmen were too wise to part with them in such a manner. As to these beads, my impression is that they are of native origin. Canon Greenwell has indeed spoken of Cornwall as a remote part of the country where "the characteristic features of early burial may have been found in connection with interments of comparatively late times;" but it must be remembered that Cornwall in great probability received civilizing influences as early as any part of Britain, for civilisation travels on the lines of commerce, and it was on account of her tin (which must have come from Cornwall) that Britain was first known to the ancient world. At the time then, when these beads were deposited in this cairn Cornwall might have been in sufficiently intimate relations with other parts of the country to have imported them, or sufficiently civilized to have made them herself. Anyhow they would be in my opinion of native British origin.

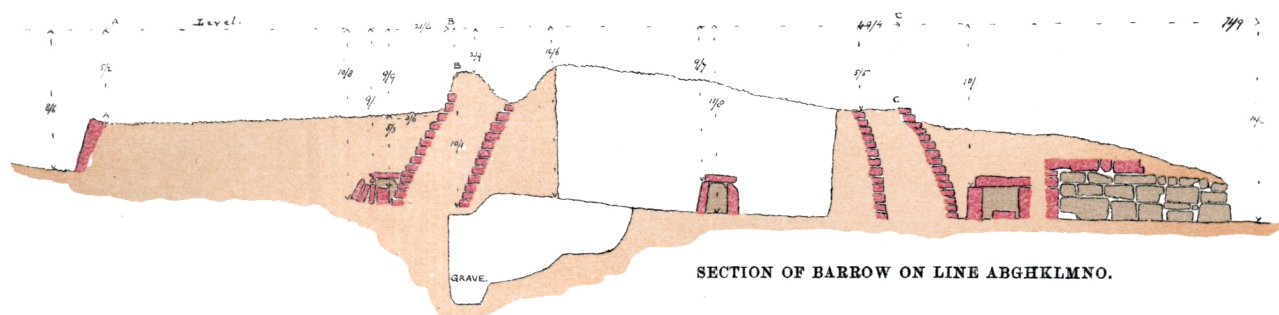
With them were found a little button formed of a substance undetermined, but of the appearance of a concrete. In shape it is half a sphere, the flat surface measuring nine-sixteenths of an inch long by seven-sixteenths broad. It is traversed from side to side by an indentation which bisects it. In each of the divisions of the surface thus formed is a hole large enough to admit a pin's head, and these two holes meet under the indented line (c). Similar ones have been found elsewhere in jet: A heart-shaped stone with flinty excrescences, with a natural perforation, possibly the charm for the necklace: The base of a leaf-shaped arrow-head of dark brown flint finely worked. The burnt fragments of bone which accompanied these articles were extremely delicate in texture—those apparently of a young woman or child.



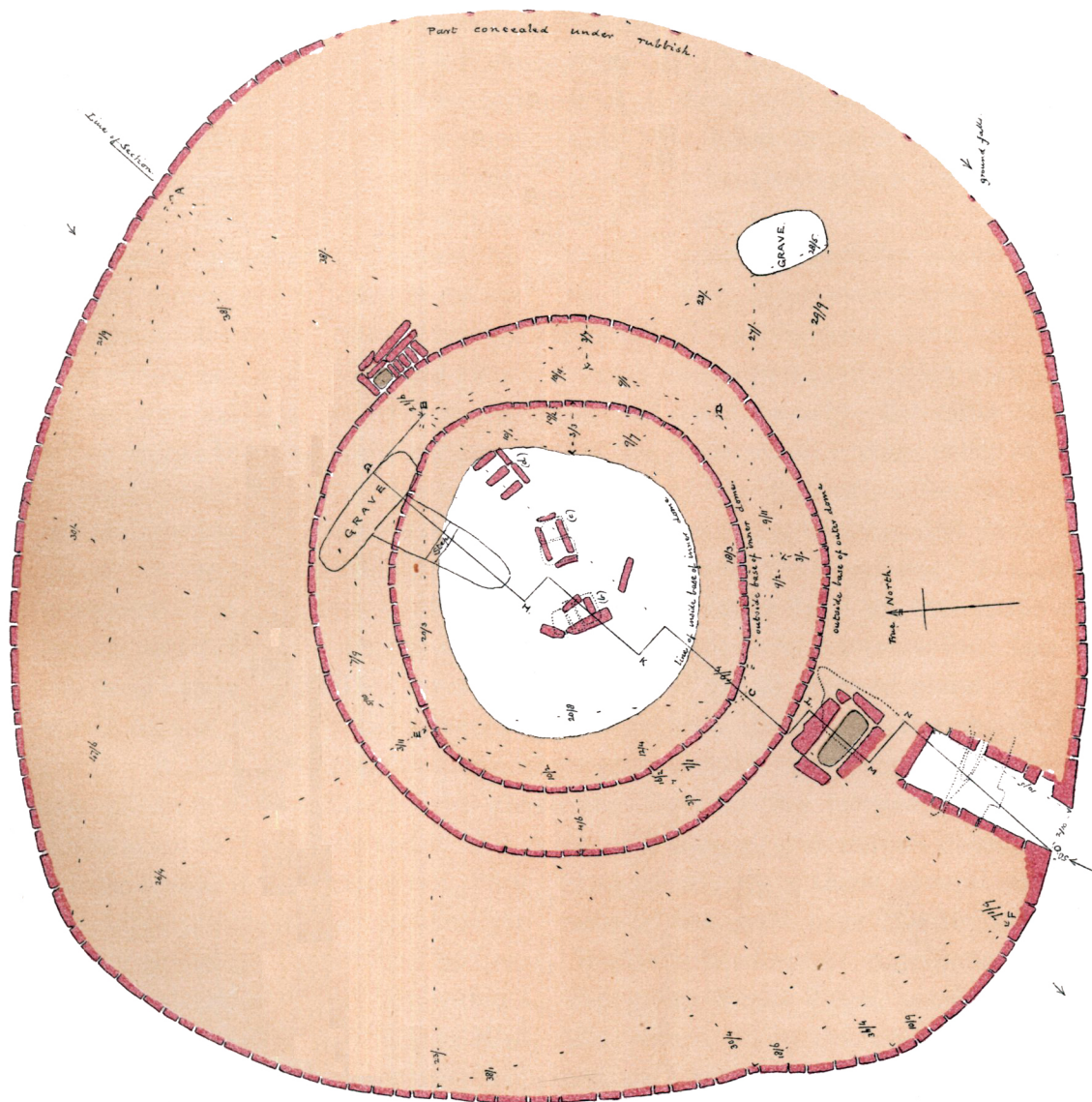
Having concluded that part of my subject which deals with the smaller stone tumuli or cairns, I now arrive at the far larger piles which in general surmount the highest of our hills and the more prominent portions of the cliffs.

