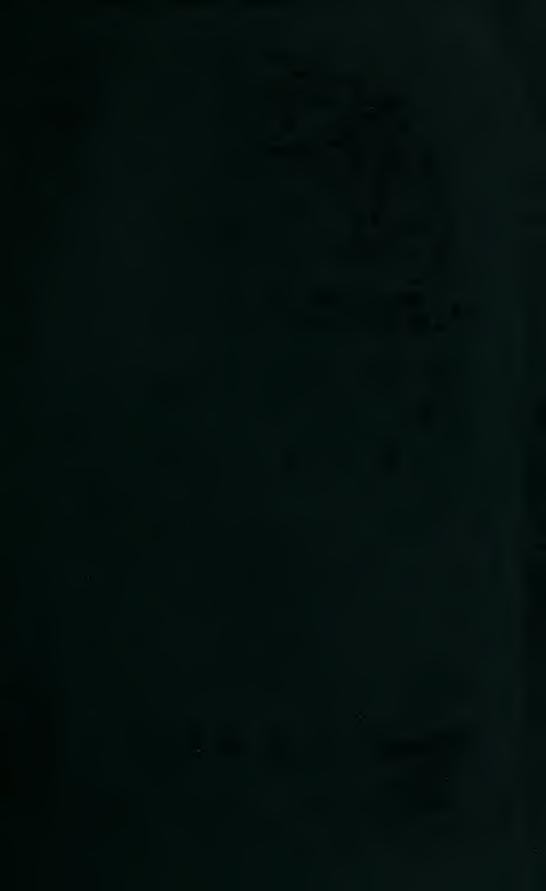


WILLIAM C. BORLASE







Frene Dwen Andrews Dublin - Aug 1926 -

THE DOLMENS OF IRELAND.

II



THE

DOLMENS OF IRELAND,

THEIR DISTRIBUTION, STRUCTURAL CHARACTERISTICS,
AND AFFINITIES IN OTHER COUNTRIES;
TOGETHER WITH THE FOLK-LORE ATTACHING
TO THEM; SUPPLEMENTED BY CONSIDERATIONS ON THE
ANTHROPOLOGY, ETHNOLOGY, AND TRADITIONS
OF THE IRISH PEOPLE.

WITH FOUR MAPS, AND EIGHT HUNDRED ILLUSTRATIONS, INCLUDING TWO COLOURED PLATES.

BV

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IN THREE VOLUMES.

VOL. II.

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THE DOLMENS OF IRELAND.

PART I.

LOCALITIES, DESCRIPTIVE DETAILS AND AUTHORITIES.

(Continued.)

COUNTY OF MEATH.

IN THE BARONY OF KELLS LOWER.

I. In the Townland of Cornaville North, and Parish of Moynalty, was a dolmen marked *Giant's Grave* in Ord. Surv. Map No. I.

IN THE BARONY OF FORE.

†1—13. In the Townland of Carnbane, and Parish of Loughcrew. Thirteen cairns are marked in Ord. Surv. Map (new edition) No. 15 in this Townland, at Carnbane West.

†14, 15. In the Townland of Newtown, and Parish of Loughcrew, adjoining Carnbane on the S.E. Two cairns are marked in Ord. Surv. Map (new edition) No. 15 in this Townland.

†16—26. In the Townland of Corstown, and Parish of Diamor, adjoining Carnbane on the E. Eleven cairns are marked in Ord. Surv. Map (new edition) No. 15 in this Townland, at a site named Carnbane East, to distinguish it from the more western group at Carnbane West.

†27—29. In the Townland of Patrickstown, and Parish of Diamor, adjoining Corstown to the N.W., three cairns are marked in Ord. Surv. Map (new edition) No. 9. There is also an earthen tumulus in this Townland shown in Map No. 15.

These thirty monuments (including the tumulus) are all that

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[†] These numbers simply indicate the number of cairns given by the surveyors, and have no reference to the actual number in Mr. Conwell's list given below.

the Ordnance Survey shows of the groups of cairns and tumuli which extend along the hills of Slieve-na-Callighe for some three miles from E. to W. They lie to the N. and N.W. of the road from Kilshandra to Oldcastle, and N. of Loughcrew, by which latter name they are generally collectively known.

On the 23rd of May, 1864, Mr. Eugene A. Conwell read a paper before the Royal Irish Academy, on "Ancient Remains, hitherto undescribed, in the County of Meath," first amongst which he noticed the cairns upon this ridge of hills. On the 14th of November following, he read a second paper, "On the Remains at Sliabh-na-Callighe" before the same society, in continuation of the first. The Meath Herald of the 21st of October, 1865, contained a communication on the same subject from the pen of Mr. George Du Noyer, which was reprinted in the "Proceedings of the Kilkenny Archæological Society," vol. v., New Ser., July,



Fig. 288.—Plan of group of cairns, A-L, Lougherew. By Mr. G. Coffey.

1865, No. 49, pp. 365-369. The same volume contains a lithographic sketch by Mr. Du Noyer of the north cist of the sepulchral chamber in the large cairn on the western summit of Slieve-na-Callighe, attached to his paper on a "Carved Rock at Ryefield, in the County of Cavan" (op. cit., p. 385). On the 11th of December, 1865, Mr. Conwell communicated to the Royal Irish Academy a paper entitled,

"Examination of the Ancient Sepulchral Cairns on the Loughcrew Hills, Part I.," which was published in the Proceedings of the Academy (vol. ix., part iv., pp. 355-379), in 1867. At the same time, Mr. Du Noyer exhibited a large collection of drawings made by him of the "Antiquarian Remains discovered and explored on the Loughcrew Hills." When I was in Dublin, in 1890, Dr. Frazer showed me a series of coloured drawings of the sculpturings on the stones at Loughcrew, which he informed me were those of Mr. Du Noyer, and which he (Dr. Frazer) has since published in the Proceedings of the Soc. of Antiquaries of Scotland, 3rd Ser., vol. iii. (1892-93) p. 294, et seqq. Lastly, on the 12th of February, 1872, Mr. Conwell read before the Royal Irish Academy, a paper entitled, "On the Identification of the Ancient Cemetery at Loughcrew, and the Discovery of the Tomb of Ollamh Fodhla," which was published in the Proceedings of the Academy, vol. i., 2nd Ser., "Pol. Lit. and Antiquities" (1879), pp. 72-107, and contains numerous illustrations of the sculpturings and objects discovered, and ground-plans of a few of the cairns.

From these several communications the following description is compiled, a notice of the sculpturings being reserved for a subsequent portion of my work. In the mean time I have to thank Dr. Frazer and the Society of Antiquaries of Scotland

for kindly allowing me to copy Mr. Du Noyer's drawings.

It was on the 9th of June, 1863, that Mr. Conwell's attention was first of all called to these monuments by an accidental visit to the Loughcrew Hills. He then found that the various summits of the range for two miles in extent were studded with the remains of ancient carns. Through the interest taken in the subject by the proprietor of the land, Mr. J. L. W. Naper, Mr. Conwell was enabled to make a "systematic examination" of what he terms "this great primeval cemetery."

Slieve-na-Callighe is the only eminence in the county which assumes the name or possesses the character of a mountain. It rises to the height of 904 feet; its longest axis is from E. to W., and its extent about two miles. Geographically speaking, "it is forced out of the Lower Silurian rocks, which occupy a large extent of the country to the northwards, from Drumlish, in the county of Longford, to Donaghadee, in the county of Down, including the range of the Mourne Mountains."

The hill is a prominent object in the landscape, and in form consists of three main peaks, two of which are still crowned with large tumuli and small cairns, while on the third was a large tumulus, which, when Mr. Conwell saw it, in 1864, was being carted away. The western of the three peaks is called Carnbane. Besides these principal peaks, are two minor hills, extending from the middle in the direction of the western peak, each also crowned with the remains of ancient cairns.

In the older Ordnance Map the only notice taken of these cairns was a mere dot or two, with the word "Stones" appended. Sir William Wilde also failed to discover them. The Ordnance Survey subsequently supplied the defect, and the result is a plan which Mr. Conwell appends to his paper in the Proceedings of the Royal Irish Academy, vol. i., 2nd. Ser. (1879), p. 84.

Mr. Conwell (Proc. R.I.A., vol. ix. p. 359) proceeds to describe the cairns, which he letters on the map as follows, commencing with those on the western extremity of the range, which is called Carnbane (pron. Carnbawn), and which

attains a height of 842 feet.

I. A. Nearly all the stones which formed this cairn have been removed. Its present (1867) remains cover a space measuring 7 yards in diameter. Four large stones still remain, marking out the circumference of its base. It is 66 yards S.E. of D, the largest cairn in the range.

2. A². In a plantation, 130 yards S. of D, the remains of a cairn are still visible, but nearly level with the ground. It measures 9 yards in diameter. One large stone stands upright on the circumference, and bears some traces of sculpturing.

3. A³. On the S. scalp of the hill, in a most conspicuous position, 60 yards S.W. from D, and nearly close to the S. side of the present deer-park wall, once stood a cairn, 22 yards in diameter. The present remains are not more than 1 or 2 feet high.

4. B. Forty-six yards to the W. of D are the remains of a cairn, 7 yards in diameter. The loose stones which formed it are nearly all gone, leaving in the centre three large flags laid on edge, forming a chamber 12 feet long, pointing

E. 20° S.

In clearing out this chamber several fragments of charred bones were found mixed with the earth at the bottom, seemingly remarkably heavy.

5. C. Sixty yards S.W. of D are the remains of a cairn 5 yards in diameter. Four large stones mark the site. At a distance of 25 feet to the N. of the cairn lies

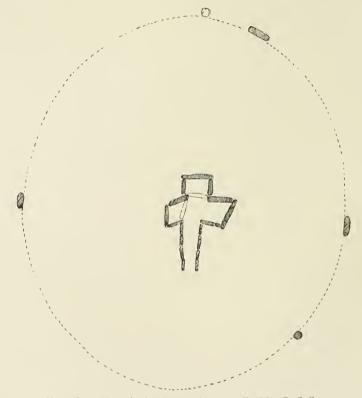


Fig. 289.—Plan of cairn F, Loughcrew. By Mr. G. Coffey.

prostrate a pillar-stone, which formerly stood upon its smaller end (see p. 317). It measures 7 feet long, 3 feet 6 ins. broad, and 1 foot thick.

6. D. The largest of all the cairns in the range, the diameter of its base being 60 yards. The N. and E. sides have been left untouched, but the S. and W. sides, extending towards the centre, have been removed.

The height of the cairn before the operations upon it commenced was 28 paces in sloping ascent from base to summit. The original circle of 54 large flag-stones, laid on edge round its base, is still perfect; and on the E. side, towards a point

indicated by E. 20° S., these marginal stones curve inwards for 12 paces in length, denoting the entrance, or passage, to the interior chambers.

After working for a fortnight, the labourers employed were unable to discover a central chamber, although they first drove in at the point indicated by the curving-stones, and then sunk in the centre till they nearly reached the bottom.

As the cutting proceeded, about midway down among the loose stones, were found portions of a large skull, and 12 teeth of a graminivorous animal, probably of an ox, "sacrificed," so Mr. Conwell thought, "on the pile."

At a distance of 105 feet N.W. of this cairn, and on the very point of the escarpment of the hill, stood a

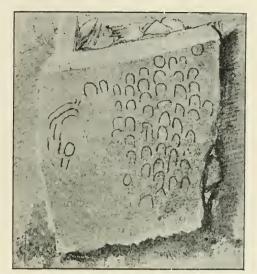


FIG. 290.—Stone in cairn F.

pillar of quartz, 8 feet high, 3 feet broad, and 2 feet thick. It is described as broken across a little above the ground, and lying where it fell. It must have been brought from a distance to its present situation. Mr. Conwell suggests that

it may be a glacial deposit from Donegal. The nearest quartz rocks are at Howth, about 50 miles S.E.

7. E. Traces of this cairn (E.S.E. of D) alone remain. These show it to have been about 5 yards in diameter.

8. F. About 5 feet of the height of the original cairn remain. It lies W. of D. In diameter it measures 161 yards. The chambers (see plan, p. 316) were in the form of a cross, the shaft of which, represented by the entrance passage, had a bearing of E. 10° N. The length of the passage is 8 feet, and the breadth 2 feet 2 ins. entire length from the commencement of the passage to the extremity of the opposite chamber is 15 feet, and the breadth from the extremity of the southern to the extremity of the northern chamber is 9 feet 4 ins. The commencement of the passage was not closed up by a block of stone, but merely by small loose stones laid against it.

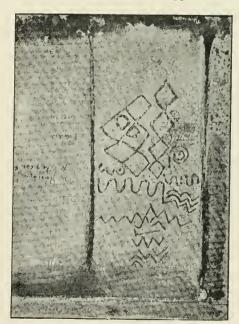


FIG. 291.—Stone in cairn F.

Only one of the roofing-flags, covering

the commencement of the passage, remains in its original position. Across the entrances of the southern and western chambers are laid stones measuring from 4 to 5 inches in thickness. On the floor of the northern crypt rests a rude stone basin, 3 feet 5 ins. long, 2 feet 4 ins. broad, and 5 inches thick. Under this basin were found a portion of a bone pin and a flake of flint. In the S.W. corner of the southern chamber, and about a foot from the bottom, was found, imbedded among the clay and stones which filled it up, a brown iron-stone ball, 3 inches in diameter, and well rounded. Several fragments of bones lay scattered indiscriminately here and there upon the floor. . . . At about 2 feet outside the circumference stand three pillar-stones . . . Seven of the stones in these chambers are sculptured.

9. G. This cairn, which is distant only 1 yard from F, and 34½ yards E.N.E. of D, measures 21 yards in diameter. Eight large stones stand in the margin. Traces

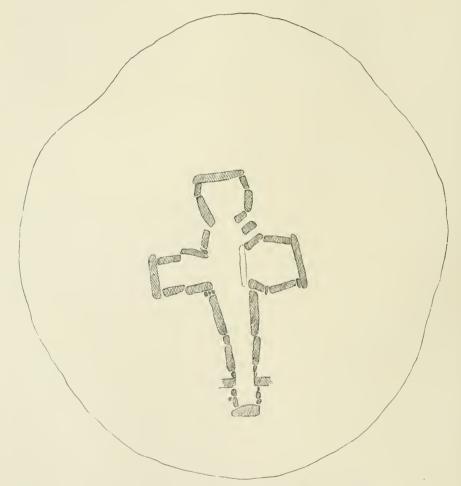


Fig. 292. - Plan of cairn H, Lougherew. By Mr. G. Coffey.

only sufficient to indicate the site of the cairn remain. All the interior chambers have disappeared.

10. H. The remains of this cairn are described as being between 5 and 6 feet in

height, and 18 yards in diameter. It lies E.N.E. of F, and is 161 yards S.W. of L, the second largest of the cairns on the western hill. The plan of the chambers was found to be cruciform, and some curious attempts at dry masonry were found at the northern and southern extremities of the chambers. The covering of the interior chambers had entirely disappeared, with the exception of about half a dozen large, overlapping flags, giving a good example of the mode of roofing, and which still remained in their places over the western and northern crypts. The chambers were, in plan, nearly similar to those in F, except that the central chamber might be considered a rude octagon. The passage, which has a bearing of E. 10° S., is 13 feet long, 2 feet wide at the commencement, and 4 feet wide at the extremity. The entire length, from the beginning of the passage to the extremity of the opposite, or western chamber, is 24 feet, and the distance across the other two chambers is 16 feet. The breadth of the southern chamber is 2 feet 7 ins.; that of the western chamber 4 feet at rear, diminishing towards the entrance to 3 feet 2 ins.; and that of the northern chamber 4 feet 2 ins. On the floor of this latter rests a rude stone basin, 4 feet 3 ins. long, 4 feet broad, and about 6 inches thick. Loose stones and earth filled the chambers and passage for about $\frac{1}{2}$ feet in depth. The passage itself, for a depth of about 3 feet, was completely packed with bones in a fragmentary state, nearly all showing evidences of having been burnt, and were found mixed with several small fragments of quartz.

Of the human remains found in the passage and crypts of this cairn Mr. Conwell enumerates "50 portions of limb bones; 30 other bones—shoulder-blades, etc.; 48 portions of skulls; 8 portions of jaws, with teeth remaining; 14 separate teeth;"—making 150 in all.

From the soft earth which, together with stones and bones, the chambers contained, Mr. Conwell obtained one end of a bone bodkin; one half of a bone ferrule; six pieces of bone pins—one ornamental pin, 13 inches in length, still retaining the metallic rivet which fastened on a head; one tine of an antler, 3 inches long; 14 fragments of very rude, brown earthenware or pottery, portions of vessels much blackened by fire, particularly on the inside surface; 10 pieces of flint; 155 sea-shells, in a tolerably perfect state of preservation, and 110 other shells in a broken state; 8 varieties of small, lustrous, or shining stones; 100 white seapebbles, and 60 others of different shades of colour. A small, brown, stone ball was also found, and a flake of bone measuring 6 ins. by 4 ins., which appears to have been polished on one side, and may probably have been used as a dish. Underneath the stone basin in the northern chamber were found imbedded in damp earth, and mixed with small splinters of burnt bones, six stone balls, the largest about an inch in diameter, but in so soft a state, that they could scarcely be touched without injuring them. Five of these appear to be white carbonate of lime, and the other porphyry.

Chiefly in the southern chamber, and about the entrance to it, for the most part imbedded in wet stiff earth, Mr. Conwell states that he got the most remarkable collection of bone implements, glass, amber, bronze, and iron, which probably has ever been found together under similar circumstances.

In some few instances, where the bone implements chanced to be protected by an overlying stone, their original polish was still perfect. In all cases, however, they were found in a state as soft as cheese, and could with difficulty be extracted from the stiff earth without breaking them. Such, indeed, was the softness of their condition that Mr. Conwell thought they could not have been preserved for many years longer, and probably would have become entirely decomposed. He saved 4071

fragments of them in a plain state, once polished, but without further ornamentation; 108 nearly perfect in shape; 60, where the bone material is a little decomposed, and still retains the original polish; 27 fragments which appear to have been stained; 11 plain fragments perforated for suspension by a single hole near the



Fig. 293.-Stone in cairn H.

end; 501 fragments ornamented with rows of fine transverse lines, and two others similarly ornamented, and perforated near the end; 13 combs, 7 of which were engraved on both sides, the heads only and the roots of the teeth of the combs still remaining; or implements engraved by compass, and in a very high order of art, with circles, curves, ornamental puncturings, etc., and twelve of these decorated on both sides. On one, in cross-patch lines, was the representation of an antlered stag, being the only attempt in the collection to depict any living In some instances the perforations near the end appear to have been counter-sunk. In all there are 4884 pieces.