On the cliff which towers above Cape Cornwall, near Ballowall, St. Just,—the headland which, until recent researches proved it otherwise, was always held to be the westernmost extremity of the land—rises the bastion of granite known as Karn Gluze, or, in English, "the grey karn." The land immediately around has from time out of mind been one of special importance to the miners, as a consequence of which an enormous mass of refuse stuff, covering several acres of ground and averaging some twenty feet in height, mars to a great extent the beauty of the spot. A curious local tradition attaches to this pile of refuse, to the effect that

miners returning from their work at night have seen lights burning and rings of fairies dancing on and around it. Having one day climbed to the top of this heap to gain a better view of fishing boats at sea, my attention was attracted to the fact that in one spot, at the very summit, the pile was composed, not of the usual material broken under ground, but of the granite stones common to the surface of the land. It was clear therefore that they had been purposely thrown there by the hand of man. Fancying that they might be, as indeed I soon proved that they were, the upper portion of a large cairn which owed its preservation to the covering of mine stuff which centuries had accumulated round it, I caused a gang of miners to drive a trench from the outside of the whole mound towards the point where the surface-stones appeared on the top. By this method, after many days' labour, the structure of an enormous tumulus was laid bare on the western side, with the following most interesting results:—At a distance of ten feet from the edge of the pile an outer wall was uncovered, formed of massive blocks of granite, some of them seven and eight feet long, set on edge contiguously, and supporting a second layer placed horizontally on their top. It took about one hundred and fifty of these blocks, as we afterwards found, to form the outer circle of the entire cairn. It formed at once the inclosing ring and the basement of the immense pile of stone which lay within. This pile measured in diameter sixty-seven feet north and south, and from seventy to eighty feet east and west, while the entire accumulation of *débris* denuded from it on all sides measured not less than one hundred and fifty feet across. The symmetry of the circle, when seen in ground plan as laid down by Mr. Lukis, is spoiled by a considerable bulge on the south-west side. Passing the outer ring and continuing the trench towards the centre, the workmen broke through a congeries of loose stones eighteen to twenty feet in breadth, and, after removing a sufficient number to gain a passage through them, reached a second wall, resting, like the former one, on the natural surface, and surrounded at its base by a stratum of ashes and charred wood. The diameter of this second circle was thirty feet north and south by thirty-seven feet east and west. Its construction was very different to that of the outer wall. In some places, though it had clearly been truncated, it was still twelve feet high, and was neatly constructed throughout in a beehive form, with layers of square or flat stones. The dome shape was so distinctly marked that, at a height of five feet from the base, it had gradually inclined inwards no less than two feet. Unlike the beehive huts, well known to antiquaries in the same district, and which are self-supporting, this dome depended for its stability on the pile of stones which it enclosed. At a height of four feet six inches from the ground, a layer of well-chosen square stones ran all round the



SECTION OF BARROW ON LINE ABGHKLMNO.



BARROW AT BALLOWAL, ST. JUST, CORNWALL.
W. C. LUKIS, F.S.A., AND W. C. BORLASE, F.S.A., 17TH JULY, 1874.

MAGN. MER. TAKEN TO BE 20° 30' W. OF NORTH.

Scale $\frac{1}{12}$ inch to one foot.

structure, forming a kind of rude plinth, from which the upper portion of the cone rose more perpendicularly than was the case with the lower part.

From this fact I should imagine that, according to the original design, this plinth marked the level to which the cairn was carried between the outer and this second wall. From this point the central cone, which would have been exposed to view above this, would take its rise—to the height (to judge by measurements and by the accumulation of *débris*)—of not less than perhaps twenty feet. On breaking through this second wall, at a distance of four feet within it, a third concentric wall was uncovered, also built in the form of a dome, but more perpendicularly than the other, and of smaller stones. The space between these two domes, which for fear of destroying the structural or I may almost say architectural features I have not explored, had been filled in with large flat stones dropped in aslant. This central circle proved to be twenty-two feet in diameter north and south by twenty-seven feet east and west.

Before I proceed to describe the various places of sepulture which were discovered during the process of overturning, as I have done, every stone within each of these circles except those between the domes, I wish to point out a fact which at once struck me, and which has struck every archæologist conversant with Oriental tumuli who has seen it since it has been laid bare, namely—the close similarity which exists between the structure of this great cairn and certain other structures in other lands. Not to mention the Talayos of the Balearic Isles, this tumulus certainly bears a striking resemblance to the topes of Afghanistan and India. Such an one is the tope of Bhojpur, described by General Cunningham. The external construction in that case is of stone, the interior being filled up with loose stones, bricks, and rubbish. An outer circle of walling supports a terrace four feet above the level of the soil. This terrace is approached by an inclined plane or by steps, which on the ground plans appears as a bulge from the side of the original outer circle. A plinth encircles the conical structure which rises from the terrace, and this plinth is at no great height above the level of the terrace itself. Were a restoration to be attempted of this cairn at Ballowall a structure would be raised which would, if I mistake not, be found to agree in all these several points with the topes which it was customary to raise in the East over the relics, or at an earlier period over the burnt bodies, of Buddhist teachers of noted sanctity. The same features are also noticeable in the great Sanki Tope, as also in Persian monuments, and finally in Asia Minor also, where, as in the case of the tomb of Tantalus, the plinth, so rudely indicated, as I believe it is, in the unhewn stones

of the Cornish mound, has developed itself into a characteristic feature of architecture.

I will now notice the several sepulchral chambers, &c., which were discovered during the process of overhauling the mound; and it is remarkable that with one exception they all lie in a straight line drawn across the centre from south-west to north-east. On laying bare the outer ring it was found that on the south-west side one of the stones of the circle was wanting. Access was by this means given to a chamber nine feet long, three feet high, and averaging from three feet six inches to two feet six inches wide. The roof was formed by two covering stones with a third wedged in between them, and the north-east end was closed by a single slab. In every respect it was clearly identical with the chambers in certain mounds known in the same locality and in Scilly as the "Giant's Graves." It proved to be paved throughout, and under the pavement quantities of burnt human bones of adults, and fragments of broken pottery—some, such as that figured, curiously ornamented with circular indentations—were discovered. The place must have been disturbed and rifled, unless we may suppose that the bones and shards were subsequently collected and thrown there, which may have been the case, as they had been dispersed all over the floor of the chamber. Two feet north-east of the end of this vault was a long grave-shaped cist, four feet long by two-feet six inches wide and two feet deep. The sides consisted each of a single granite block; two stones formed the cover, and a single stone lay along the floor, on which it is probable that an unburnt body of which not a trace remained had been placed. This cist rested on the natural soil and was scarcely a foot distant from the base of the outer dome. Two other discoveries were made in the outer circle; one on the south-east side, namely, a grave or pit six feet long, three feet wide, and three feet six inches deep, cut in the hard natural soil six feet from the outer dome; the other a very carefully protected cist eighteen inches square and ten inches deep, abutting on the outer dome on the north-east side—being the only example I have found of a cist on that side of any cairn. A large square block of stone lay at the bottom, five flat stones were set slantwise against the south-east side, and several others heavy blocks against the north-east side. It contained the indistinct traces of having contained some article of wood unburnt, but no trace of an interment.

As the workmen penetrated the third wall, which formed the inner dome, ashes became more plentiful, and on arriving at the centre a pit was discovered sunk in the natural soil. It was in the form of a T, the shaft of that letter being represented by a pit eight feet long, lying in a direction south-west and north-east.