Of amber, Mr. Conwell collected 7 small beads, the largest scarcely a quarter of an inch in diameter, and another small, oblong bead of uncertain material.

Of glass, he obtained three small beads of different shapes, and different shades of colour; two fragments of glass; a curious molten drop, I inch long, trumpetshaped at one end, and tapering towards the other extremity.



Fig. 294.—Stone in cairn H.

Of bronze there were six rings, slightly open, or rather not closed or cemented

into one solid piece, varying from a quarter of an inch to three quarters of an inch in diameter; a portion of another which is hollow, and formed by overlapping a thin plate of bronze; also portions of eight other small rings in a less perfect state.

Of *iron* there were found—not lying together, but mixed up with the earth and *débris* which filled the southern chamber—seven specimens, all thickly coated with rust. One is an open ring, about half an inch in diameter; one half of another somewhat larger; two pieces, each about an inch long, and a quarter of an inch thick, of uncertain use; one thin piece, probably a portion of a knife, or of a saw, three quarters of an inch long, and half an inch broad; one piece, 1½ inches long, resembling the leg of a compass, and with which, so Mr. Conwell

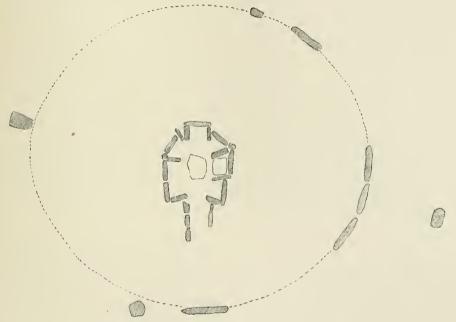


Fig. 295.—Plan of cairn I, Loughcrew. By Mr. G. Coffey.

thought, the incised-sculpturings might have been made; and, lastly, an iron punch, or pick, 5 inches long, with chisel-shaped point, and head that bore evidence of the use of the mallet. With this tool, also, Mr. Conwell thinks, the circular sculpturings and the other figures, "which have all been punched, or picked out," may have been formed.

In this cairn there were five sculptured stones.

11. I. This cairn is $64\frac{1}{2}$ yards E. of F., 53 yards S.W. of L., and measures 21 yards in diameter. The apex had disappeared, and the structure measured only 4 or 5 feet high. The chambers, or crypts, as Mr. Conwell calls them, had lost their roofs, and were filled up with small stones. In some cases, where the stones showed sculpturing, the surfaces crumbled away, being forced off by nettle-roots before Mr. Conwell could make any record of their devices.

The direction of the entrance is due E. The passage alone is 8 feet 6 ins. long, and 4 feet 6 ins. wide, and the distance from the commencement of the passage to the back of the opposite chamber is 22 feet. The diameter across the chambers N. and S. measures 13 feet. The interior arrangement consists of seven compartments formed by flagstones standing out towards the centre of the structure.

The respective breadths of these chambers is 2 feet 8 ins.; 3 feet 6 ins.; 3 feet 7 ins.; 3 feet 7 ins. at the rear, narrowing considerably towards the

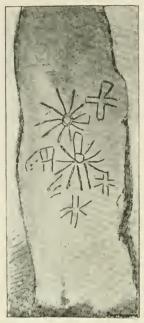


Fig. 296.—Stone in cairn I.



Fig. 297.—Stone in cairn I.

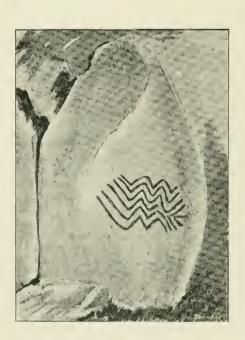


Fig. 298.—Stone in cairn I.



Fig. 299.—Stone in cairn I.

entrance; 3 feet 10 ins.; and 2 feet 8 ins. These (marked from a to g) were indicated on a plan exhibited by Mr. Conwell. On the floors of four of them rested a flag about 2 square feet in area, and 2 inches thick. A quantity of

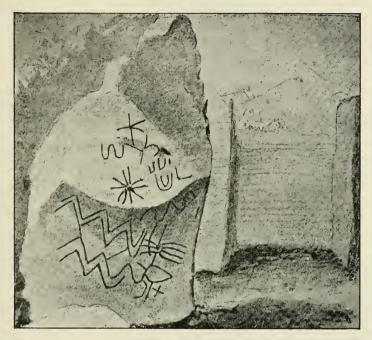


Fig. 300.—Stone in cairn I.

charred bones was found on each of these flags, but in such a crushed state, from the falling in of the stones upon them, that it would be difficult to determinate to what portion of the frame they belonged. On the flag on which the bones had

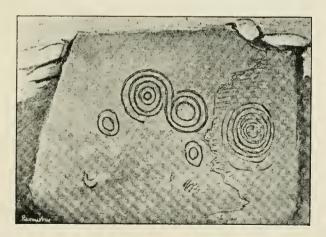
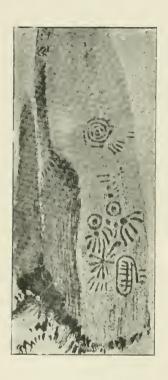


Fig. 301.—Stone in cairn I.

been placed being raised in each of these four compartments, there was found immediately underneath, a layer, about 4 inches in depth, of dry, small stones, the surface

portion of the layer broken very fine, from a quarter of an inch to an inch in size, and having some fragments of charred bones scattered on top, the lower portion of the layer consisting of larger stones.

In the compartment which exactly faces the E., and on the surface of these finely broken stones, Mr. Conwell found two stone ornaments—a bead and a pendant. The bead lay about the centre of the space covered by the flag, and the pendant under but close to the extremity of the flag, on the right-hand side, and near the back of the compartment. The bead had been highly polished, and





F1G. 302.-Stone in cairn I.

Fig. 303.—Stone in cairn I.

was narrower on one side than on the other. Probably it formed part of a neck-lace. Its greatest diameter was three quarters of an inch, and the pendant, perforated by a single hole for suspension, was r^{\perp}_{1} inch long. Both appeared to have suffered from the action of fire, and had become so decomposed that it was found difficult to identify the material. The bead resembled pale, grey, earthy grit, which had become soft from the decomposition of the felspathic part of the stone, but more probably it was blue carboniferous limestone, and the pendant yellow shale, mixed with whitish particles.

The floor of another of the compartments, which Mr. Conwell marked f in his plan, was covered with a closely fitting flag, 3 feet 10 ins. long, 3 feet 3 ins. broad, and 9 inches thick. On its surface no bones were found, as in the other instances, but on its being raised it was found to cover a layer of finely broken stones, mixed with splinters of charred bones, and having a depression of nearly a couple of inches in the centre. This stone, as it rested on the floor, concealed the sculpturing on the lower portion of one of the side-stones.

Nine of the stones in this cairn bore sculpturings.

12. J. This cairn is 23 yards N.E. of H, and only 3 yards distant from L. It measures 15½ yards in diameter. The remains of it measured from 4 to 5 feet in height, and there were twelve large stones in the circumference. The interior had been much disturbed, and was filled up with loose stones and rubbish. The passage, having a bearing E. 10° S., was 7 feet 6 ins. long, without any upright stone closing its entrance. A roughly finished brown stone ball, about an inch in diameter, was found near the opening of the passage into the interior chambers.

Three of the stones in this cairn bore sculpturings.

13. K. This cairn is 12½ yards N.E. of L, and is 16½ yards in diameter. The large flagstones forming the central chambers were found to be in a rather disorderly condition. The bearing of the entrance is E. 15° N. Thirteen stones remained round the margin. No object of antiquarian interest was found here. At a distance of 20 feet to the S.E. lay a pillar-stone, 6 feet long, 2 feet broad, and 1 foot thick.

Two of the chamber-stones bore sculpturings.

14. L. This cairn is 45 yards in diameter, and lies E.N.E. of the great cairn D,

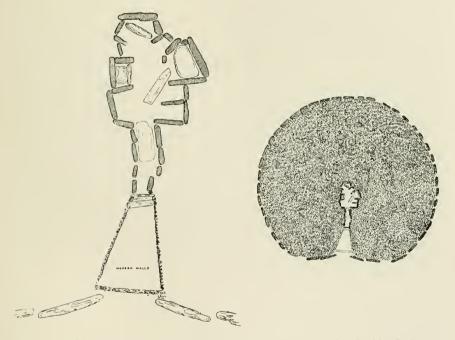


Fig. 304.—Plan of cairn L, Loughcrew, and of the chamber enlarged. By Mr. G. Coffey.

between which and it is the cairn F. It is surrounded by forty-two large stones laid lengthwise on their edges, and varying from 6 to 12 feet in length, and from 4 to 5 feet high. Great quantities of the loose stones which formed the apex of this cairn had been removed. A curve inwards in the circumference, of 10 yards in length, on each side of a point having a bearing of E. 20° S., indicated the direction of the entrance, or passage, which commenced at a distance of 18 feet inward from the circumference.

Finding a large flag on the top of the mutilated cairn, Mr. Conwell caused it and two others to be removed, when he discovered that he was actually taking to

pieces what remained of the original construction of the roof. The principal portion of the overlapping flags, which formed the roof over the chambers, had disappeared, leaving them filled up with loose stones, which had fallen in. "When the chambers were carefully cleared of these small stones, they exhibited in situ about forty of the large plinths which formed the matchless, dry, cyclopean masonry of the roof. This dome was constructed of large slabs, overlapping one another and bevelled slightly upwards, having thinner slabs most ingeniously inserted between them, which, on receiving the superincumbent weight, became crushed, and formed a bond for the whole. Wherever this precaution of placing thinner slabs or smaller stones between the large ones was omitted, the larger slabs themselves were found to be cracked across. What remained of this unique roofing rose 12 feet above the level of the floor, which is even with the ordinary surface of the ground. The breadth of the passage at the commencement was 1 foot 10 ins., which increased to



F1G. 305.—Recess or cell, with stone basin and sculptured stones, cairn L, Loughcrew. From a drawing by G. Du Noyer.

upwards of 3 feet about the middle, and contracted again to 1 foot 9 ins. where it terminated. The passage itself was 12 feet long, and the entire length, from the commencement of the passage to the extremity of the western chamber, was 29 feet. The greatest breadth across the chambers was 13 feet 2 ins., measured from points nearly N. and S., diminishing to 10 feet 4 ins. where the passage terminated."

"The seven chambers composing the interior of this great tomb were quadrangular, and nearly square. The first, on the left-hand side, at the termination of the passage, was 4 feet 8 ins. in breadth; the second, 3 feet 6 ins.; the third, 2 feet 2 ins.; the fourth, 4 feet 3 ins.; the fifth, 5 feet 10 ins.; the sixth, 3 feet 5 ins.; and the seventh, 2 feet 6 ins. Mr. Conwell, in his plan, lettered these chambers from a to f."

From among the loose stones which filled up the chamber, Mr. Conwell collected 1010 portions of bones; two pieces of bone apparently silicified; a weapon, or other instrument, which he terms a spear-point in bone, and a portion of what he calls a polished bone javelin; 154 fragments of very rude pottery, imperfectly fired, and varying in size from 1 to 30 square inches. Some fragments retained their original brown colour, but the generality of them had been much blackened by fire on the inside surface, and for a distance round the exterior of the lip, or upper rim of the urns, of which they were parts. One piece, a portion of the upper edge of an urn, about 3 inches long, and 3 inches broad, was very rudely ornamented with three slight ridges; and, about an inch from the top, was perforated by a single hole. Another larger piece, ornamented with four slightly raised ridges, was perforated by two holes, one an inch and a half below the other.

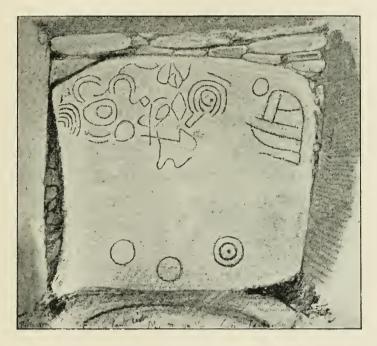


Fig. 306.—Stone in cairn L.

"Extending along the floor of the passage, completely covering it, and inclining a little way into the space surrounded by the interior chambers, seven in number, lay a flag 8 feet 9 ins. long, 3 feet 6 ins. broad, and about 6 inches thick. Close around the western end of this stone, the earth on the floor, to a depth of about 2 inches, was perfectly black, arising, it appeared to Mr. Conwell, from the presence of blackened ashes;" from which he thought that the process of cremation was performed on this stone.

"On the floor of the second chamber, and shut in by an upright stone of a foot high and 4 inches thick, rested a quadrangular stone basin, hollowed out from the sides towards the centre, to a depth of $3\frac{1}{4}$ inches, and having had a piece taken out from one of its sides. It measured 2 feet 11 ins. long, by 2 feet broad, and was about 6 inches thick. Mixed with the earth under this sepulchral basin were found many fragments of charred bones, and several human teeth."

"Completely filling up the length of the opposite chamber, which was entered

through a space only 2 feet wide between two upright pillar-stones, rested an ovalshaped stone dish, or basin. The broader end was turned to the E., the narrower



Fig. 307.—Stone in cairn L.

to the W. Its greatest length was 5 feet 9 ins. At a distance of 18 inches from the narrower extremity it measured 3 feet I in. broad, and at 18 inches from the other extremity it was 7 inches broader, where, on the side facing the chambers, a curved piece about 4 inches broad had been scooped out of the side of the stone. A raised rim which ran all round it, varied from 2 to 4 inches in breadth, and rose about an inch above the otherwise perfectly level surface of the stone." The tooled or picked workmanship of this stone Mr. Conwell describes as "exquisite." "On raising it, several splinters of blackened, charred bones were observable; and on the stiff wet earth underneath it being carefully picked, upwards of 900 pieces of charred bone were discovered imbedded in it, with about a dozen pieces of charcoal lying in various directions. There were also 48 human teeth in a very perfect state of preservation; the pointed end of a bone pin, $5\frac{1}{4}$ inches long, and $\frac{1}{4}$ of an inch thick; a piece, about an inch in length, of a similar bone pin; a most perfectly rounded syenite ball, still preserving its original polish, nearly $2\frac{3}{4}$

inches in diameter; another perfectly round stone ball, streaked with white and purple layers—probably a pebble—and about an inch in diameter; another stone ball, upwards of $\frac{3}{4}$ of an inch in diameter, of a brown colour, dashed with dark spots; a finely polished oval jet ornament, $1\frac{1}{4}$ inch in length, and $\frac{3}{4}$ of an inch broad; eight other white stone balls of carbonate of lime, which had become quite soft, but which gradually dried, on exposure, to a sufficient degree of hardness to allow of their being removed in a tolerable state of preservation."

These latter, together with five similar ones found in cairn H, Mr. Conwell regarded as "brain balls, won and worn as trophies during life by the champion here laid at his rest." He presents engravings of two of them, and also of that found in cairn H, in his appendix to "The Discovery of the Tomb of Ollamh Fodhla" (Dublin, 1873), p. 62.

The large flag stones, both in this and the other cairns, alluded to by Mr. Conwell, are, he tells us, "as to material, of a uniform character, consisting of compact sandy grit, the natural rock of the locality." One of the stones in this cairn is, however, an exception, being a good specimen of a water-washed column of blue limestone, probably from one of the adjoining lakes. In cairn W. a similar stone occurred.

There was also a stone in this cairn for which there did not appear to be any particular necessity in the construction of the chamber. It was a diamond-shaped slab, placed on one of its angles, and the stone abutting on it was elaborately carved on both sides with diamond-shaped figures.

On the lower surface of the second large roofing flag, looking directly down upon the large sepulchral basin, a reticulated pattern, finely cut, 9 inches long, and varying from 3 to 4 inches broad, formed by twelve short lines crossing in a slanting direction eight other nearly parallel lines, had been sculptured. The meshes (about fifty) varied from $\frac{1}{2}$ an inch to 1 inch broad, and from 1 inch to $\frac{1}{2}$ inch long.

15. M. About 650 yards to the S.E. of L, and crowning the next knoll, called

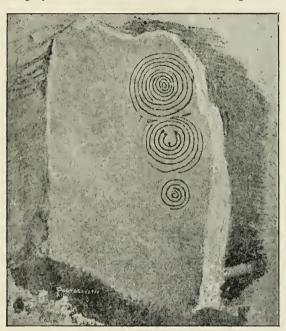


Fig. 308.—Stone in cairn L.

Carrickbrack, were the remains of a cairn, 22 yards in diameter, but only about 4 feet high, and wanting the usual boundary-ring of large stones, as well as the internal chambers.

16. N. On the top of a second knoll, 572 yards due E. of M, were the remains of a cairn, 22 yards in diameter. Of the small stones which composed it there remained a pile about two feet in height. Four large stones outside this cairn marked an avenue pointing due E., 16 yards long, 7 yards wide at the entrance, and diminishing to 4 yards wide as it approached the cairn. One of the stones composing it, standing upwards of 6 feet above the surface of the ground, had 48 cup-hollows sculptured upon it.

17. O. In the valley below the two knolls, 352 yards N.E. from M, and 279 yards N.W. from N, were the remains of a cairn, 11 yards in diameter. Three large prostrate stones, each measuring about 4 feet by 5 feet, marked the site. One upright stone, 3 feet 9 ins. high, 3 feet 9 ins. broad, and about a foot thick, was still standing, apparently in the circumference of the original cairn. On its W. face, arranged principally in four groups, were 39 cups, varying from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch in diameter, and about $\frac{1}{4}$ of an inch deep.

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18. P1. The remains of a cairn, 143 yards N.E. from N, 8 yards in diameter. Sufficient stones only remained to denote the original basis of the cairn.



Fig. 309.—Stone in cairn S.