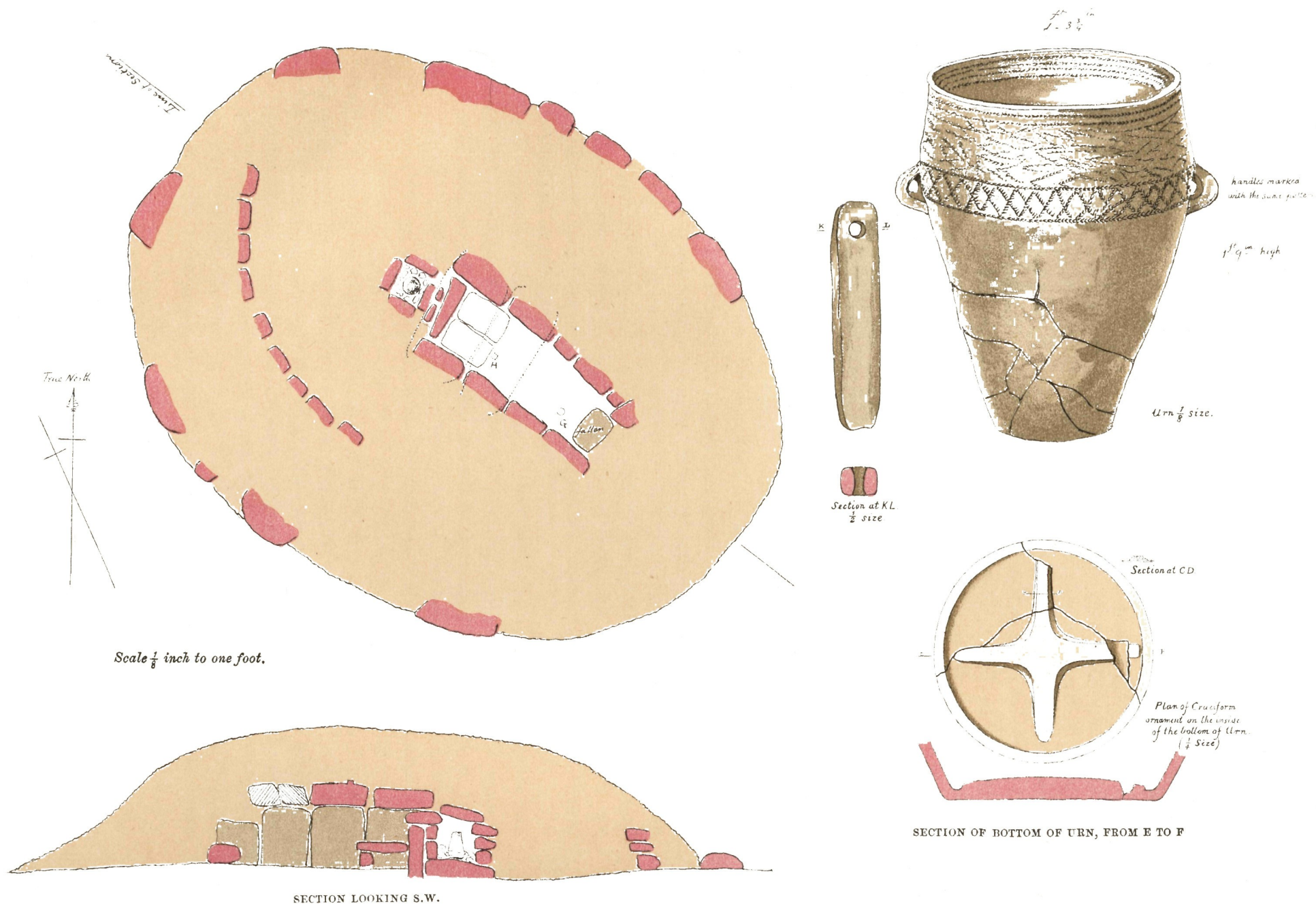
The depth at the south-west end was three feet, but it descended by two steps until the floor at the other end was reached seven feet under the surface. Here it joined the transverse portion, which was eight feet long by two feet wide, was rudely rounded off at either end, and had been hollowed out like a cave under the hard soil. This part lies under the north-east side of the inner circles, and if it was a grave at all it is here that the body would have been interred. I have my misgivings however that it may be the work of miners at a later date. No traces of interment were found in it, but a quantity of black greasy mould, amongst which was a bead of soft micaceous stone one inch and a quarter in diameter, which differs from a spindle-whorl in being more globular in shape. In cleaning up the floor of this inner circle immediately around this pit the workmen brought to light no fewer than five little stone cists, of very neat construction, and all arranged on the south and south-west sides.

The first of these was four feet from the south-west end of the pit. It was three feet long and about one foot wide, covered in by three stones—more like a drain than anything else. At the south-east end it was closed, but at the other end it curved round towards the mouth of the pit. The depth was about eighteen inches. At the south-west corner, close against the wall, stood a small and perfectly plain cylindrical little urn, mouth upwards. It was filled with dark-coloured earth and charred wood, on the top of which lay two minute portions of burnt bone. The height is five inches and three eighths, and its diameter four inches and three quarters.

In the same cist were three other fragments of another small vessel which had been provided with two knobs or cleats. Two feet to the south-east of this cist was a second; and the same distance to the north-east a third, which though it was perfect when discovered has since been destroyed. It was two feet long, one foot three inches wide, and covered by two stones. Within it lay another miniature urn on its side, closely hugging the south-east wall, and evidently placed purposely in that position. It is four inches and a half high and four inches wide at the mouth. The pottery is very coarse, black, and earthy, and, like the former one, was not made on the wheel. It is as good a representation in miniature of the one form of Cornish sepulchral urn (*i. e.* the type with the bulge and tapering extremity) as is the other little one in the other cist of those of the cylindrical type. It appeared as if these little cists had been placed in a rude circle, for two feet north-east of this cist was another, this time a double one, each of the compartments measuring two feet long by one foot wide.

On a portion of the upper part of the cairn falling away, a sixth and last cist was discovered at a height of five feet above the level of the ground. It measured one foot square, and contained several fragments of a thin well-baked vessel of the domestic type, such as is found in the hut villages of the neighbourhood, clearly distinguishable from the sepulchral pottery, and assignable to the Romano-British date. With the shards were some unburnt bones of animals, among which was the jawbone of a lamb.

On the western slope of a hill at Tregaseal, in the parish of St. Just, and about a mile and a half from the cairn just described, stands the tumulus to which I will next call attention. It is rather oval than round, measuring in length from north-west to south-east forty-one feet, and in breadth some ten feet less. Twelve stones of the outer ring were still in their place, and there were traces of an inner circle on the north-west side. The greater portion of the north side, and apparently the centre also, had been carted away for hedging, and an urn had been discovered in the process. Undeterred, however, by hearing this, I set to work in August, 1879, upon the portion that still remained, and was soon rewarded by discoveries of a particularly interesting nature. On the south-east side, and apparently communicating with the outer ring by a passage way which had lost its covering stones, was a fine stone chamber, the sides of which were formed by slabs of granite, four on one side and five on the other, terminated at the north-west end by a single block, and at the south-east end by a smaller stone, which had fallen inwards. It was eleven feet long and four feet high, varying in width from three to four feet, and was paved throughout. The roof was formed of two remarkably well-chosen slabs, which, however, only extended half the length of the chamber, the others having seemingly been removed. One of these slabs presented the peculiarity of a natural boss, rising to a height of five inches from its surface; and I have little doubt (from other similar examples of stones having peculiar formations occurring in connection with rude stone monuments) that this feature had led to its selection. The floor of this chamber, as at Ballowall, was strewn with ashes and the burnt bones of full-grown human subjects, amongst which was a quantity of broken pottery and a long sand-stone, perforated at one extremity and intended for a whetstone. At the north-west end of the chamber was a raised platform formed of two flat stones, both under and upon which burnt bones were found. A flint scraper and other broken flints occurred in the material of the barrow, which on the north side was composed of stone and on the south of earth. But the feature of greatest interest occurred



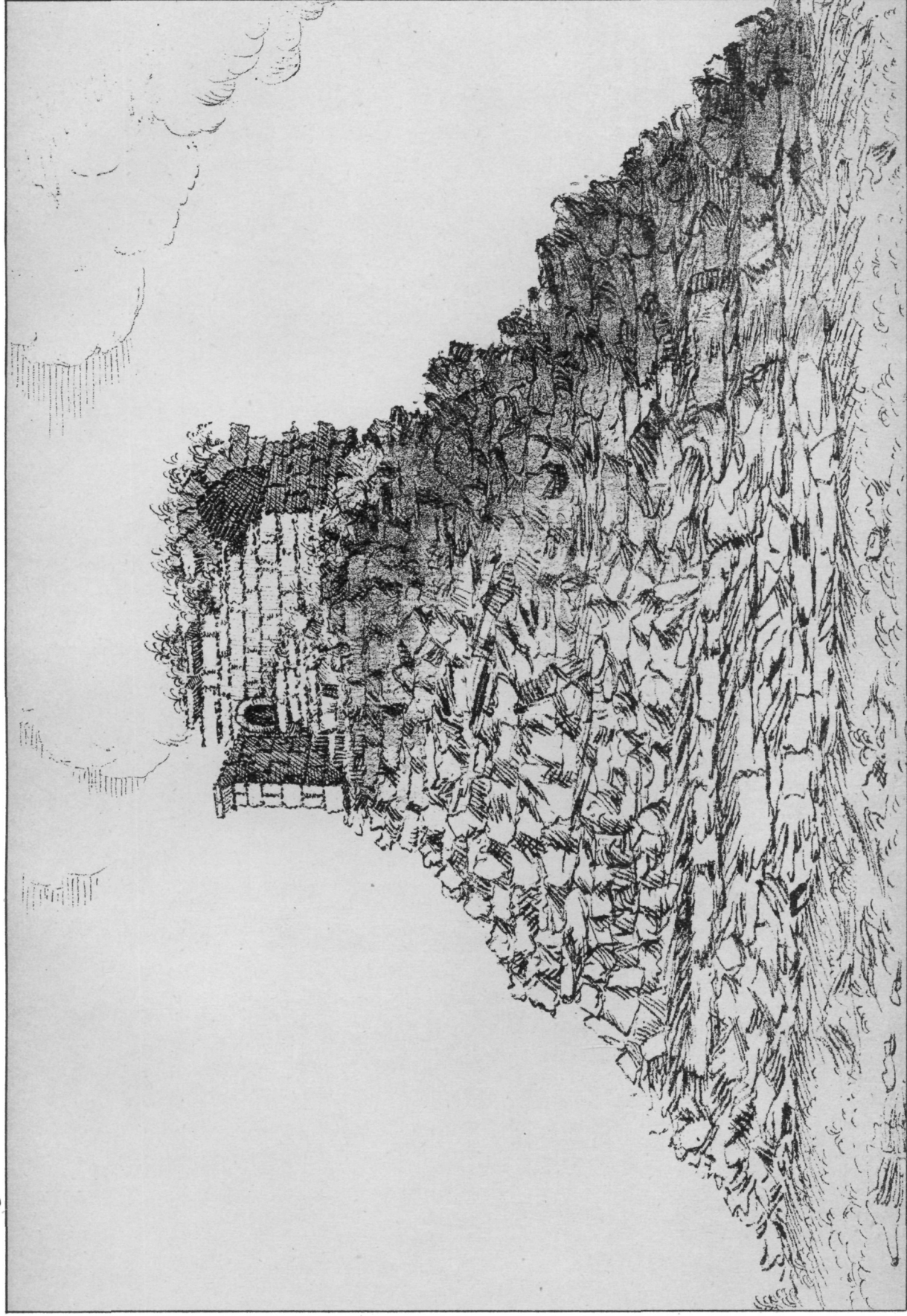
BARROW NEAR TREGASEAL, ST. JUST, CORNWALL,
OPENED BY W. C. BORLASE, F.S.A., AND J. W. TROUNSON, C.E., AUG., 1879.
(From Mr. Trounson's plans).