- 19. P². About 22 yards N. of the last were six large stones, which Mr. Conwell judged to be the remains of another cairn. One of these stones, 6 feet 6 ins. long, 5 feet 6 ins. broad, and about 2 feet thick, rested in an inclined position, and had its eastern face thickly covered with small, cup-like hollows; but these might possibly have been created by the action of water.
- 20. Q. There were the remains of another cairn, 38 yards N. of P^2 , which measured $4\frac{1}{2}$ yards in diameter. Nearly all the stones which composed it had been carried away.
- 21. R¹. Passing up the hill in an easterly direction, at a distance of 242 yards from Q, were the remains of a cairn, 11 yards in diameter. What remained of the pile varied in height from 2 10 3 feet.
- 22. R². The remains of another cairn, 9 yards in diameter, and about 2 feet in height, lay 16 yards to the S. of R¹, and 55 yards S.W. from T.
 - 23. S. This cairn is only 5 yards W.

of T, and 51 yards from R1. Thirty-three large stones standing on their ends

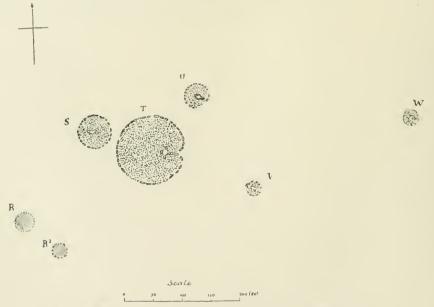


Fig. 310. - Plan of cairn T and group surrounding it. By Mr. G. Coffey.

form a circle, $18\frac{1}{3}$ yards in diameter, round the remains of it. The apex of this cairn is completely gone, leaving exposed the tops of the upright stones forming the chambers, the arrangement of which here differs from the others in having the passage, or entrance, from the W., bearing exactly W. 10° N. The entire length of the passage and chambers taken together is 15 feet. The passage itself, which varies in breadth from 2 feet 3 ins. to 2 feet 7 ins., is divided by transverse upright stones into two compartments, each about 2 feet square. Immediately outside the entrance of the passage was found a perfect specimen of a leaf-shaped arrowhead, in white flint, 1 inch long, and 3 of an inch broad. Dr. Thurnam, who saw it, pronounced it to be somewhat larger than those of the same unbarbed type found by him in the Wiltshire barrows. The two small compartments into which the passage itself is divided were filled up to the height of 18 inches with charred bones, broken into small fragments. On the top of these, in the first chamber, a piece of bent bone, tooled and rounded at one end, and 9 inches long, was found. It was silicified. In the second chamber, and also on the top of the charred bones which filled the compartment, a roughly finished bone dagger was found, 7 inches long, and nearly an inch broad at the extremity of the handle, its widest part. Nearly covering the entire floor in each compartment, rested a thin flag, underneath which were found splinters of burned bones, intermixed with small stones and pieces of charcoal.

Six of the stones which formed this chamber bore sculpturings.

24. T. From a distance this is the most conspicuous of the cairns, crowning the summit of the highest of all the peaks in the range, that, namely, which is specially

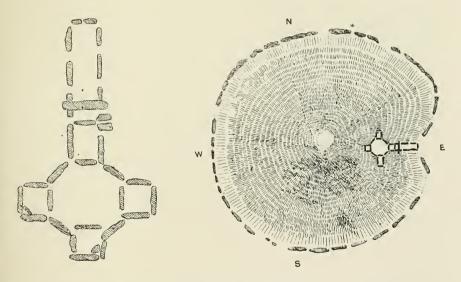


FIG. 311.—Plan of cairn T, and of the chamber enlarged.

* Hag's Chair.

known as Slieve-na-Callighe. The original shape of this cairn still remains comparatively perfect, having an elevation of 21 paces in slant height from base to summit. It measures $38\frac{1}{2}$ yards in diameter, and is enclosed by a circle of thirty-seven stones laid on edge, and varying in length from 6 to 12 feet. This may be regarded as a retaining wall. The fragments of rock which form the conical tumulus within are nearly all native rock—Lower Silurian grit.

One of the thirty-seven stones in the periphery of the base of the cairn is popularly called "The Hag's Chair." This great stone, exactly facing the N., is set about 4 feet inwards from the circumference of the cairn. It measures 10 feet broad, 6 feet high, and 2 feet thick, judging from which dimensions, allowing 12 cubic feet of rock to every ton, it must be upwards of 10 tons in weight. A rude seat-like cavity is hollowed out of the centre. The ends of the block are elevated 9 inches above the level of the seat, and the back has fallen away by a natural fracture of the stone. There is a cross carved upon the seat of the chair, which, together with others to be found on the upright marginal stones here and in cairn S, Mr. Conwell states to have been cut for trigonometrical purposes by the men formerly engaged in the triangulation survey of the county in 1836. The

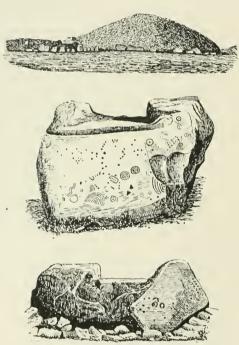


Fig. 312.—Cairn T, with back and front view of the Hag's Chair.

chair is a rock of Lower Silurian Grit. Underneath the seat the stone seems to have been rounded off, or beaded, for ornament for nearly its entire breadth, and below this are a considerable number of small cuphollows, much defaced. Further down on the face of the stone will be found a double zigzag, 9 inches long; a figure consisting of six concentric arches, 7 inches high and 7 inches broad; three concentric circles, 7 inches across; and a cup surrounded by three concentric circles, 6 inches across. On that portion of the original back of the chair which has not fallen away will be found a cup with two concentric circles, 4 inches across; and, in another place, two separate cups. In front of, and round the base of the chair, considerable quantities of quartz, broken into small lumps, were strewn about.

On the E. side of the cairn, the stones forming the periphery curve

inwards for 8 or 9 yards on each side of the point where the passage to the interior chambers commences, on the very margin of the cairn, the bearing of the passage being E. 10° S. The entrance was closed by two irregular blocks of stone, filling up the passage for 5 or 6 feet in length. On the outside of the entrance was placed a loose layer of lumps of quartz. All the roofing flags covering the passage, and more than two-thirds of those which originally covered the central octagonal chamber, had disappeared, leaving the passage and central chambers completely filled up with stones. Among the loose stones over the central octagonal chamber were found three large bones, probably those of a deer. The imperfect portion of the roof that remains, formed by about thirty large flags overlapping one another, rises to 10 feet above the level of the floor.

The floor of the central octagonal chamber was covered by two large flags and three small ones. The largest Mr. Conwell was unable to raise, but underneath the

others were found fragments of charred bones, small, broken stones, and pieces of charcoal. The three cists are each about 4 feet square. Above the upright stones forming the walls of each chamber, about a dozen large flags, overlapping one another, are covered in by a horizontal slab, forming a chamber about 5 feet high, across the entrance into each of which stands a stone about 2 feet high, leaving an opening over it of 3 feet.

These three cists were nearly, but not entirely, filled up with dry, loose stones,

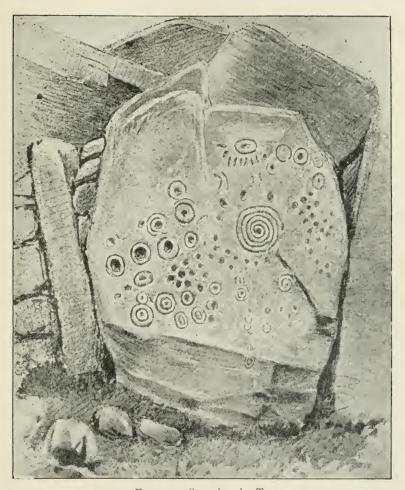


FIG. 313.—Stone in cairn T.

from the uncovering of the central chamber around which they were placed. The earth on the floor of each was mixed with splinters of burned bones; while in the centre of one a circle of earth, a foot in diameter, inclosed about a hatful of charred bones, which were covered with a flag, above which were raised, for about 2 feet, alternate layers of finely broken and larger stones, among which were found some human teeth and twenty-four bones, with the ends apparently ornamented with crossed lines. Among the loose stones at the bottom of the central chamber, and close to the entrance of a cist, was found a bronze pin, $2\frac{1}{2}$ inches long, with head ornamented, and stem slightly so, and preserving a beautiful green polish.

The entire length of the passage is 17 feet; and from the commencement of the passage to the W. extremity of the opposite chamber, 28 feet. The transverse distance measured from the backs of the cists is 16 feet 4 ins., while the distance between their entrances is 7 feet; and from the termination of the passage to the entrance of the end cist is 6 feet 3 ins. The breadth of the passage at its termination is 3 feet 1 in.; and the respective breadths of the cists 2 feet 8 ins., 3 feet 5 ins., and 3 feet 6 ins.

There were twenty-eight sculptured stones in this cairn.

The end chamber or cist has a beehive roof of seven flags, capped by a large

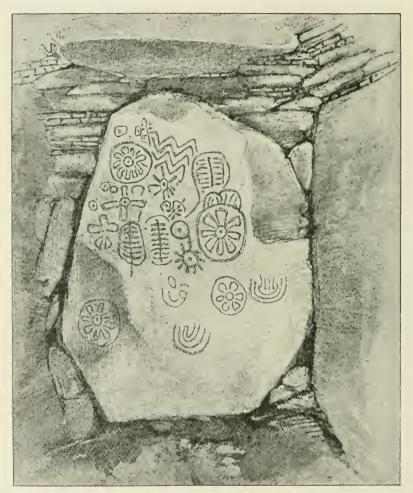


Fig. 314.—Stone in cairn T.

horizontal one, on which is a figure formed of fourteen concentric circles—as far as they can be counted—extending out of sight under the structure, where no tool could reach; one single circle, 2 inches in diameter; 4 cups, each surrounded by a single circle; 2 cups, each surrounded by 2 circles; a figure of 2 concentric circles; another of 3 concentric circles round a cup; a quadrilateral figure with 4 lines across; a group of 5 wavy lines, adjoining which are 6 concentric circles;

a straight line running under the roof, with 8 short lines in the form of a star, 3 inches in diameter; 5 concentric ovals running under the roof; a straight line surmounted by 3 elliptical arcs; a circle surrounded by 10 rays, making a figure 6 inches across; a star of 6 rays; a cup with 8 rays, surrounded by a circle 6 inches



Fig. 315.-Stone in cairn T.

in diameter; a cup and circle, out of which rise 11 looped or arched rays, making a figure 6 inches in diameter; a spiral of 4 curves, 12 inches in length, having 7 lines on each side at right angles to the 2 outer coils.

The beehive roof above mentioned is formed by five flags covered in by a horizontal one, on which are cut in fine lining, less than $\frac{1}{4}$ of an inch asunder, 4 chevron zigzag lines, about 1 foot in length, and terminated at one extremity by a single zigzag line at right angles to them; also a circle $1\frac{1}{2}$ inch in diameter.

On the lintel-stone over the entrance to the S. chamber are twelve short lines along the edge of the stone, and six others further down. Mr. Conwell thought these were probably ogam characters.

This was the cairn which he designated "The Tomb of Ollamh Fodhla."

25. U. This cairn is situated 14 yards N.E. from T, and 46 yards E. of S. There were sixteen large stones in the base; and, nearly 2 feet inside the circumference, a

stone measuring 8 feet 2 ins. long, 2 feet 4 ins. broad, and 1 foot 8 ins. thick, lay opposite the commencement of the passage. The remains of the cairn were only from 4 to 5 feet high, and $14\frac{1}{2}$ yards in diameter. The tops of the upright stones were left visible, and the chambers themselves were more than half filled up with loose stones and earth. On removing these, the interior arrangement of the chambers was found, as in most other cases, to be cruciform. The length of the passage alone, which has a bearing of E. 20° S., is 9 feet; and from the commence-



Fig. 316.—Stone in cairn T.

ment of the passage to the extremity of the opposite chamber is 20 feet; while the breadth across the chamber is 10 feet. One of the stones of the chamber is wanting, and another is displaced. When the stones which filled up these chambers were removed, the earth at the bottom, in some places from 12 to 18 inches in depth, was found to be thickly mixed with splinters of burned bones.

Mr. Conwell was informed by an old herd on the mountain that he recollected the chambers in this cairn, in their half-cleared-out state, having been used for culinary purposes by the men engaged in the Ordnance Survey. There were thirteen sculptured stones in this cairn.

26. There were some appearances of a cairn having stood about midway between U and V.

27. V. This cairn was 39 yards S.E. from T, and 51 yards S. of V. It measured 11 yards in diameter. All the smaller stones which originally formed the cairn had been carried away, leaving quite bare the upright stones which formed the interior chambers. From the appearance of these stones, Mr. Conwell did not think they seemed to have been arranged on any particular plan. The greatest length of the

chambers, having a bearing E. 20° S., was 21 feet, and breadth 10 feet. About a yard outside the circumference, on the N.W. side, stood a pillar-stone, 5 feet above ground, 5 feet 6 ins. broad, and 1 foot 6 ins. thick. Digging round the base of this stone, Mr. Conwell found a rounded white sea-pebble, which he thought from appearances might have been used as a sling-stone or a hammer.

Four of the upright stones in this cairn bore sculpturings.

28. W. This cairn is 128 yards E. of T. What remained of it appeared to be

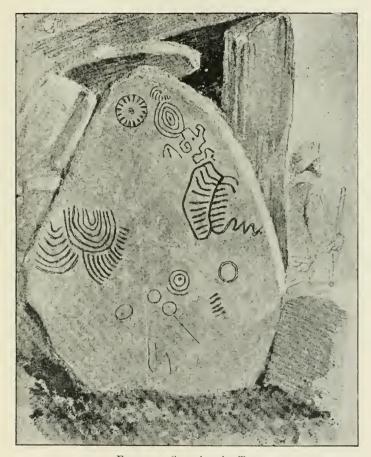


Fig. 317.—Stone in cairn T.

nearly level with the ground, and covered a space of 7 yards in diameter. The single interior chamber which this cairn contained was round, or well-shaped; and, unlike all the others, which appeared to have been erected on the bare surface of the ground, the earth seemed to have been dug away for the construction of this chamber, which proved to be 6 feet 9 ins. in diameter, formed by 8 flagstones placed on ends, fitting closely together, except in two instances, and all having an inclination inwards at the bottom. A layer of charred bones, 6 inches in thickness, was found to cover the bottom of this chamber, in the clearing out of which was brought to light, resting on the floor, a splendid stone urn, $2\frac{1}{2}$ feet square, I foot thick, and hollowed out from the sides towards the centre to a depth varying from 3 to 4 inches. On raising this urn, which evidently occupied its original position,

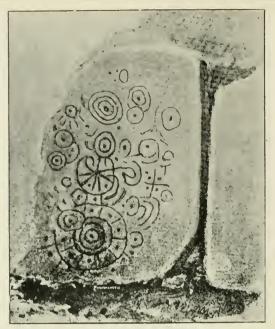


Fig. 318.—Stone in cairn T.

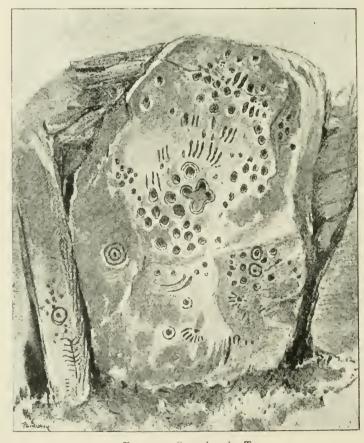


Fig. 319.—Stone in cairn T.

some splinters of charred bones were found beneath it. The point which appears to have been the entrance to this chamber has a bearing due S.

Five of the chamber-stones in this cairn bore sculpturings.



Fig. 320.—Stone in cairn U.

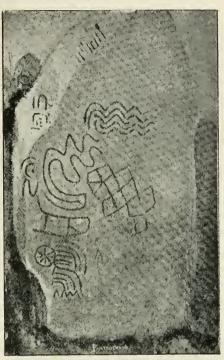


Fig. 321.—Stone in cairn U.



FIG. 322.—Stone in cairn U.

29, 30, 31. X. Under this letter, Mr. Conwell mentions three circles, which were marked in the Ordnance Map as "cairns," but as to which he is doubtful

whether they were the base-rings of cairns, or independent circles. They are passed in going from the hill specially known as Slieve-na-Callighe towards the Hill of Patrickstown, and are situated midway up the latter, or eastern peak.

Of these the northern one was the most perfect. The diameter is 40 feet. The

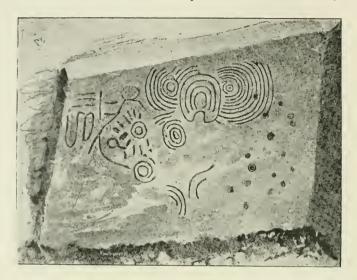


Fig. 323.—Stone in cairn U.

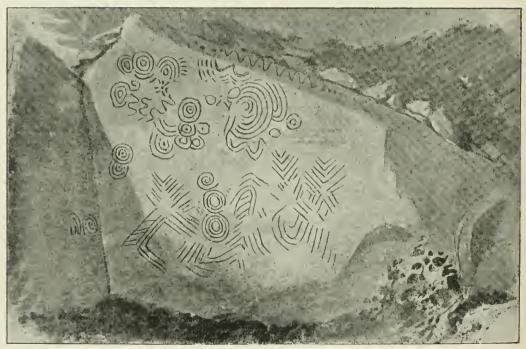


Fig. 324.-Stone in cairn U.

distances between the stones were as follows: From No. 1 to No. 2 was 4 yards; from 2 to 3, 4 yards; from 3 to 4, 1 yard; 4 and 5 nearly touch one another;

5 to 6, 2 yards; 6 and 7 nearly touch one another; 7 to 8, 3 yards; 8 to 9, 8

yards; 9 to 10, 7 yards.

At a distance of 13 feet inwards from the circumference of this circle stood an upright stone, upon the face of which, pointing N.W., were sculptured a circle, 3 inches in diameter, a cup with 13 rays, surrounded by a circle 6 inches in diameter, on which circle was another cup 2 inches in diameter, and $\frac{1}{2}$ an inch deep, from which were deflected 9 rays, varying from 4 to 12 inches in length, and from $\frac{1}{2}$ an inch to 1 inch in breadth, 5 of which terminated each in a cup; a cup with 9 rays, 6 inches across, over which were 13 equidistant arcs of circles, varying in length

from 2 to 12 inches. Along the lower part of the face of the stone were 3 circles, one 3 inches, one 4 inches, and one 5 inches in

diameter.