MAGN. MER. TAKEN TO BE $20^{\circ} 50'$ W. OF NORTH.

when the workmen were clearing away the stones and earth immediately outside the north-west end of the chamber. Here a cist had been rudely constructed, about three feet in height, subsequently to the chamber itself, as was evident from the fact that advantage had been taken of the stones of the latter in forming the walls and roof of the former. The cist proved to be full of fine earth, which, as it came shaling down, displayed an urn—the largest of the sepulchral type yet found in Cornwall, if not in England, measuring twenty-one inches high, with a diameter of sixteen inches at the mouth, and eighteen inches at the bulge (seven inches below the rim), from which point it tapers away to a base only six inches in diameter. The shape of the vessel may fairly be said to be artistic: two handles, each five inches in breadth, spring from the sides, and the whole of the upper portion is ornamented with double indented lines arranged in bands, or in acute angles, or in diamond form. Similar bands are carried round the inside of the rim. The urn stood in an inverted position, the mouth resting on a granite rock *in situ*. It was about half full of calcined human bones. The bottom, which had been broken in by the shifting of the cover of the cist, showed on the inside a cross, standing out in relief, from a quarter to half an inch. It is chamfered or rather bevelled at the edges; the arms are of equal length, and, as they do not reach to the sides of the vessel, clearly could not have been intended to strengthen it. It has evidently been made with care and trouble, and is no mere conventional pattern for the sake of quartering the circle. I have seen in the British Museum another example from one of the Devonshire caves; and Canon Greenwell notices one or two other specimens from Wilts and Dorset.

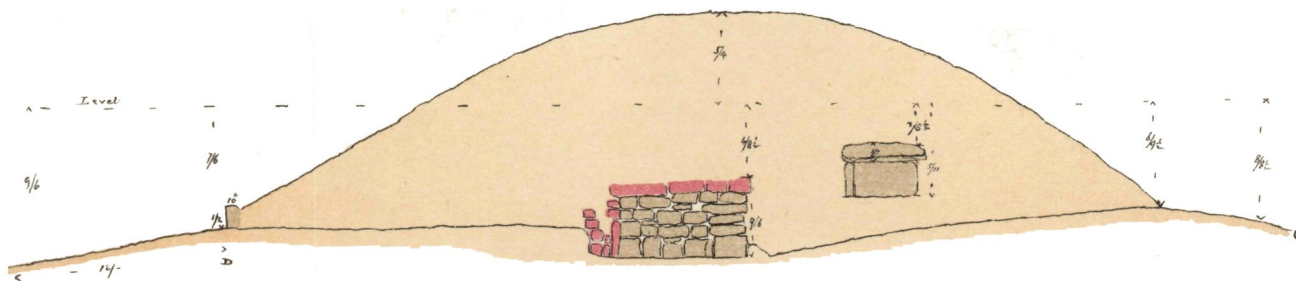
The last tumulus I propose to notice is that which crowns the summit of the last hill in England—Chapel Karn Brea. The estate on which it stands derives its name from a chapel which once stood on the top of this very cairn. The accompanying drawing, made by my ancestor Dr. Borlase, which has never yet been correctly engraved, represents the mound and chapel as they appeared one hundred and fifty years ago. In 1816 the stones of the little building were removed in order to make additions to a barn, and all that now remains is the rude pile used by the fishermen as a landmark and called the “tummal.” Satisfied that such an accumulation of stones—for it is fifteen feet high and sixty-two feet in diameter—would never have been gathered together by the chapel-builders, I several years ago sunk a pit to the centre, which, however never reached the level of the natural soil. Not contented with so poor a trial, in the autumn of 1879 I caused a trench thirty feet wide to be driven towards the