The designs on this stone could only be seen to advantage in a suitable shade of sunlight. In obtaining this Mr. Conwell says he was most fortunate.

The second, and middle circle, lay 9 yards S. of the northern one, and measured 12 yards in diameter. The distances between the stones were as follows: From No. 1 to No. 2, 4 yards; from 2 to 3, 1 yard; from 3 to 4, 2 yards; from 4 to 5, 2 yards; from 5 to 6, 3 yards.

In the centre of this circle two flat stones were lying. On one of the stones a cup was sculptured, having ten others in a circle round it, this circle measuring 10 inches



Fig. 325.-Stone in cairn W.

across, and having four other cups in an incomplete circle round this again, nearly 18 inches across, the cups being about $\mathbf{1}\frac{1}{2}$ inch in diameter, and $\frac{1}{4}$ of an inch deep. There were also twenty-eight similar cups in one group on this stone.

Another stone in the circle contained a circular hole, $6\frac{1}{2}$ inches in diameter, cut vertically, with much preciseness and smoothness, to a depth of 3 inches.

The third and southern circle lay 12 yards S. of the middle one, and measured 23 yards in diameter. It contained only seven stones, with an eighth lying 5 yards W. of its boundary. The distances between the stones were as follows: From No. 1 to No. 2 is 7 yards; from 2 to 3, 15 yards; from 3 to 4, 4 yards; from 4 to 5, 9 yards; and 5, 6, and 7 adjoin one another.

On the whole, I am myself inclined to regard these circles as cairn-bases, and

not independent or free-standing circles.

32. Y. Crowning the top of the Hill of Patrickstown, which attains the height of 885 feet, there stood, until within a few years of Mr. Conwell's visit, one of the most conspicuous cairns in the range. It measured 33 yards in diameter; but only a few cart-loads remained, the bulk of the pile having been used in the construction of fences.

33. Z. At the base of the eastern peak, on the south side, stands the "Moat of Patrickstown." It measures 115 paces round the base, 45 feet in slant height, and 40 paces round the circumference at the top, which is flattened. This tumulus is situated on the top of a small sloping eminence in a green field, and is crowned by a mutilated whitethorn tree, growing on its eastern border. It is covered with earth and grass, and, in common with most moats, is popularly believed to contain stone chambers in the interior.

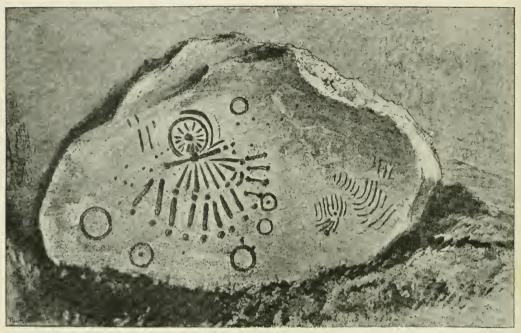


FIG. 326.—Stone near the northernmost of three circles on the peak at Patrickstown.

In concluding his paper (Proc. R.I.A., vol. ix. pt. iv. p. 377), Mr. Conwell states his opinion that, "although the carved stones in all these cairns, taken together, exceed one hundred in number, there are not two the decorations on which are similar."

The sculpturings on the stones in thirteen cairns on the entire range he classifies thus:

Single cup-like hollows, some ar	ranged	l in pa	arallel	lines, s	ome in	circle	and i	many	
of them scattered in groups									406
Cups, each surrounded by a singl		e							86
Cups, each surrounded by two ci									30
Cups, each surrounded by three c								• • •	17
Cups, each surrounded by four ci									4
Cups, each surrounded by five cir									3
Cup-hollows, each surrounded by						• • •			4
Star-shaped figures, varying from					• • •		• • •		35
Circles with rays emanating from				***				• • •	22
Cups, each surrounded by a circle		rays e	manatii	ng iron	1 11	***	• • •		14
Single ovals			***	• • •		• • •	• • •		16
Figure of two concentric ovals	• • •						• • •		1
Figure of six concentric ovals	• • •				* * *		• • •	• • •	1
Single circles	• • •					• • •			114
Figures of two concentric circles Figures of three concentric circles			• • •	• • •	• • •				32
Figures of four concentric circles							• • •		10
Figures of five concentric circles			• • •			• • •		• • •	6
rigures of five eclicentific circles		* 4 *							4

Figure of six concentric circles								 I
Semi-elliptical or arched figures	• • •					• • •		 68
Spirals	• • •							 12
Quadrilateral figures		•••	• • •					 14
Triangular figures formed by cros	s-hatcl	red lir	ies		• • •	• • •		 6
Reticulated figures consisting in						• • •		 54
Single straight lines (some of whi	ich Mr.	Conv	well tho	ugh t o	gamic)	about	• • •	 300
Zigzag or chevron lines, upwards	of	• • •	• • •		•••	• • •	• • •	 80
Single curves		• • •	• • •		• • •			 IO
Figures of two concentric curves								 II
Figures of three concentric curve	S							 10
Figures of four concentric curves			• • •				• • •	 8
Figures of five concentric curves			•••		***		• • •	 4
Figures of six concentric curves		• • •	• • •		• • •	• • •	• • •	 4
Figures of seven concentric curve			• • •		• • •			 2
Figure of eight concentric curves						• • •	• • •	 I
Figure of nine concentric curves						***		 I
Figures of thirteen concentric cur	ves		• • •			• • •	• • •	 2

[&]quot;In all," Mr. Conwell sums up, "I have laid bare 1393 separate devices."

IN THE BARONY OF SLANE UPPER.

I. In the Townland of Rathkenny, and Parish of Rathkenny,

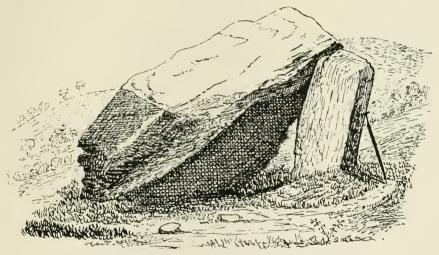


Fig. 327.—Rathkenny. From drawing by Sir Samuel Fergusson.

is a dolmen marked *Druid's Altar* in Ord. Surv. Map No. 12.

upon the ground, and the upper portion propped by an angular block of grit measuring 4 feet in height above ground, and 2 feet by 1 foot 6 ins. in breadth and thickness. In this condition it resembles the dolmens of Howth and Mount Venus, and comes under the category, according to Mr. Du Noyer, of semi-dolmens, or earth- Fig. 328.—Markings on the dolmen at Rathkenny. fast dolmens known to French an-

The covering-stone of this dolmen rests in an inclined position, the lower edge



tiquaries. The measurements of the covering-stone are 10 feet 10 ins. long, 8 feet 6 ins. broad, and 3 feet thick. Its weight has been estimated at 20 tons.

The upper surface of this tabular stone is "profusely covered with small cupshaped hollows, some of which are probably natural, but others certainly artificial,

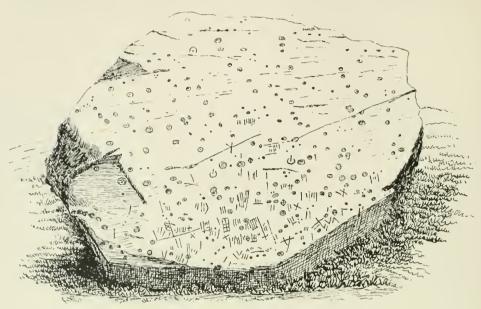
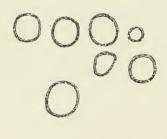


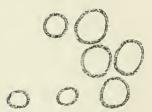
FIG. 329.—Upper surface of the covering-stone at Rathkenny.



stone there are seven incised circles on its inner face, and seven more on a pillar-stone of the same monument.

O.S.L., Co. Meath, $\frac{14}{E_{-22}}$, p. 105; Proc. R.I.A., vol. ix.

and between them a number of marks and scorings." † Besides these marks on the surface of the covering-



O.S.L., Co. Meath, $\frac{14}{E.23}$, p. 105; Proc. R.I.A., vol. ix. (1864-66), p. 541, and pl. xii.; Journ. of Kilk. Archæol. Soc. (1868-69), plate facing p. 42.

Fig. 330.—Two groups of seven circles; the upper on inner face of covering-stone; the under on pillar-stone, Rathkenny.

2, 3. In the Townland of Newgrange, and Parish of Monknewtown, is a chambered cairn marked *Moat* in Ord. Surv. Map No. 19. A second near it not marked. (See next page.)

4, 5. In the Townland of Dowth, and Parish of Dowth, is a chambered cairn marked *Moat* in Ord. Surv. Map No. 20. Also another to the W., indicated in Map No. 19. (See page 365, *infra*.)

[†] Compare fig. 17, p. 20. See also a rock near Oldcastle, "Kilk. Archæol. Journ.," 1865, p. 383; also a rock near the dolmen at Paddock, Co. Louth, id., 1864-66, p. 499; also Phenician characters in De la Marmora's atlas to his "Voyage en Sardaigne," pl. xxxii.; also those at Cerro del Sol in Spain, in Gongora y Martinez, "Antiq. de Andalucia," p. 131.

6, 7. In the Townland of Knowth, adjoining that of Newgrange on the N., and Parish of Monknewtown, is a cairn probably

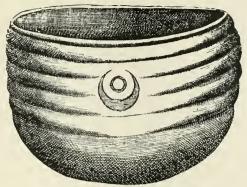


Fig. 331.—Stone urn found at Knowth. From Boate, edit. Molyneux, "Nat. Hist.," p. 200. Length 16 ins., breadth 12 ins., height 11 ins.; in cist in tumulus, with burnt bones.

containing a chamber, and a second near it; the former marked Moat in Ord. Surv. Map No. 19. (See p. 345, infra.)

NEW GRANGE.

On the northern bank of the river Boyne are a number of monuments, seventeen in all, dispersed over an area extending about 3 miles from E. to W. and about

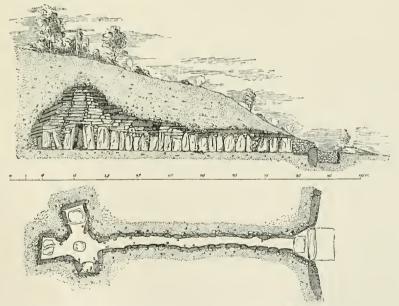


Fig. 332.—Plan and section of chamber at New Grange. From Mr. G. Coffey's paper in the "Transactions of the Royal Irish Academy."

[†] With regard to the etymology of the name Newgrange, it has been suggested by O'Brian, with more ingenuity than probability perhaps, that it is the English corruption of An Uamh Greinè, which would have been pronounced 'noovgrainy, meaning the cave of Grainnè.

The word Grange, however, is in far too common use in Ireland in its ordinary English sense to render this etymology plausible.

I mile to 1½ mile from N. to S., all of them being, roughly speaking, included in a bend of the river.

O'Donovan states that "there is a tradition in this county that all these moats (or tumuli) have caves within them, in which bars of gold are laid up, but that it would be dangerous to open them, as evil spirits are watching the treasure." Such seems to be the sum total of the current oral legend relating of these mounds.

A very important question, however, lies beyond this; namely, whether Newgrange and the group of tumuli lying in the peninsula formed by the bend of the river Boyne constitute a royal cometery called Brugh, or Brugh-na-Boinne, to which reference is frequently made by the mediaval

writers, both in poetry and prose, in the ancient Irish books.

The materials for the discussion of this question have been fully set forth by Mr. George Coffey, in his paper on "The Tumuli of Newgrange, Dowth, and Knowth," in the Transactions of the Royal Irish Academy." He is himself an advocate of the view that the tumuli and other monuments do indicate the spot which the early writers had in mind, and to which the legends and traditions recorded by them, and which had survived to their time, partly in writings older perhaps by some centuries than the copies preserved, relate.

O'Donovan and Sir Samuel Fergusson were of a contrary opinion, but Mr. Coffey states their

views with accuracy and perfect fairness.

Taking leave to transpose somewhat the order of his arguments in favour of the site being that known as "The Brugh," I may summarize them as follows:—

Firstly, as to the name. In the Ordnance Survey Maps of this district, subsequent to that of 1837, we find the name *Broe House* applied to a site close to the river at the S.W. point of its bowshaped bend, and immediately adjacent to a ford less than half a mile W.S.W. of Rosnaree House on the S. side of the river. It may be said, indeed, that Rosnaree and Broe occupy the two banks of the river, fronting each other at a distance of less than half a mile, the greater portion of which intervening space is taken up by the main channel, side channels, islands, and shallows which the river forms at this point. From Broe House to the centre of the New Grange mound is five-eighths of a mile in a N.E. direction, and at a similar distance to the N.W. are the remains of a fort

niver forms at this point. From Broe House to the centre of the New Grange mound is nive-eighture of a mile in a N.E. direction, and at a similar distance to the N.W. are the remains of a fort apparently connected with the river on the N. side.

This, however, is by no means the only instance of the application of the name Bro or Broe, to places in this peninsula. Mr. O'Laverty, in a "Note on New Grange," in the "Journal of the Royal Soc. of Antiquaries of Ireland," tells us that thirty years before he wrote his paper, Mr. Maguire of New Grange and his son informed him that "the field in which New Grange tumulus stands is called Bro Park," and that in the immediate vicinity are the "Bro Farm, the Bro Mill, and the Bro Cottage," which latter is perhaps the Broe House by the river, above mentioned. "The word Brugh," as he notes, "would assume the modern form Bro, as in Brughshane, pronounced Broshane, and many other townland names."

Brugh, however, signifies a "burg," or town, a fortified town, and in a more restricted sense, a mansion, palace, or dwelling-place. How, then, can it be applied to a district? The answer is simple, and may be made by asking the question how it comes that "Cashel," for example, or "Cairn," with the simple meanings of "stone-walled enclosure" and "pile of stones," came to be given to townlands and districts. There must have been a noteworthy "cashel," and a noteworthy "cairn," from which the name gained its extended sense. There must, then, have been a memorable brugh, or mansion, somewhere hereabouts, and the circumstance that the field in which the central and largest mound, that is to say, the Newgrange one itself, is situated, is called Bro Park, that is Brugh Field, would seem to point to that tumulus, with its enclosed buildings, as the "mansion" required.

It was not necessary that the "mansion" should be the abode of mortal man. The spirits of the dead, the fairies, the stable, might have had their brugh, or palace, as well. And in this sense

It was not necessary that the "mansion" should be the abode of mortal man. The spirits of the dead, the fairies, the sldble, might have had their brugh, or palace, as well. And in this sense it was actually used, as we gather from Mr. Standish H. O'Grady's valuable translation of the piece called the "Colloquy with the Ancients," in his "Silva Gadelica," p. 210: "The sons of Lugaid Menn rose and took their way to the green of the brugh upon the Boyne, where, none other being in their company, they sat them down." A young man appears to them, and in answer to their question whence he has come, he replies, "Out of yonder brugh, chequered with the many lights, hard by you here." In answer to their question who he was, he replied, "I am the Dagda's son, Bodbh Derg; and to the Tuatha dé Danann it was revealed that ye would come to fast here tonight, for lands and for great fortune." The sons of Lugaid Menn therefore went "into the brugh." Bodbh informed them that "three times fifty sons of kings we are in this sldh," and "for three days with their three nights they abode in the sldh."

I must pause to notice the very great importance of this passage, which proves to us that in the

I must pause to notice the very great importance of this passage, which proves to us that in the Middle Ages a tradition, then committed to writing, either from older manuscripts or from oral sources, existed with regard to the nature of the rites performed in pagan times at those places, which were

held sacred to the heathen mysteries.

It would appear that the cultus was that of the spirits of royal or famous ancestors, who were to be approached by pilgrimages made to their abodes, accompanied by a residence of a certain duration—in this case three nights and days, throughout which period fasting was prescribed—within the spirit-mansion itself. The spirits of the dead, who were doubtless conciliated by sacrifices, being thus approached and "fasted upon," as the term was, were supposed to respond to the prayer of the suppliants to grant them what they desired, and to enter into converse with them. In a piece called Echtra Nerai, an episode in the saga called Tain Bo Aingen (a pre-tale to the

Besides the tumuli, at least four raths, or forts, two single pillar-stones, and a group of standing stones, are included in the same area.

Tain Bo Cuailgne), we have another description of the entrance of a mortal, named Nera, into one of these mansions or palaces of the *sidhe*, namely, that at Cruachan, where we are told that he went into the cave (*uamh*), and into the *sid* of the cave.

Here, then, we have the three terms, brugh, sidh, and uamh, applied to the subterranean buildings, or (as in the case of Cruachan) the partly natural cavities, which were appropriated to this worship. By the term uamh, or "cave," the whole of the internal vaults are meant, with regard, not to their fairy occupants or mystic character, but simply to their appearance; by the term brugh their likeness to a dwelling or souterrain beneath a fort or rath-mansion is intended, with regard also to their legendary and mystic sense as the abode of the spirits of the dead, and as the fairy mansion or palace; by the term sidh or sid (as we gather from the story of Nera) the principal inner chamber of the *namh* is intended—the *sanctum sanctorum*, or *penetralia* of the spirit-temple, upon entering into which the mortal came face to face with the royal occupants, and

there doubtless he lay fasting, or offering his sacrifices, at the periods prescribed.

I feel but little doubt that in the inner chamber at New Grange, with its three recesses and its basins, we have this "std of the cave," and the place where the pilgrims fasted—a situation and a practice precisely similar to that which, under Christian auspices, was continued at such places as the Leaba Mologa in Cork, the original Patrick's Purgatory in Lough Derg, and elsewhere. The practice of lying in stone troughs was a feature of the Christian pilgrimages in Ireland. Sometimes such troughs had served the previous purpose of stone coffins. It is just possible that the shallow basins in the cells at Loughcrew, New Grange, and Dowth may, like the stone beds or troughs of the saints, have been occupied by the pilgrims engaged in their devotions. If so, however, they

must have sat in them in eastern fashion.

According to a local oral tradition, as stated by O'Donovan (A. 4 M., p. 22)—though it is not still extant—"Aenghus-an-Bhrogha was considered the presiding fairy of the Boyne, and his name," he adds, "is still familiar to the old inhabitants of Meath, who are fast forgetting their traditions, with the Irish language."

This makes it very interesting to find that in the popular tale called "The Pursuit of Diarmad, and Grainne," in which, perhaps, more than in any other to be named, oral popular tradition is preserved, Aengus, the son of the Dagda, is called Aengus-an-Bhrogha, and associated with the

Brugh-na-Boinne.

Thus Finn is made to say, "Let us leave this tulach, for fear that Aengus-an-Bhrogha and the Tuatha-De-Danann might catch us; and though we have no part in the slaying of Diarmuid, he would none the more readily believe us." Subsequently Aengus-an-Bhrogha transported Diarmuid's body to the Brugh-na-Boinne, saying, "Since I cannot restore him to life, I will send a soul into him, so that he may talk to me each day."

Here again it is to be observed that a tradition had been handed down with regard to the sid or brugh, that it was a place within the mystic precincts of which it was in the power of the presiding divinity—in this case Aengus-an-Bhrogha, otherwise called Bodbh Derg, or Aengus Og, or Aengus Mac Oc, or Aengus Mac Ind Oc—to reanimate the bodies of the dead, and cause them to speak to devotees, we may suppose oracularly. In the piece called "Bruighion Chaorthainn," or Fort of the Rowan Tree, the House of "Aengus Og of the Brugh," is described as a kingly house which cannot be burned or harried, and out of which "no hostages are given to the king,"—another way of saying, perhaps, that the dead pay no taxes, or that, being a holy place, it was exempt.

We will now turn back to the traditions respecting Brugh-na-Boinne which were collected in the tenth and eleventh centuries by Flann of Monasterboice, Eochaidh O'Flannagan, and Cinaeth O'Hartagain, and which were committed to writing in the twelfth century, and glossed, where necessary, by Moelmuiri of Clonmacnoise in the Leabhar-na-h-Uidhri.

We there find the cemetery of Brugh standing second in order in a list of the chief cemeteries before "The Faith." They are as follows: Cruachu, Brugh, Tailltiu, Luachair Ailbe, Oenach Ailbe, Oenach Collain, and Temhair Erann.

We are further informed that "the nobles of the Tuatha De Danann used to bury at Brugh, namely," adds Moelmuiri, "the Dagda with his three sons, and also Lugaidh, and Oe, and Ollam, and Ogma, and Etan the poetess, and Corpre the son of Etan."

Now, the kings of Temair (Tara) had used as their burying-place Oenach Cruachan (believed to be Rathcroghan in Roscommon) down to the time of Crimthann, or Cremthann Niadh Nar.

It is thought necessary to state the reason why it was not at Brugh that the line of kings of the race of Heremon from Cobhthach Coelbregh to Cremthann were buried, but at Oenach Cruachan, that reason simply being that the latter place was in Connaught, and that that province was Cobhthach's ruidles, that is, native principality.

This looks as if Brugh had been regarded as the more ancient royal cemetery of the two, or, at

all events, as in use as a burying-place for kings at an earlier date than Cruachan.

The reason is also given why Cremthann followed the practice of the Tuatha De Danann in having himself buried at Brugh. It was because "his wife Nar was of the Tuatha Dea, and it was she who solicited him that he should adopt Brugh as a burial-place for himself and his descendants, and this was the cause that they did not bury at Cruachan."

Accordingly, the kings of Temair were interred at Brugh "from the time of Cremthann to the time of Logdaire, son of Niell except three persons, namely. Art, the son of Conn. and Corman.

time of Loeghaire, son of Niall, except three persons, namely, Art, the son of Conn, and Cormac, the son of Art, and Niall of the Nine Hostages."

Of these three, Art was interred at Dumha Dergluachra, now Trevet, the reason being that,

The most remarkable, although not the largest of the tumuli, is that which lies N. of the road, near Newgrange House. Its position, with regard to the other two

having "believed" the day before the battle of Muccramma, he would not be buried in a pagan cemetery. For a similar reason Cormac told his people not to bury him at Brugh, but at Ros-na-Righ, to which place his body was thrice carried by the waters of the Boyne when his followers tried to disobey his orders and bear him to Brugh. It is to be observed that Rosnaree is the tried to disobey his orders and bear him to Brugh. It is to be observed that Rosnaree is the name of a place immediately opposite Broe House, and that in O'Donovan's time a spot called "Cormac's Grave" was pointed out there, although that authority doubts the genuineness of the tradition. The third absentee from the royal cemetery, namely, Niall, was buried at Ochonn, or Ochán. (See Whitley Stokes, "Rév. Celtique," vol. xv. p. 296.)

In the days of Cinaeth O'Hartagain, who died in 973, the following were the dingna, or "remarkable remains" pointed out by tradition at Brugh-na-Boinne (O'D., Ord. Surv. Letters, Co. Meath, p. 202; Whitley Stokes, "Rév. Celt.," vol. xv. p. 293):—

1. The long (? house, ship, or bed) of the daughter of Forann.

2. The lecht (monument) of the Dagda.

3. The mur (? mound, or wall; "walled mound," "rampart") of the Great Queen of the Dagda ("Great Queen" is here O'Donovan's rendering of Morrigan; Whitley Stokes mentions that it is glossed lamia; and it is perhaps connected with mâr, an evil spirit of night).

4. The lecht (monument) of the Mata.

4. The lecht (monument) of the Mata.

5. The bare (palace) of Crimthann Nia Nair, "for he was buried therein."
6. The fert (grave) of Fedlimid (Felimy), the law-giver. [With this name compare that of the Herulian prince Philimuth (Procop. B.G., 2, 22).]
7. The carn-ail (stone-heap) of Cuchullin, the hero.
The Rennes Dindshenchas has here instead "The carngal of Conn of the Hundred Battles."

8. The *cumat* (? keeping-place) or *comfhot* (grave) of Carbry Lifechar, 9. The *fullact* (cooking-place) of Fiacha Sraiftine.

Cinaeth says that Cormac was not interred here on account of his having embraced the Truth. His body rested on the strand at Ros-na-riogh, where it was interred. Niall the Great, was not interred at Brugh-na-Boinne, because he undertook an expedition to the Alpian mountains, where he was assassinated and interred. After Niall pure religion came to the Plain of Fal, and, Brugh ceasing to be a place of burial, the kings were interred in consecrated churchyards.

Mr. Coffey points out a line in this poem of O'Hartagan (the first of the eighth stanza), sechi bo boadain buain, "which seems to refer to the existence of a monument at Brugh to Boadan," a name which, as it appears also in the A. 4. M. (anno 861) as that of the occupant of a "grave over Dubhath," i.e. Dowth, affords proof, he fairly reasons, not only that the Brugh of O'Hartagan referred to this particular collection of tumuli, but that it extended over the district which includes them all. O'Donovan, he adds, seems to have overlooked it.

The Leabhar-na-hUidhri contains, in a poem on the death and burial of Dathi (38, B. 14, facsimile), two stanzas which refer to Brugh. The first runs—

"The three cemeteries of Idolaters are The cemetery of Tailten, the select, The cemetery of the ever-fair Cruachan, And the cemetery of Brugh."

The second begins-

"The host of great Meath are buried In the middle of the lordly Brugh."

Moelmuiri, commenting on this poem (38, B. 34), says—
"The nobles of the Tuatha De Danann (with the exception of seven of them who were interred at Talten) were buried at Brugh, namely, Lugh, and Oe son of Ollamh, and Ogma, and Carpre son of Etan, and Etan herself, and the Dagda and his three sons (namely, Aed, and Oengus, and Cermait), and a great many others, besides of the Tuatha De Danann, and Firbolgs and others."

In the Book of Ballymote (written in 1391), the above list from the Dindshenchas, certified by Cinaeth O'Hartagan's poem, is followed by a prose passage setting out the monuments at the Brugh

in greater detail:

in greater detail:—

"Aliter. The Bed (imdaei) of the Dagda, first; the Two Paps (da cich) of the Morrigain, the place where † Cermud Milbhel (or Cermaid or Cermait), son of the Dagda, was born; the grave of Boinn, the wife of Nechtan—it was she who brought with her the small hound called Dabilla, from which Cnoc Dabilla is called; the Mound (duma) of Tresc; the grave of Esclam, the Dagda's Brehon, which is called Fert-Patric (or Ferta Putraic) at this day; the Comb (cir) and Casket (cuirreill) of the Dagda's wife (so Whitley Stokes translates it, while O'Donovan makes Cir and Cuirreill proper names, 'wives of the Dagda')—these are two hillocks; the grave of Aed Luirgnech, son of the Dagda; the Cave (dere) of Bualc Bec; the Monument of Cellach, son of Maelcobha; the Monument of the steed of Cinaed, son of Irgalach; the Prison (carcar) of Liath Macha; the Glen of the Mata, i.e. the monster, ‡ as some assert; the Pillar-stone of Buidi, the son

[†] This seems to be in apposition. ‡ Whitley Stokes translates this "that was a tortoise."

large tumuli at Knowth and Dowth respectively, is a little over \(\frac{3}{4} \) of a mile S.E. of the former, and 11 mile W.S.W. of the latter.

of Muiredh, where his head is interred; the stone of Benn, i.e. the Monument on which the Mata was killed—it had one hundred and forty legs and four heads; † the Mound of the bones; the Caisel (stone enclosure) of Aengus, son of Crunnmael; Rout sula Midir, the shot of Midir's Eye," etc.

(stone enclosure) of Aengus, son of Crunnmael; Rout sula Midir, the shot of Midir's Eye," etc.
After this there follows a poem by Mac Nia, son of Oenn—"De quibus Mac Nia Mac Oen cecinit"
—which is really explained by the prose just quoted, which is prefixed to it. O'Donovan speaks of it as "extremely ancient and obscure," but adds that the prose preface "enables one to arrive at the meaning without much difficulty." Mr. Coffey printed a copy of it with a translation by Prof. O'Looney in the "Trans. R.I.Academy," but subsequently cancelled it. This poem is to be found also in the "Book of Leinster" (fac. p. 164, B. 28, continued at p. 211), with the single omission of the stanza on the grave of Esclam ("Book of Ballymote," 354, B. 26).

In the revised edition of his paper, Mr. Coffey quotes a translation by O'Curry of the second stanza of this difficult poem—

stanza of this difficult poem-

"Behold the sidh before your eyes, It is manifest to you that it is a king's mansion, Which was built by the firm Dagda; It was a wonder, a court, a wonderful hill."

In the Book of Lecan (fol. 279, vers. 6, 26), a manuscript written in 1416, is the following

passage:—
"There was, moreover, Eochaid Ollathair, i.e. the Dagda Môr, son of Eladán, son of Delbaith, eighty years in the kingdom of Erin. It was he who had the three sons, namely, Aengus and Aed and Cermaid. It was upon those four the men of Erin made the Sid of the Brugh."

A difficulty has presented itself to several Irish writers as to how it could have been that, if Brugh-na-Boinne was the cemetery of the Tuatha De Danann celebrities, it should be that also of the so-called Milesian princes of Temair. This is based upon the supposition that the two were of separate nationalities. Granting, merely for the sake of argument, that this were so, an explanation has been already afforded by the circumstance that Cremthann followed the practice of the Tuatha De Danann in burying there at the solicitation of his wife Nar.

The whole Milesian story is, however, so patently apocryphal, and their contest with the Tuatha De Danann so obviously unreal, that it is open to question whether, under the number of Golam's (i.e. Milesius's sons) the Tuatha De Danann people are not included.

To me it would seem that in the sons of Milesius we have an example of the manner in which ethnological problems were treated in the early Middle Ages, ‡ namely, by referring the several diverse peoples or tribes inhabiting a country or province to distinct eponymi who were treated as brothers, e.g. Vandalus, Gothus, Brutus, Albanus, etc. If this be so, in Heber, Heremon, Ir, and the rest, we shall have to seek for the elements which were believed to constitute the Irish nation, and for the several peoples who were held to have possessed the soil of that island either coincidently or successively, according to traditions current at the date when the fabulous tree was constructed. Among the sons of Milesius we may therefore look for representatives of Partholan and Nemid, of the Firbolg and Tuatha De Danann, as well as for those of the Cruithne or Picts. Accidental coincidences in the Irish mythological genealogies render this view not an improbable one.

It would appear that the Brugh was a place of periodical pilgrimage for the princes of Temair to the shrines of their ancestors, just such as the Japanese Emperors made to the magnificent spirittemples of the Sînto at Nikko. In the Leahhar-na-hUidhri, in the Tale of the "Phantom-chariot of Cuchullin," it is stated that King Loeghaire was passing over the "Slope of the Chariots," on the north side of Temair, on his way—apparently on such a pilgrimage—to the *enuc side in broga*, "to the hill," that is, "of the sid of the Brugh, in the plain of the assembly of the Brugh of Mac Ind Oc," when he saw Cuchullin, the divine hero, traversing the plain before him like a heavy fog."

In the A. 4 M., under date 861, the following passage occurs:-

"Amhlaeibh, Imhar, and Uailsi, three chieftains of the foreigners, and Lorcan, son of Cathal, Lord of Meath, plundered the land of Flann, son of Conang. The cave of Achadh-Aldai (field of Aldai) in Mughdhorna-Maighen; the cave of Cnoghbhai; the cave of the grave of Bodan, i.e. the shepherd of Elemar, over Dubhath; and the cave of the wife of Gobhann at Drochat-atha

[Drogheda], were plundered by the foreigners."

The same event is stated as follows in the Annals of Ulster, under date 862:—"The cave of Achadh-Aldai, and (the cave) of Cnodhba, and of Fert-Boadan over Dubadh, and the cave of the Smith's Wife, were searched by the foreigners, quod antea non perfectum est, viz. on the occasion when three kings of the foreigners plundered the land of Flann, son of Conaing, to wit, Amhlaim, and Imhar, and Auisle; and Lorcan, son of Cathal, king of Meath, was with them thereat."

‡ This process of constructing allegorical genealogies may have been borrowed from the Bible (Gen. cap. x.), or from the Classics (Tac. Germ. cap. ii.) or from both. It is found in Nennins, and in many old German and Norse historians.

^{† &}quot;Seven score legs and seven heads" in the Rennes MS. This was evidently an idol. Suantevit the idol at Arcona in Riigen had four heads. See "Saxo Gramm." (edit. Holder, 1886), p. 564, where the description of the temple of this god is strikingly like that of Cormac's House at Temair.

The first published notices of New Grange of which I am aware are two contained in letters written respectively in December, 1699, and March, 1700, by Edward Lhwyd, keeper of the Ashmolean Museum.

The first is as follows: "The most remarkable Curiosity we saw [between

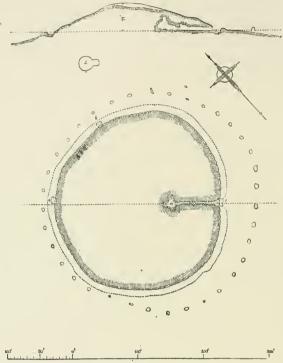


Fig. 333.—Plan and section of tumulus at New Grange. By Mr. G. Coffey, M.R.I.A.

Dublin and the Giant's Causeway] was a stately Mount at a place called New Grange near Drogheda, having a number of huge Stones pitch'd on end round about it, and a single one on the Top. The Gentleman of the village, one Mr. Charles Campbel, observing that under the green Turf this Mount was wholly

It is true that the name Brugh does not occur here, but there can be little question that Petrie was right in identifying Cnodhba with Knowth, and Dubhath with Dowth, which would lead to the supposition that by the cave of Achadh-Aldai, the New Grange structure is intended. It is true that Mughdhorna-Maighen is in Oriel, but that may easily be a mistake for Mughdhorna-Breagh.

It is certainly singular that, with one exception, none of the names applied by the annalists

of these events in the ninth century to these places are the same as those in those poems and prose accounts which we have quoted from the ancient scrap-books—the Leabhar-na-hUidhri, and the

Books of Leinster, Ballymote, and Lecan.

The names are, nevertheless, those of Tuatha De Danann celebrities; as, for example, Aldai is mentioned as one of the famous ancestors of that race by Mac Firbis, as is also Elemhair-an-Bhrogha, whose name O'Flaherty latinizes into Elemair de Burgo. In the Dindshenchas of Carn Conaill (trans. Whitley Stokes, "Rév. Celt.," vol. xv. p. 478), the Brugh Mná Elemair, i.e. Brugh of Elemar's wife, is mentioned between the names Cnogba and Taltiu, as that of one of those "best lands in Meath," upon which Cairbre Nia-fer, lord of Temair, permitted the sons of Umor to settle when "they had made a flitting over sea out of the Province of the Picts." For a reference to Elemar's daughter in connection with Cnogba, see under Knowth (in/ra).

The one exception, too, as Mr. Coffey has pointed out, would be sufficient in itself to establish the identity of the places mentioned in the "Annals of the Four Masters" with those in the Brugh of the poems. It is the name Boadan or Boadain mentioned in O'Hartagan's poem, in the line Sechi bổ boadain buain, in reference to a monument at the Brigh, and also by the Annalists as the

cave of Fert Boadan at Dowth.

composed of Stones, and having occasion for some, employ'd his Servants to carry off a considerable Parcel of them; till they came at last to a broad flat Stone, rudely carved, and placed edgewise at the Bottom of the Mount. This they discover'd to be the Door of a Cave, which had a long Entry leading into it.

"At the first entering we were forced to creep; but still, as we went on, the Pillars on each side of us were higher and higher; and coming into the Cave we found it about 20 Foot high. In this Cave, on each hand of us, was a Cell or Apartment, and another went on straight forward opposite to the Entry. In those on each hand was a very broad shallow Bason of stone, sinuated at the Edge. The Bason in the Right-Hand Apartment stood in another; that on the Left hand was single; and in the Apartment straight forward there was none at all. We observed that Water dropped into the right-hand Bason, tho' it had rained but little in many Days; and suspected that the lower Bason was intended to preserve the superfluous Liquor of the upper (whether this Water were Sacred, or whether it was for Blood in Sacrifice), that none might come to the Ground.

"The great Pillars round this Cave, supporting the Mount, were not at all hewn or wrought; but were such rude Stones as those of Abury in Wiltshire, and rather more rude than those of Stonehenge. But those about the Basons, and some elsewhere, had such Barbarous Sculpture (viz. Spiral like a Snake, but without distinction of Head and Tail), as the fore-mentioned Stone at the entry of the Cave. There was no Flagging nor Floor to this Entry nor Cave; but any sort of loose Stones everywhere under Feet.