centre from the south-west side. An outer ring of well selected granite blocks was first encountered, of which from twenty to thirty appeared on the surface in different places round the mound. From the fact that three or four of these were found lying one above the other I came to the conclusion that it was very possible that similar stones, arranged in layers or steps, were once placed pyramid fashion around it so as to encase the whole. There are traces also, as I think, of a detached circle of single stones having surrounded this cairn. At a distance of fourteen feet inside this first ring we came upon a rude perpendicular wall four feet high; three feet inside that again was a second; and at a like distance a third, at the foot of which we found a spindle-whorl of baked clay. At a point in this inner wall, which faced the south-west, stood a single slab, apparently used as a rude entrance, and supported by a stone buttress or prop. It reminded me at once of the entrances to chambers, such as those I have already described, and I came to the conclusion, which I have no doubt is the correct one, that in this case the cairn had been raised at different ages, and that this inner circle was the exterior of the primitive place of sepulture. Within this entrance was a trench running in a north-north-westerly direction, faced on either side with stones set on edge. It was eighteen inches wide, and terminated at another point in the inner circle. From the bottom of it were taken up a small piece of coarse sepulchral pottery and two chips of burnt human bone. Driving on towards the centre and having for our guide some rough walling on the right, at a distance of eight feet from the stone door, we came to the mouth of just such another chamber—except that its construction was ruder—as I have described before in the cases of Ballowall and Tregaseal. The floor proved to be two feet below the natural surface. The internal length was seven feet six inches. Its direction was north-north-west and south-south-east. At the bottom, at the northern end, it tapered to a point, but the plan was squarer as the walls ascended. The width in the centre was three feet, and at the entrance two feet six inches. It was four feet high, and was roofed in by four stones of various sizes. So rudely constructed were the walls that they would scarcely serve for a hedge, and without the support of the pile which surrounded them it is impossible that they could have supported the roof. In this circumstance they differ materially from those I have described, and probably afford evidence of greater antiquity. The chamber was more than half full of slimy earth and stone, mingled with ashes which appeared to have fallen through from above. A few atoms of very rude pottery, and a whetstone not perforated, were taken up from the bottom. Continuing the excavation to