"They found several Bones in the Cave, and part of a Stag's (or else Elk's) Head, and some other things which I omit, because the Labourers differ'd in their Account of them. A Gold Coin of the Emperor Valentinian [A.D. 364-375], being found near the Top of this Mount, might bespeak it Roman; but that the rude Carving at the Entry and in the Cave seems to denote it a Barbarous Monument. So, the Coin proving it ancienter than any invasion of the Ostmans or Danes, and the Carving and rude Sculpture Barbarous, it should follow that it was some Place of Sacrifice or Burial of the ancient Irish."

The second account, written by Edward Lhwyd, from Sligo, to Henry Rowlands, the author of "Mona Antiqua Restaurata," in March, 1700, and which I shall also give in full, is as follows: "I met with one Monument in this Kingdom [Ireland] very singular. It stands at a place called New Grange near Drogheda, and is a Mount or Barrow of very considerable height, encompass'd with vast stones pitched on End round the bottom of it; and having another lesser standing on the top.† This Mount is all the work of Hands, and consists almost wholly of Stones, but is cover'd with Gravel and green Swerd, and has within it a remarkable Cave.

"The Entry into this Cave is at bottom, and before it we found a great flat Stone, like a Tomb-Stone, placed edgewise, having on the outside certain barbarous Carvings, like Snakes encircled, but without Heads. The Entry was guarded all along on each side with such rude Stones, pitch'd on End, some of them having the same carving, and other vast ones laid a-cross these at top. The Out-Pillars were so pressed by the weight of the Mount that they admitted but just creeping in; but by degrees the Passage grew wider and higher, till we came to the Cave, which was about five or six Yards in height. The cave consists of three Cells or Appartments, one on each hand, and the third straight forward, and may be about seven yards over each way. In the right-hand Cell stands a great Bason of an irregular oval Figure of one entire

[†] Compare this with the Scythian tombs, each with a baba or stone female figure on the summit. (Vide infra, Part II.)

Stone, having its Brim odly sinuat'd or elbow'd in and out; and that Bason in another of much the same form. . . In the left Appartment there was such another Bason, but single. In the Appartment straight forward there was no Bason at all. Many of the Pillars about the right-hand Basons were carved as the Stones above mention'd; but under Feet were nothing but loose stones of any size in Confusion; and amongst them a great many Bones of Beasts and some Pieces of Deers' Horns. Near the top of this Mount they found a gold coin of the Emperor Valentinian."

The account which, in order of date, comes next to those of Lhwyd is that given by Sir Thomas Molyneux in his "Discourse concerning the Danish Mounts, Forts, and Towers in Ireland."

With respect to the stones placed around the base of the tumulus he states that, while some were 11 feet high, others were not more than 4 feet. He says, also, that "the bottom of the cave and entry is a rude sort of pavement, made of the same stones of which the mount is composed, not beaten or joined together, but loosely cast on the ground, only to cover it." The measurements he gives were evidently made with care and pains, and the plan, which is unusually accurate for plans of ancient monuments in those days, was the work of Mr. Samuel Molyneux, a young gentleman of the "College of Dublin." The construction of the central chamber is well described, as follows: "The walls round the circumference of the cave and side apartments are composed, like those of the long gallery, of huge mighty flagstones set end-ways in the ground, of 7 or 8 foot high. These upright stones support other broad stones that lie along or horizontally, jetting their ends beyond the upright stones; and over these again are placed another order of flat stones in the same level posture, advancing still their edges towards the center of the cave further than those they rest upon, and so, one course above another, approaching nearer towards the middle, form all together a rude kind of arch by way of roof over the vault below. This arch is closed at the top by one large stone that covers the center, and keeps all fixt and compact together; for through the whole work appears no sign of mortar, clay, or other cement to make its parts lie firm and close; but where a crevice happens, or an interstice, they are filled up with thin flat stones, split and wedged in on purpose with that design."

Molyneux mentions that "along the middle of the cave, a slender quarry-stone, 5 or 6 foot long, lies on the floor, shaped like a pyramid." This, he imagined, "once stood upright, perhaps a central stone to those placed round the outside of the mount."

"When first the cave was opened," he continues, "the bones of two dead bodies entire, not burnt, were found upon the floor." "In each of the three cells"—not in two, only, as when Edward Lhwyd visited it—was "a broad and shallow cistern, somewhat round, but rudely formed out of a kind of free stone. They all were rounded a little at the bottom, so as to be convex, and at the top were slightly hollowed, but their cavities contained but little. Some of their brims, or edges, were sinuated, or scolopt; their diameter was 2 feet wide, and in their height they measured about 18 inches from the floor." "The cell that lay to the right hand was larger, and seemed more regular and finished than the rest; for, rude as it was, it showed the workman had spent more of his wild art and pains upon it than the other two. The cistern it contained was better shaped, and in the middle of it was placed another smaller cistern, better wrought, and of more curious make; and still, for greater ornament, the stone that lay along as lintel, o'er the entrance of this cell, was cut with many spiral, circular, and waved lines."

Molyneux adds that during the removal of "some of the heaps of stones on

the outside of the mount," "some ten or twelve years" before he published his account—that is to say, in about 1713-15—"two Roman gold coins," of which he gives illustrations, "were found by accident, near the surface, buried among the stones. One was of Valentinian I., struck at Triers about the year 368, in honour of a victory obtained by him and his son Gratian over the Germans at Solicinium; the other of Theodosius, also coined at Triers, on account," so he thinks, "of the victory over Eugenius, about the year 395."

"About a hundred yards distant from this mount are placed two other pyramids, but of much smaller size, not above a fourth part as big, and, like it, both are encompassed with a circle of stones, set at some distance from one another, round

their bottoms."

In 1770 a paper on "New Grange," by Thomas Pownall, was read before the Society of Antiquaries of London. From a sketch of the mound appended to this communication it appears that at that date it was entirely destitute of trees, and more symmetrical in form than is at present the case. The measurements for his ground-plan and section were made by Mr. Samuel Bouie, a surveyor, and are approximately correct. The base, according to these, covered two acres of ground. Ten stones of the environing circle were at that time standing, and measured from 7 feet to 9 feet high. The mound itself is described as but a ruin of its former self, all the roads in the vicinity having been made with its stones. "The mouth of the gallery lay concealed and shut up, near 40 feet within the body of the pile. . . . This gallery is formed by large, flat stones. Those which compose its sides are set on edge, and are of different altitudes, from 2 feet to 7 feet high, and of various breadths, from 2 feet to 3 feet 6 ins. The thickness of each could not be taken with certainty, but some of the large ones are from I foot 6 ins. to 2 feet thick. . . . The mouth of the gallery is 3 feet wide, and 2 feet high. . . . At 13 feet from the mouth, it is only 2 feet 2 ins. wide at the bottom. . . . We made our way by creeping on our hands and knees till we came to this part. Here we were forced to turn upon our sides, and edge ourselves on with one elbow and one foot. After we had passed this strait we were enabled to stand, and by degrees the height above us increased from 6 feet to 9 feet."

On the third side-stone of the passage from the central chamber, or dome, were the traces of a spiral line. "Were I to indulge my own conjecture," proceeds Governor Pownall, "I should rather suppose that this stone, as well as some others in the compilation of this structure, had formerly belonged to some other monument of a much more ancient date, and that they were brought from the sea-coast indiscriminately with the rest of the materials, and without knowledge of their contents, as well as without reference to the place they were here fixed in, being placed just as the shape of the stone suited the place assigned it." In parenthesis I may remark that had this writer observed that some of the stones have carving on the back as well as on the face, he would have felt his view on this point

further confirmed.

"The central chamber," he says, "is upon the whole an octagon, with a dome of about 20 feet in height, and of an area which may be circumscribed within a circle of 17 feet, or 17 feet 6 inches." In his details of the construction, Pownall does not differ from Molyneux, but he holds that the latter was mistaken in placing a basin in the third cell, and that Lhwyd was right in stating that there was not one there. He describes the northern cell, or "tabernacle," as he quaintly terms it, as having a large, flat stone for its flooring. The two others had only the natural ground for their floor. Each had a rock-basin placed in it. The basin in the left-

hand, or western one, stood on the floor; that in the right-hand, or eastern one, upon "a kind of base," which must have been the second basin described by Lhwyd.

The plan and section in Pownall's paper seem to have been those adopted by antiquaries ever since, until the appearance of Mr. George Coffey's excellent paper on "New Grange, Dowth, and Knowth," printed in the "Transactions of the Royal Irish Academy (vol. xxx. part i.)," to which I shall presently refer.

A notice of this monument, together with an illustration of one of the cells, will be found in Sir Richard Colt Hoare's "Tour in Ireland." He observed that the basin in the E. cell had two depressions of the cup-type sunk into its surface.

Another account of the tumulus, by Petrie, occurs in the *Dublin Penny Magazine* for 1832-33, where a rough engraving of the eastern cell is given.

In the "Archæologia," vol. xxx., the discovery is recorded in the year 1842 of a gold chain, two finger-rings, and two gold torcs, of rope pattern, by a labouring man, within a few yards of the entrance to the "caves at New Grange," at a depth of two feet below the surface of the ground. The place where they were found was further searched, and a denarius of Geta (A.D. 211-212) was found.

In Mr. Wakeman's excellent little work, "Archæologia Hibernica," are some illustrations which admirably illustrate the external appearance of the tumulus, as well as the mouth, or entrance, to the passage, the basins within the cells, the various sculptured patterns and devices, and a so-called inscription.

These illustrations are reproduced in Sir William Wilde's "Beauties of the Boyne and the Blackwater," with the addition of a graphic representation of the right-hand, or E. cell, with its basin and sculpturings.

I regret to have to notice the existence of another account of this monument, which, as far as its illustrations are concerned, gives a most inaccurate and altogether misleading conception of the structure and its sculptured work. It is contained in the "Proceedings of the Oxford Architectural and Historical Society," before the members of which it was read (March 1st, 1865) by the Rev. H. Estridge. Its inaccurate representations have been twice reproduced, namely, in the *Gentleman's Magazine* for 1865, and, what is the more to be wondered at, by Mr. Brash in his "Ecclesiastical Architecture of Ireland." The "specimens of carved decoration" which this paper contains must surely have been drawn from memory, and filled in from some vague notion that they should be made to conform to medieval, or modern heraldic forms.

On the whole, the best view of the external appearance of the tumulus in recent times, with some of the remaining pillar-stones forming the outer and free-standing circle, is that given by Colonel Forbes Leslie, in his "Early Races of Scotland," p. 334, and reproduced by Fergusson, in his "Rude Stone Monuments," p. 201.

In the "Archæological Journal" for 1865 will be found certain observations on New Grange, made by General Lefroy, R.A., who made facsimiles of the incised markings, which, however, are not reproduced in the published paper. The author combats the theory that these designs are referable to the same epoch as the rock markings from the Cheviots, described by Dr. Collingwood Bruce.

In the "Journal of the Hist. and Archæol. Society of Ireland" (1879-82) a drawing of the sculptured stone placed lintel-wise above the outer entrance to the passage is given.

Fergusson, in his "Rude Stone Monuments," has produced three examples, stated to be from rubbings, of the ornamental work which occurs both on the faces and at the backs of several of the stones. He considered, and that justly, the sculptured mark, or so-called inscription, of which Pownall had given a full-

sized representation, might be aptly compared with one at Mané Lud, in Brittany, which he also figures.

Before I proceed to epitomize the latest and most exhaustive and accurate of the accounts yet published of New Grange—namely, that printed in the "Transactions of the Royal Irish Academy," from the pen of Mr. George Coffey, there are a few points, arising out of a comparative review of the above accounts, to which it will be as well to refer.

- In the first place—although it was probably removed during the half century succeeding his visit—I see no reason to doubt the accuracy of Lhwyd's statement that a pillar-stone once stood on the top of the mound.
- 2. I am inclined to think, in opposition to the opinion of Mr. Coffey, "that no such stone ever existed" (*loc. cit.*, p. 14), that we may accept as true the statement of Molyneux, that a "slender quarry-stone, 5 or 6 feet long, shaped like a pyramid" lay along the middle of the cave in the spot in which it is placed in his plan, and that his surmise is probably correct that it once stood upright. My view on this point is strengthened by the fact that a pyramidal pillar, shaped and rounded, was found standing upright within the chamber of the dolmen of Yr Ogof, in Wales (see Archæol. Cambr., 1869, p. 140), which in form closely resembled the pillar-stone called the Bod Fergusa, at Temair. Such a stone could readily have been removed through the passage, and its shape, so suitable for a gate-post or for building purposes, would supply the special motive for its abstraction.
- 3. I perfectly agree with the view entertained by Mr. Coffey that the hearsay account of the discovery of two human skeletons upon the floor of the cave, when it was first opened, is wholly untenable. If such a rumour reached the ears of Lhwyd he thought it so little worthy of credit that he placed it in the category of those stories of discoveries which he omitted because the "labourers differ'd in their account of them."
- 4. As to the number and positions of the stone basins, there can be no question but that the account given by Lhwyd that there were only three in all, one standing in the W. cell, and two (one within the other) in the E. cell, and none in the N. cell, or "the appartment straight forward," as he calls it, is, as far as the latter part of his statement is concerned, incorrect. The mistake may have arisen from the fact that the basin in that compartment was already, as it is now, broken, and did not present the appearance of a basin at all.

Molyneux is correct in stating that there was a stone basin in each of the three cells, as well as a second in the E. one. In recent times the second, or upper basin in the E. cell has been placed arbitrarily in the centre of the chamber, a position for which there is no warrant in any account.

5. With respect to the discovery of Roman coins upon and close to the tumulus—some dating from the beginning of the third, the others from the close of the fourth century—it would appear that, besides third-brass ones accompanying that of Geta, two of Valentinian and one of Theodosius were found, since the Valentinian mentioned by Lhwyd must have been found prior to 1699, while the Valentinian of which Molyneux speaks was found thirteen or fifteen years after that date. With respect to the ones found in the mound, it is quite clear that they must have got there either at the time of its erection or subsequently; and, considering the probability—nay, almost the certainty—of intercourse having been maintained between the Irish on the one hand and the Provincials of Britain and Germany on the other, during the period to which these coins belong, I do not attach so slight an importance as Mr. Coffey appears to do, to their presence on

and near this tumulus in relation to the question of its date and purpose. That it was of far greater antiquity in its origin than the date of the earliest coin found there I do not for one moment doubt. That it was a sacred spot in connection with the worship of the dead I feel equally certain, while the fact that at such sacred spots offerings consisting of a portion of the spoils of the enemy were made, is beyond question. The barbarians of the North-to one or other division of whom this district of Ireland then belonged-were continually at war with the Romans and the Roman Provincials, who used Roman money, and wore Roman ornaments. The discovery of such objects, therefore, either in the body of, or around the circuit of such a place as this, is a fact readily accounted for. The great importance of the discovery of coins as late as the third and fourth century consists, however, in this, that—granted the superior antiquity of the monument, which may I think be assigned to the Bronze Age and perhaps to an early period of it, as we shall see in the sequel—the presence of the coins and gold objects in connection with it may be held to show that as late as the period to which they belong at least, tribute and offerings were brought to it by devotees who observed the same customs and held in honour the same divinities as those who had planned and raised the structure, perhaps fifteen hundred years before. The inference from this is either that one and the same race occupied this district during the whole of this period, or, at all events, at the date when the tumulus was erected, and at that when the later offerings were made. Can the appearance of the Cruithne or Picts in Meath (see Reeves, "Adamnan's Columba," p. 117) have been a return of those people to their ancient settlements, or had they always been settled there? The continental influence exhibited at New Grange is attributable to two widely distinct epochs: the decoration on the stones to early contact with art in the Mediterranean; the coins to Roman Provincial times. The absence of any trace of treasure in the central chamber itself is natural. The superstition, which held the despoiler accursed, once broken through, the place became at once the prey of the first marauding chief, either native or foreign, whose followers, greedy of booty, happened to scour the district. For what length of time the belief in their inherent sacredness guarded such shrines it is impossible to say. There appears to be evidence, however, that when the Danes arrived, in the ninth century, they looked on such "caves" as these as fair prey, and plundered them whenever and wherever opportunity offered. This fact, coupled with the popular belief that treasure lay concealed in the tumuli, goes far to prove that it was the custom of their builders to deposit in them offerings of value which none of their own race dared to touch.

SITE AND STRUCTURE OF THE TUMULUS.

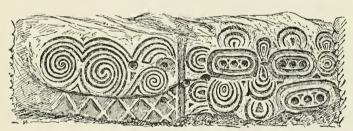
Mr. R. Clark, of the Geological Survey of Ireland, supplied Mr. Coffey with the following report on these points:—

"Both these remarkable structures, the tumuli at Dowth and New Grange, are erected on the drift which in this neighbourhood thickly covers the coal measures formation. The passages and chambers of the two mounds have been formed of large slabs of the Lower Silurian rocks, which crop up within a few miles' distance. They were apparently either rudely quarried for the purpose, or split from surface rocks. With the exception of some of the stones in the passage and others of the upright course, the slabs in the interior of New Grange show little traces of the original weathered surface of the rocks from which they were taken, but, on the contrary, even faces, which indicate that they have been split along the cleavage,

and care taken in their selection. The spiral carvings have been cut exclusively on this description of stone; and, considering the exposed positions of the external slabs, they show but little effect of weathering. Each mound (i.e. Dowth and New Grange) is surrounded by a circle of elongated blocks and slabs placed on edge. Such, also, are mostly derived from the Silurian rocks, interspersed with a few varieties of traps. The parent rocks of the latter are probably to be found amongst the igneous rocks which are associated with the Silurian beds in the vicinity of the neighbouring town of Slane. In the outer circle at New Grange are a number of standing stones, mainly of Silurians (grits and slates); a few traps also occur, which may also be referred to the Slane district. A large standing stone near the River Boyne, at New Grange, is composed of a fine, compact grit. In the centre of the chamber of the New Grange structure is a granite basin, which Wilkinson, in his 'Ancient Architecture of Ireland,' states to be of Mourne origin. It is difficult, owing to the defective light to be obtained, to definitely fix the locality from which the material for this basin was procured. To the writer it appeared to bear more resemblance to some of the granites of the Wicklow series than to those of the Mourne district.

"There is no doubt that, with the exception of the granite basin above referred to, all the materials used were procurable within a radius of a few miles. Wilkinson points out in his work that flags of very considerable size can be obtained in a quarry at the old gateway of Mellifont Abbey, and it is not improbable that this was the source from which the huge slabs at Dowth and New Grange were obtained."

The following is Mr. Coffey's account of the structure of the monument,



F1G. 334.—Boundary stone discovered by Sir Thomas Deane. From a sketch by Mr. G. Coffey, M.R.I.A.

artificially considered: It "appears to have been originally surrounded, a few yards outside the base, by a circle of standing stones, twelve of which may still be traced. Four of these stones, forming a portion of the circle near the entrance, are of great size, measuring, respectively, in height, 7 feet, 6 feet 8 ins., 8 feet, and 6 feet above the ground, and in girth 18, 20, 19, and 15 feet. . . . The rest are smaller, in some cases but a foot or two above ground, with the exception of one on the E. side, which appears to have fallen down, and is now level with the surface. It measures II feet in length. The interval between the three stones at the entrance, where the circle appears unbroken, measures 30 feet from centre to centre, and will be found to go, with approximate accuracy, evenly into the distances between the other stones, giving about thirty-five stones to the circle. It is possible that the circle was never completed; but the regular manner in which the existing stones are placed would indicate that they have not been set up at random, but form portions of a circle which originally consisted of, or was laid down for thirty-five stones. Inside this circle a ditch and rampart, mainly of loose stones, runs round the base of the mound. It is difficult to say whether or not it is part of the original structure. For the greater part of the circumference it is well defined, but less so at the E. side, for a portion of which it may be said to cease. . . .

"The mound, or tumulus, itself consists of an enormous cairn of loose stones,

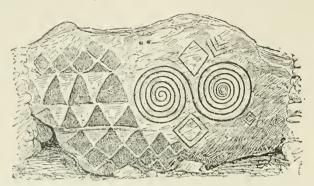


Fig. 335.—Boundary-stone discovered by Sir Thomas Deane. From a sketch by Mr. G. Coffey, M.R.I.A.

heaped within a curb of great stones, 8 to 10 feet long, laid on edge, and touching end to end, over which a thin covering of grass has grown. . . . In plan the

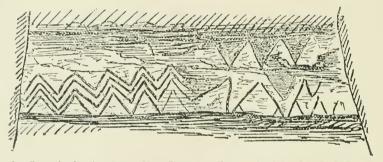


FIG. 336. - Stone in the chamber at New Grange. From a sketch by Mr. G. Coffey, M.R.I.A.

tumulus is circular, and covers an area of about one acre, or, taking the circle of the standing stones, nearly two acres. The greatest diameter of the



FIG. 337.—Stone in the chamber at New Grange. From a sketch by Mr. G. Coffey, M.R.I.A.

mound measures 280 feet. Its present height is 44 feet. The somewhat flattened top, also found at Knowth, is not an unusual feature in such structures. A retaining wall, or revetment of dry rubble, some 5 to 6 feet high, is built immediately on the base stones. . . . This wall partakes of the character of masonry," but "is microlithic, as distinguished from the general megalithic, or rude stone construction of the tumulus. . . .

"The entrance is clearly marked by the curving inwards of the curb-stones.

The large stone in front of it is one of the boundary stones, and marks the limit of the mound at that side. This stone, richly carved in spirals and lozenges, has

been frequently described. Until recently its lower half was covered by the

ground. But" in 1889, "the monument having been scheduled under the Protection of Ancient Monuments Act of 1882, the earth was excavated in front, so as to expose the entire of its carved surface. Sir Thomas Deane's investigation brought to light two additional richly carved stones in the boundary circuit (Figs. 334, 335), and it is probable that further examination will add to the number. . . . Immediately in front of the entrance, and between it and the carved boundary-stone already mentioned, lies a large flat stone, forming a sort of sill to the opening of the passage. This stone, probably, sealed the entrance, with the dimensions of which it roughly agrees. In a section of the chamber, drawn by Du Noyer, and published in Wilkinson's 'Practical Geology and Ancient Architecture of Ireland' (1845), this stone is shown in an inclined position, as if it had been forced back from the entrance; and in the text, Wilkinson says, 'a large flat stone appears, from the peculiarity of its position, to have closed the entrance.' A few feet above the opening, a horizontal slab, carved on its projecting face, should be noticed. It gives somewhat of an

architectural character to the entrance, and is remarkable on that account, as well as for its carving.†

"In general plan the passage and chamber is irregularly cruciform. The former measures 62 feet in length, and is formed of large stones, set on end, some 5 to 8 feet in height, roofed with flagstones of great size. That at the entrance is 11 feet long, and the stone next but one somewhat longer. The average width of the passage is about 3 feet, but, some 14 feet in, the side-stones have been forced inwards, and meet at the top, rendering it necessary to creep on hands and knees for a distance of about 6 feet. After this point the passage presents no further difficulty. entrance it is 4 feet 9 ins. high; it then rises gradually to about 6 feet through a distance of 26 feet. The headway is then reduced by the roofing-stone at that point, after which it rises rapidly by overlapping stones to 7 feet 10 ins. at 43 feet from the entrance, when it suddenly falls again to 4 feet 10 ins. . . . After passing this point, the passage rises rapidly by corbelled or overlapping stones, till merged in the roof of the chamber. The latter consists of a conical or funnel-shaped dome, formed of large flat stones laid horizontally, and corbelled, or projecting inwards, one over the other, till closed by a single stone. In plan it is



Fig. 338.—Stone in the chamber at New Grange. From a sketch by Mr. G. Coffey, M.R.I.A.

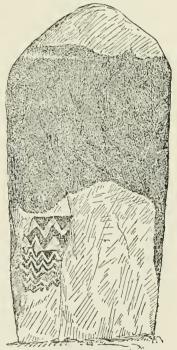


Fig. 339.—Stone in the chamber at New Grange. From a sketch by Mr. G. Coffey, M.R.I.A.

an irregular hexagon, and shows considerable enterprise in the fitting of the

passage-roofing and recesses. The principal dimensions of the chamber are:—Height, 19 feet 6 ins.; end of passage to back of north recess, 18 feet; back of east to back of west recess, 21 feet.



FIG. 340.—Entrance to New Grange. From a photograph in Mr. Coffey's paper in the Trans. R.I.A.

"Something of an architectural character is given to the construction of this chamber by the carrying round its walls of the upright course of stone which lines



Fig. 341.—Sculpturing at New Grange.



Fig. 342.—Sculpturing at New Grange.

From photographs as above.

the passage, and in places supports its roof. In the chamber these stones do not

actually support the roof, as at Dowth; the construction of the dome is practically independent of such support, and is incorrectly described by Sir W. Wilde as springing from this course of upright stones. The carvings for which the tumulus is noted are cut chiefly on these stones. The three recesses, which give the plan its cruciform appearance, are of unequal dimensions. That on the E. side is 8 feet 8 ins. in depth; the north recess, 7 feet 6 ins.; and the west recess but 3 feet 4 ins. On the floor of each recess is placed a large stone basin. . . ." [The statement of Molyneux was correct on this point, whereas Lhwyd had stated that no basin stood in the northern cell.] "The hollowed-out form of the basin is that in the E. recess. That in the N. recess is . . . broken. It shows but slight traces of having been hollowed, and might be described as a flat stone. It,





Fig. 343.—Sculpturing at New Grange. Fig. 344.—Sculpturing at New Grange. From photographs in Mr. Coffey's paper in Trans. R.I.A.

however, no doubt, served a similar purpose to those in the other recesses. A much more carefully wrought basin at present stands in the centre of the chamber. It was found in the E. recess, and stood within the basin still in that recess. It has been recently moved into the centre, on the supposition that, as at Dowth, it originally occupied that position. . . . This basin is remarkable for two cup-depressions within the hollowed portion of the stone." "A slightly marked ridge, or step, is noticeable, as dividing the two cups from the central hollow." "The two clearly-marked cups measure respectively 7 and 8 inches in diameter." "The stone in which the basin and cups are" is of granite, and, unless a naturally transported boulder, must have been brought fully fifty miles to its present destination, whether from the Mourne Mountains or from Wicklow. It "measures 4 feet by 3 feet 6 ins., and is 1 foot thick."

Mr. Coffey notices the absence of the "sill-stones," which it is usual to find placed across the entrances to side-chambers, or recesses, in other chambered tumuli of similar class to New Grange, and suggests the view that "the basins would seem to indicate a development, and that they replace the sill-stone as a means of confining the interments."

Before quitting the subject of the construction of the passage and chamber, I wish to express a view which occurred to myself when examining them in the year 1888. It appeared to me that the great dome was a later addition to a structure, the inner chamber of which had been the portion of the present passage, which rises to a height of 7 feet 10 ins. by overlapping stones, at a distance of 43 feet from the entrance. On this supposition, the tumulus which would have covered the original structure, which may have been shallow, would have been purposely broken down on the northern side, and the northern end of the original chamber being removed and the dome constructed, the whole of the former structure would have been made to serve as a passage and ante-chamber to the newer and more pretentious erection. It is noticeable that the passage is wider at the elevated portion than elsewhere, and I saw no way to account for this increased width and height, except on the supposition that this had once formed the terminal chamber of a smaller tumulus—one which, in its dimensions and in the simplicity of its construction,



Fig. 345.—Sculpturing at New Grange. From a photograph in Mr. Coffey's paper.

would have been exactly comparable to examples of such structures, both in Ireland itself, in Scotland, England, and elsewhere. In further support of this view, it appeared to me, also, that the material of the body of the tumulus was different immediately over what I regarded as the original structure to what it was on the upper and northern portions—that is to say, in the former case it consisted of tightly packed earth and stones, while in the latter it was, below the surface, a cairn pure and simple.

The construction of the dome; the quasi-architectural character of it, and of the designs on some of the stones, such as that over the entrance, for example, which has all the appearance of having been added at a later date; the presence, too, of the basins;—all point, so it appears to me, to the conclusion that the great dome and the whole of the inner

portion of this monument to which the passage leads, was the work of more skilled hands than those of the men who constructed the ruder examples of chambered tumuli, to which the passage and ante-chamber might, however, well belong. However this may be, the dome and the more elaborate sculptures should be assigned to the period when the barbarians of the north, though retaining their pristine customs, funereal and sacrificial, and their habit of building mortarless chambers enveloped in mounds for the purposes of their weird rites, had, nevertheless, been brought into more or less direct contact with the civilization of the south and east,—with the Pontus and the Ægean on the one hand, and the Adriatic and Tyrrhene Sea on the other. In short, the domed tomb at New Grange appears to me to stand to the domed tomb of Atreus † in a relation somewhat analogous—to pass to a later date—to that borne by the coinage of Britain to the staters of Macedon; or, to take a third period, to that borne by

[†] For section of this see Fergusson's R.S.M. See also the section of a Pict's House, infra, p. 371.

the columns of early Irish churches to those of the basilicas erected under Constantine. The type and plan of the structure may be native and barbaric, growing out of the ruder passage-dolmen, but the secret of construction is borrowed from the cultured alien, in an age when the inhabitants of the amber coasts of the Baltic were pressing westwards through the Straits of the Cattegat, or across the narrow isthmus which separated the Suevic from the Britannic Gulfs—the forerunners of the Picts, planting settlements in Britain, Scotland, Ireland, and the northern and western coasts of France, carrying with them an imitative reflex, so to speak, of

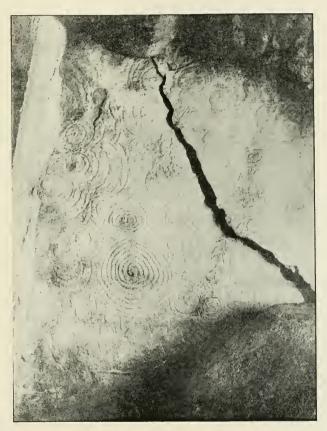


FIG. 346.—Sculpturing at New Grange. From a photograph in Mr. Coffey's paper.

such art as had reached them during the process of the amber commerce, and displacing, perhaps, by the force of their invasion, some of those tribes in Gaul who now began to traverse Europe in a south-eastern direction, down the Danube, into Greece, very possibly, I think, into the Caucasian districts, and even east of them, and at all events into Asia Minor, to return perhaps one day as the new Bituriges (Bitugures), the new Caturiges (Cutriguri, Cortragi), etc., to swell the numbers of the Huns or Bolgars, descending on the Roman Empire.

For New Grange see "Trans. of the Royal Society," vol. xxvii. p. 503. "Mona Antiqua Restaurata," by Henry Rowlands, 1st edit. (1723), p. 338; 2nd edit. (1766), 314.

p. 314.
"Discourse concerning the Danish Mounts, Forts, and Towers in Ireland," by Sir Thomas Molyneux (Dublin, 1725), published with the "Natural History of Ireland," by Gerard Boate, Thomas Molyneux and others, p. 202; or p. 187 of the edition dated 1755. [With a plan and section of the monument, and drawing of the E. recess, and of two gold coins.]

"Works of Sir James Ware," edit. by W. Harris, vol. ii. pl. ii. [Molyneux's plan and drawings reproduced.]

"Archæologia," vol. ii. (1773), p. 236, et seqq., with plan, section, and elevation. Ledwich, E., "Antiquities of Ireland," pl. xxvi. [Reproduction of Pownall's plan and

"Rude Stone Monuments," Fergusson, p. 203.
"Tour in Ireland," by Sir R. C. Hoare (London, 1807), p. 252.

**Dublin Penny Magazine, 1832–1833, p. 305.

"Archæologia," vol. xxx. p. 137. Gold ornaments found at New Grange.
"Archæologia Hibernica" (Dublin, 1848), p. 21, et seqq.
"Beauties of the Boyne and the Blackwater," Dublin, 1849, p. 188. et seqq.
"Beauties of the Oufen Abelian Company of the Proposition of the Oufen Abelian Company." "Beauties of the Boyne and the Blackwater," Dublin, 1849, p. 188, et seqq.

"Proceedings of the Oxford Architectural and Historical Society," 1865.

The Gentleman's Magazine, for 1865, p. 735.

Brash, "Ecclesiastical Architecture of Ireland," p. 30.

By Col. Forbes Leslie, "Early Races of Scotland," vol. ii. p. 334.

"Archæological Journal," (1865), pp. 87, 89.

"Journ. R. H., and A.A. of Ireland," 4th Ser., vol. v. (1879–1882), p. 381.

Wilkinson, G., "Ancient Architecture of Ireland," with section, p. 52.

"Trans. R.I. Acad.," vol. xxx. (1892), part i.; Paper by G. Coffey, with map, plans, and sections, of sculptured stones, and photographs.

cuts of sculptured stones, and photographs.

"Journ. Roy. Soc. of Ant. of Ireland," vol. ii. p. 430. "Note on New Grange," by the Rev. James O'Laverty.

Note-book, W. C. B., 1888.

On the western side of the great mound at New Grange, also in the Townland of New Grange, is a chambered tumulus. In the "Proc. of the R.I.Academy," Mr. (afterwards Sir William) Wilde records the discovery and examination of this. It was about 8 feet long, and consisted of a small stone passage leading into a little chamber formed on the type of the great barrow.

In this was discovered a vast collection of the remains of domestic animals, as well as several human bones, some perfect and others in a half-burned state. What gave particular interest to this excavation was the fact of the stones which lined the floor having been vitrified on the external face, which would lead to the conclusion that the cremation had taken place in the chamber itself.

Proc. R.I.A., vol. iii. p. 262.

Below the great mound of New Grange, and in the same Townland, are two tumuli, one having a vallum. "Two well-defined tumuli may be seen," says Mr. Coffey, "showing as conical grass-covered hillocks on the low-lying land by the river." Approximately their measurements are respectively 220 feet in circumference, and 300 feet in circumference, with an altitude in each case of about 20 feet. The one which is the nearer to the great tumulus, and the smaller in circumference, "appears to have been encircled, at a distance of about 200 feet from the mound, by a vallum, a portion of which is still traceable at the east side." Both are "at present evenly grass-grown."

Trans. R.I.A., vol. xxx., Mr. Coffey's paper, pp. 49, 50.

In the Townland of New Grange, on the brow of a steep bank E.N.E. of the last-mentioned tumulus with vallum, and near the river Boyne, are two pillar-stones. "A great block of compact sandstone grit, set on end, similar to, but larger than, those set round the great mound. It measures 10 feet high, and is 17 feet in girth. In the adjoining field a similar standing stone will be found, but it is not so large."

Trans. R.I.A., vol. xxx., p. 50.

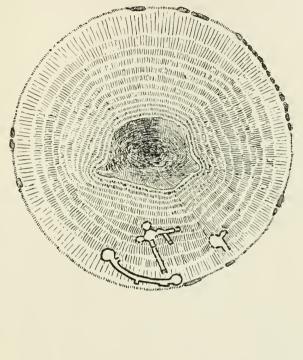
In the Townland of New Grange, in the field to the left of the second pillarstone last mentioned, are the ruins of a monument (unclassified), described as "several large stones, probably the remains of some sepulchral monuments."

Trans. R.I.A., vol. xxx., p. 50.

In the Townland of New Grange, at the top of the field next to that in which the ruined monument last mentioned stands, there is a tumulus encircled. It is described as "one of the most remarkable of the lesser tumuli. Its base is enclosed by a well-defined circle of boundary stones. It measures about 280 feet in circumference, and 12 feet in height."

Trans. R.I.A., vol. xxx. p. 51.

Between New Grange and Dowth, about $\frac{3}{8}$ of a mile S.W. of the tumulus at Dowth, are three tumuli, one of them resembling a Long Barrow. The three



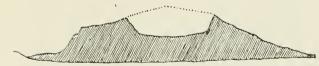


Fig. 347.—Dowth; plan and section of the mound and chambers. From the Report of Commissioners of Public Works, Ireland.

tumuli are arranged in a line. The central one "is of unusual shape. It is about 150 feet in length, by 60 feet in width, and 10 feet high." In the surfaces of each of these mounds there are depressions, from which Mr. Coffey infers they have been plundered.

Trans. R.I.A., vol. xxx. p. 51.