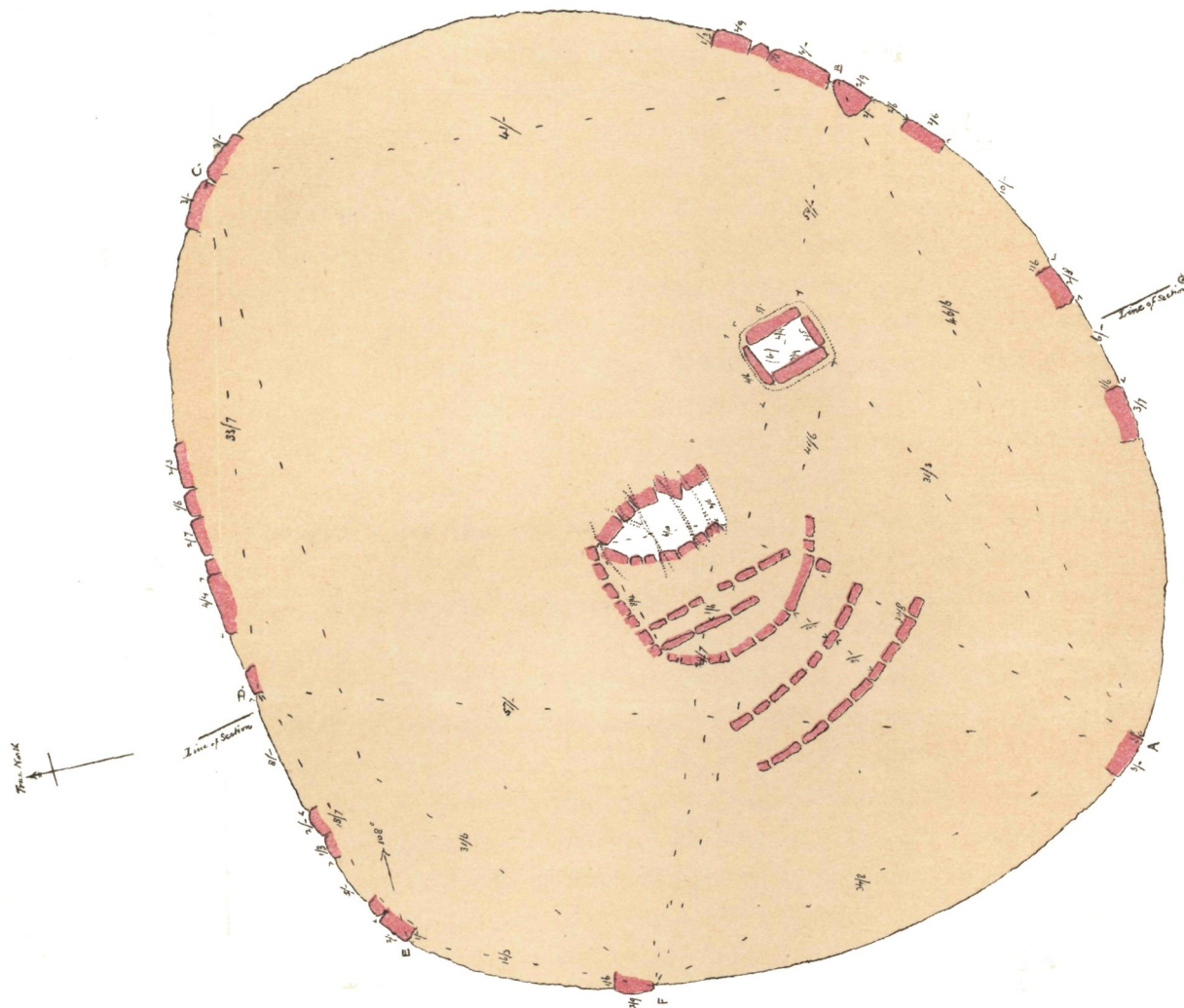


"The South East View of Chapel-Corn-Brea with the Artificial Hill it is built on."

FAC-SIMILE OF DR. BORLASE'S DRAWING.



SECTION FROM D TO G LOOKING EAST



SECTION OF CAIRN (b)
LOOKING NORTH

CAIRN WITH CISTS, CHAPEL-KARN-BREA, ST. JUST, CORNWALL.
W. C. LUKIS, F.S.A., 8TH AUG., 1879. OPENED BY W. C. BORLASE, F.S.A., AUG., 1879.
MAGN. MER. TAKEN TO BE 20° 30' W. OF NORTH.
Scale $\frac{1}{12}$ inch to one foot.

the south-east, at a distance of six feet six inches from the entrance of the chamber, and at a higher level, stood a fine cist or dolmen, covered by a single well-chosen slab, five feet square on the top and one foot six inches thick. The cist itself measured internally three feet by two feet six inches, and two feet in depth. There was nothing in it, and the floor was composed of the loose materials of the earlier mound on which it had been built. From the evidence of an old farm labourer who had known the place for years, I am inclined to believe that there was another similar cist removed from the west-south-west side. In the *débris* of the cairn above this some pieces of Romano-British pottery were found, and among them a small fragment of Samian ware. A buttress sunk to support the corner-stone of the chapel had reached to within a foot or two of the cover of the cist; but it was plain that the builders of the chapel had never disturbed either that or the chamber, and were therefore ignorant of their existence. Veneration for the spot on the part of the natives probably induced the Christian missionaries to adopt it for themselves, and the fact that an annual tour is made by country-people to a stone on the hill-side below points in the same direction. Reaching the level of the foundation of the chapel, mediæval pottery and glass occurred, as well as some of the very curious ridge-tiles of the edifice. Taken altogether, the evidence derivable from the exploration of this cairn—although the discoveries were next to none—was very instructive. It is clear from it that the period of the chambered mounds or giants' graves—perfect specimens of which we possess at Pennance and Brane in the same district, and also in Scilly, preceded that of the cist or dolmen proper; and the occurrence of the Samian ware, and other objects at higher levels, afford us, like so many geological strata, evidences of human society in each successive age, even down to the ferret-bell which I found in a rabbit-hole at the top. I may add that this cairn, being on my own property, will be carefully preserved. Occupying as it does a position so important to mariners, I have restored it to its original height, leaving the chamber and cist exposed to view.

In conclusion I should like to add one word as to the plans and drawings I have made use of in illustration of my subject. They were made by Mr. Lukis during his visit to Cornwall in the autumn of 1879. In the work of planning the rude stone monuments of Cornwall I accompanied him and rendered such assistance as I could. To give you an example of the value of the series of plans he then made, I may mention that they represent every rude stone monument known in the county, and there are no two of them alike. More than this,

several of the monuments, and those not the least in importance, have never been planned, and indeed have scarcely been known to exist before. On one of them—a singular dolmen in the Lizard district—we discovered cup-markings which, with one doubtful exception, had not occurred in Cornwall previously. Another monument—a circle, in the parish of Blisland, on Hawks Tor—is next in size to Abury itself; it presents the remarkable features of a surrounding trench, a central pillar, and a cist close by, while the stones are of remarkable height, though, owing to many having fallen, they had hitherto escaped observation. The fact that the Society is publishing this most interesting series is a matter of sincere gratification to those who bore a part in a work, which they hope soon to see extended to other portions of the United Kingdom.