In the Townland of Dowth, nearly \(\frac{1}{2} \) a mile W. of Dowth House, is a

[†] Anciently spelt "Dubhath" (as see above in the passages from the A. 4 M. and the A. of Ulster, under New Grange). "Over Dubhath" was the cave of Bodan, or Boadan—a name also mentioned in connection with a monument at the Brugh, by O'Hartigan. Boadan was the "Shepherd of Elcmar," a Tuatha De Danann ancestral celebrity. The cave there was plundered (as also see above) by three foreigners—the kings Amhlaeibh, Imhar, and Uailsi in the 9th century, assisted by Lorcan, King of Meath.

chambered cairn. Mr. Coffey judges this tumulus to have been of about the same size as that at New Grange. "It averages in height about 47 feet, and measures 280 feet in circumference. The base is surrounded by a curb of large stones set on edge."

"Of the internal arrangement of this huge cairn," writes Mr. Wakeman, in his "Archæologia Hibernica," "little, until very recently" (he wrote in 1848), "was known." "The committee of the Royal Irish Academy, in the course of the autumn of 1847,



Fig. 348.—Sculptured stone at Dowth. From a drawing by G. Du Noyer, lent me by Dr. Frazer, M.R.I.A.

opened a cutting from the base to the centre of the mound." "The first discovery was that of a cruciform chamber upon the western side, formed of stones of enormous size, every way similar to those at New Grange, and exhibiting the same style of decoration." "A rude stone trough, bearing a great resemblance to that in the eastern recess at New Grange, was found in the centre. It had been broken into several pieces." In the rubbish, with which the chamber was filled, was found a large quantity of the bones of animals, in a half-burnt state, and mixed with small shells. A bronze pin and two small iron knives were also discovered. "Upon the

chamber being cleared out, a passage, 27 feet in length, was discovered, the sides of which incline considerably, leading in a westerly direction towards the side of the mound, and composed, like the similar passage at New Grange, of enormous stones placed edgeways, and covered with large flags." "The chamber is smaller than that at New Grange. The recesses do not contain basins. A passage extending in a southerly direction, communicating with a series of small crypts, forms another peculiarity."

"A stone, 9 feet high, and 8 feet broad, between the northern and eastern recesses, is remarkable for the singular character of its carving." The dimensions of the structure are given as follows: "The entrance passage measures 27 to 28 feet long, and the chamber to which it conducts is 7 feet in diameter, the centre being, as above said, occupied by a large hollow stone. The recess to the left is a little over 6 feet in depth. The similar recess in front is also 6 feet in depth. The passage running off to the right is 16 feet long. At the end, the branches into which it divides are, the one 5 feet, the other 8 feet long, at which distance the latter is stopped by a stone across it, beyond which is another cell, extending 5 feet further."

"A sepulchral chamber," says Mr. Wakeman, "of a quadrangular form, the stones of which bear a great variety of carving, and among them the cross, has been discovered on the southern side of the mound. Here, as elsewhere, the workmen found vast quantities of bones, half burnt, many of which proved to be human; several unburned bones of horses, pigs, deer, and birds; portions of the heads of the short-horned variety of the ox, and the head of a fox. They also found a star-shaped amulet of stone, a ring of jet, several beads, and some bones fashioned like pins."

Wilde gives some additional particulars. He states that, previous to the exploration of the mound by the Committee of the Royal Irish Academy, a considerable gap existed in the western face of the mound, and that in this excavation, made by a quarryman, a passage, similar to that at New Grange, had been long exposed. It was this passage which the committee determined to follow up, and, in prosecuting their labours eastward, the cruciform chamber and the minor chambers were reached.

Speaking of the stone basin, he tells us that when the chamber in which it now is was first opened, only a portion of it stood there in the centre. All "the other fragments, nine in number, were since recovered in the chambers and passages around."

"During the excavations," he continues, "some very interesting relics and antiquities were discovered. Among the stones which form the great heap, or cairn, were found a number of globular stone shot, about the size of grape-shot, probably sling-stones, and also fragments of human heads. Within the chamber, mixed with the clay and dust which had accumulated, were found a quantity of bones, consisting of heaps, as well as scattered fragments, of burnt bones, many of which proved to be human." Here Wilde repeats the list given above, and adds: "Glass and amber beads of antique shapes, portions of jet bracelets, a curious stone button, or fibula, bone bodkins, copper pins, and iron knives and two rings, the latter similar to those found in a *crannog* or lake-dwelling at Dunshauglin, also in Meath, were likewise picked up. Some years ago a gentleman, who then resided in the neighbourhood, cleared out a portion of the passage, and found a few iron antiquities, some bones of mammals, and a small stone urn, which he presented to the Academy."

It has been also stated that a double circle of stones set on edge anciently surrounded this cairn.

Such was all that was known of this tumulus, until, in the year 1886, Mr. (now

Sir Thomas) Deane, in carrying out the provisions of Sir John Lubbock's Act for the Protection of Ancient Monuments, as applied to Ireland, undertook some fresh excavations, notices of which will be found in the "Proceedings of the Royal Irish Academy" for 1888, and in the "Fifty-fifth Report of the Commissioners of Public Works in Ireland."

At a distance of about 50 feet S. of the chamber and passage above noticed, a

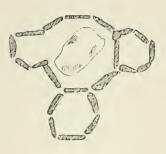




FIG. 349.—Dowth: (1) Plan of part of the central cell. (2) Plan of newly-discovered chamber. From the Board of Works, Ireland.

round chamber, with a single recess opening off it on the S.E., was discovered. The recess is wedge-shaped—a feature in which these side chambers or cells of the chambered cairns resemble the dolmens—broadening toward the inner and S.E. end, which is closed by a flag, 7 feet 6 ins. in length. A single slab forms either side, that on the left measuring 8 feet 6 ins., and that on the right 9 feet long. The circular chamber itself measures 15 feet in diameter. It is now roofed in with concrete, but when found the roof had fallen in. From the S.W. it is entered by a passage, the present length of which is 11 feet 6 ins.

Most of the stones surrounding the circular chamber are covered with similar carvings to those found in the cruciform chamber. The stones of the entrance passage were of large size, like those of the chamber, and on the largest of them, to the right as one enters the passage, are four hollows.

On the side opposite to that on which this latter chamber, cell, and passage were found by Mr. Deane's workmen, viz. to the N. of the previously existing passage, there were traces of the existence of other vaults. "Commencing," says the Report, "at the northern side of the known entrance to the central chamber, an opening was made which

led to a passage terminated at either end by circular cells, carefully roofed with corbelling stones. In this passage were found a quantity of bones, mostly those of horses and lower animals, but none human. The passage had an incline towards the S. On emerging from it at a point where it met the entrance to the originally known chamber, a flight of steps was discovered. In the circular cell at the S. end of the curved passage were found a bronze pin, a buckle, and an iron dagger," or other instrument.

Mr. Coffey, in his paper above quoted, and Mr. G. H. Orpen, in the "Journal of the Royal Soc. of Antiquaries of Ireland," have pointed out that the character of this passage and of the cells in connection with it is quite different to that of the passages, chambers, and cells previously discovered in the tumulus. "The cells, which are of the usual beehive form, and the curved passage are built of semi-coursed dry rubble, the latter roofed with flagstones; they are, in fact (not megalithic, like the others), but microlithic." The structure is, in short, a souterrain of the same type and class as those so frequently found in connection with raths, and the inference is that the tumulus was, long after its original formation, found by the rath-builders to be an eligible site for a rath with its souterrain, and treated accordingly.

As will be noticed by reference to the plan, the various chambers, passages, and cells at Dowth are all on the W. and S.W. edge of the tumulus, and occupy a very small proportion of its area. The committee of the R.I.Academy ascertained that there was no central chamber, and the deep depression made in the summit is the result of their attempt to discover one.

The sculpturings on the stones of the chambers and passages I shall speak of again in the second part of this work, but the following passage from Mr. Coffey's paper, comparing the construction of the megalithic portion of the Dowth tumulus

with the stone-work at New Grange, must not be here omitted:-

"In construction, the chambers of Dowth are similar to New Grange, with the exception that the roofing-flags are not corbelled, and, in general, less architectural enterprise is shown. The flags roofing the central chamber are of great size, and rest directly (dolmen-fashion) on the upright lining-stones of the chamber. latter are, if anything, rather larger than at New Grange, and in some cases measure between 10 and 11 feet in height. The plan of the principal chamber is, as at New Grange, cruciform, but smaller. It is 11 feet high, and about 9 feet in diameter. The passage measures 27 feet in length. The entrance has been recently protected by masonry, and it is not now possible to make out its original form," which may be seen, however, in the drawing of it in Wilde's "Beauties of the Boyne and the Blackwater." "Across the passage are placed three projecting stones, and at the entry into the central chamber, and before two of the sidechambers, similar sill-stones are found. The latter are smaller than at New Grange, and do not contain slabs, or basins. At the end of the right-hand chamber it is possible to pass round the stone at the right side, and then enter the additional chambers above-mentioned. The chamber going forward is 8 feet 6 ins. long, and is floored by a great flag 8 feet in length, in the centre of which a curious oval hollow has apparently been rubbed down. At the end of this chamber a smaller one, 2 feet 6 ins. by about 3 feet 6 ins., is divided off from it by a high sill-stone, and closed in at the back by the roof, which slopes to the ground at this point. The two chambers, one within the other, at right-angles to those described, measure about 2 feet each in depth. The furthest is divided off by a sill-stone, and a flat slab rests on its floor."

"The two chambers, with separate entrance to the S. of the principal chambers, do not require detailed description. In construction they are of the same general character. Sill-stones are found at the end of the passage leading into the circular chamber, and at the opening into the inner chamber. The first stone at the righthand side of the passage . . . has a wide and deep groove sunk in its face, showing nearly 2 feet above ground, and measuring about 8 inches in width and 3 inches in depth." It is similar to a stone found in a dolmen at Carrickglass in Tyrone, figured above, and also to the grooved doorpost at the entrance to the passage at Killeen-Cormac tumulus in Wicklow (see Proc. R.I.A. 2nd Ser. vol. i. p. 125).

"Archæologia Hibernica," by W. F. Wakeman, p. 31.

"Archæological Journal," vol. xxii. (1865), p. 88.

"Beauties of the Boyne and the Blackwater," by W. Wilde, p. 204, et seqq.

"Proc. R.I.A.," 3rd. Ser., vol. i. (1888), p. 161.

"Fifty-fifth Report of the Commissioners of Public Works, Ireland," Appendix, p. 64. Trans. R.I.A., vol. xxx. p. 51.

In the Demesne of Dowth, in the grounds at the back of Dowth House, on the W. side are two tumuli, one of them a chambered tumulus. There are two smaller tumuli also near by. The southern of the two is open at the top. "The centre of it consists of a corbel-roofed chamber, formed of flags laid on the plan of

an irregular hexagon. The chamber thus formed," adds Mr. Coffey, "is about 8 feet high, and 10 feet in diameter. Five cells are placed round the sides, formed by small flags set on edge. No trace of a passage is apparent, but probably a passage exists. None of the stones are inscribed."

Trans. R.I.A., vol. xxx. p. 51.

At a place called Cloghalea, also in Dowth Demesne, are the ruins of a monument. In the same field as the great ring fort (see next below), Wilde

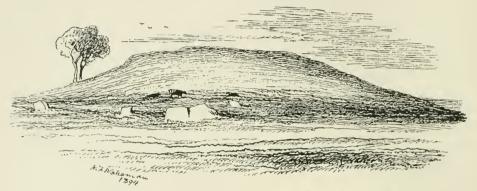


Fig. 350.—Knowth. From an original drawing by Mr. W. F. Wakeman, M.R.I.A.

mentions that there was "a portion of a stone circle, evidently part of the side wall or basement of a sepulchral chamber, similar to New Grange." He adds that "human remains have on more than one occasion been found in the vicinity of this remnant of an ancient tumulus."

Pownall, in his paper on New Grange above quoted, notices this circle, eleven stones of which were standing. "I paced this circle," he says, "and, as well as I recollect, it is not above 21 feet. The stones are large and massive, and about 5 or 6 feet high. There remains eight of these stones together in one part of the circle, two in another, and one by itself. On the left hand from the entrance into the circle lies a large flat stone," which he thought might have been the top of a kistvaen, or cromlech.

Trans. R.I.A., vol. xxx. p. 51.

In the Townland of Knowth † is a chambered tumulus. This tumulus has been generally supposed to be the largest of the three great tumuli in this group. Mr. Coffey, however, pronounces it to be the smallest, although "almost equal in size to that of Dowth." "It measures," he states, "nearly 700 feet in circumference,

Cruithne, to settle. Another mention of the same place occurs in the Dindshenchas of Nas (Naas in Kildare), which, as translated by Dr. Whitley Stokes, is as follows:—

"Nas and Bói, two daughters of Ruadri son of Caite (?), King of Britain, were the two wives of Lugh son of Scál Balb, 'the Dumb Champion.' Now, Nás was the mother of lives son of Lugh.

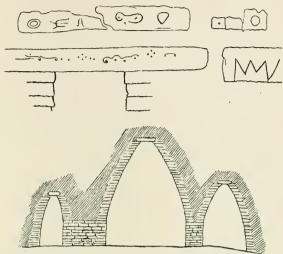
There (at Naas) Nas died, and in Nas she was buried, hence it is called Nas. Her sister Boi died straightway of grief for her, and was buried on Cnogba, whence that name (Cnogba = Cnocbua).

[†] Pronounced by the Irish, "Knoo-wa." The old spelling was "Cnodhba," "Cnogba," "Choghbhai," as see the passages quoted under New Grange, recording the plundering of these places by the Danes. It is when writing of Knowth that O'Donovan, as above-quoted, says that there is a tradition in this county that all these "moats" have caves within them, in which bars of gold are laid up; but it would be dangerous to open them, as evil spirits are watching the treasure.

As we have noticed above (see note to New Grange), Cnogba is mentioned in the Dindshenchas of Carn Conaill as one of those good lands upon which King Cairbre Nia-fer permitted the sons of Umor—that is, the Firbolg—after their flight from the Tuatha de Danann and banishment by the Cruithne, to settle. Another mention of the same place occurs in the Dindshenchas of Nas (Nass

or about 225 feet in diameter, and between 40 and 50 feet in height. The mound is more regular in appearance, and has suffered less from dilapidation than those

at New Grange and Dowth. No trace of base-stones is at present to be seen, but possibly they are covered by the sod, which is evenly grassgrown, and makes it difficult to say exactly where the mound ends, and the natural slope of the ground begins. . . . At the northern side some large stones showing above the surface of the ground seem to indicate the entrance to the tumulus." The top of the mound presents "a flattened form," and "a considerable depression existing in the margin." "A similar formation" is observable at New



centre portion, gives the appearance of a rampart round

FIG. 351.—Section of a "Pict's House"—chambered tumulus pearance of a rampart round

on the Holm of Papa Westra. The incised markings are on the wall, some over the entrance; others on the E. side of the chambers.

Grange, and Mr. Coffey throws out the hint that "these mounds may have been used at various times for purposes of defence," in which case the circular, rath-like rampart would have been purposely thrown up, and formed no part of the original design.

O.S.L., Co. Meath, 14 E. 23, 151; Trans. R.I.A., vol. xxx. p. 68.

Some yards to the N. of the Knowth tumulus are "several large stones, forming," says Mr. Coffey, "a more or less defined ellipse, of about 70 feet by 30 feet, possibly marking the site of another sepulchral monument."

Trans. R.I.A., vol. xxx, p. 68.

Lugh gathered the hosts of the Gaels (Gaidel) from Tailtiu to Fiad in Broga, 'the land of the

Lugh gathered the hosts of the Gaels (Gaidel) from Tailtiu to Fiad in Broga, 'the land of the Brugh,' to bewail those women on the first day of August in each year; so thence was the nasad, 'assembly,' of Lugh, whence Lugh-nasad, 'lammas-day,' that is, Lugh's commemoration, or remembering, or recollection, or death-feast" ("Rév. Celt.," vol. xv. p. 316).

From the poem on the same subject in the "Book of Leinster" (194a, 17), Mr. Coffey gives three extracts. He points out that in the last line of the second stanza Bui is called Bui in broga, i.e. "Bui of the Brugh." He next quotes the lines, "Her sister and Cnogba, it is there Bui was buried;" and thirdly, "Hosts of fair Gaedels came to mourn the women to the Brugh from Tailtiu." Commenting on these passages, he justly concludes that, "not only in direct statement, but in the reference to Bui as 'Bui of the Brugh,' is the traditional association of Knowth with Brugh definitely established."

Brugh definitely established."

Brugh definitely established."

In "Folk Lore," vol. iii. p. 506, Dr. Whitley Stokes translates a passage from a copy of the Dindshenchas, in the Bodleian, with the following reference to the name Cnogba: "Englic, daughter of Elcmaire, loved Oengus mac ind Oc, and she had not seen him. They had a meeting of games there between Cletech and Sid in Broga. The Bright Folk and fairy hosts of Ireland used to visit that game every Halloween, having a moderate share of food, to wit, a nut. From the north went three sons of Derc, son of Ethaman, out of Sid Findabrach, and they eloped with Elcmaire's daughter, (going) round the young folk without their knowledge. When they knew it, they ran after her as far as the hill named Cnogba. Great lamentation they made there, and this is the feast that supported them—their gathering. Hence, 'Cnogba,' that is, Cnó-guba, 'nut-lamentation they made at you gathering.'

"Hence is Cnogba of the troops, So that every host deems it famous, From the lamentation after reaping nuts . . . Following Elemaire's daughter."

COUNTY OF WESTMEATH.

IN THE BARONY OF RATHCONRATH.

*1. In the Townland of Ushnagh Hill, and Parish of Conry, a quarter of a mile W.N.W. of the ruins of the ancient hill-town



FIG. 352.—"The Cat-Stone" at Ushnagh. From a sketch by the Author.

of Ushnagh, an oblong area on the summit of the hill, is marked *Patrick's Bed* in Ord. Surv. Map No. 24.

A quarter of a mile S.S.W. of Patrick's Bed is the natural cleft rock marked *Atlnamireann*, or Cat's Rock, Petra Coithrigi, in the Townland of Kellybrook.

A little over a quarter of a mile due S. of Patrick's Bed is the well called *Tobernaslath*, or *Finnleascach* in the Townland of Ushnagh Hill.

The ruined hill-town of Ushnagh, with its cave, and a second site covered with ruins are in the Townland of Rathnew.

There is a place called Usnagh in the County of Tyrone.

If there are any remains on Ushnagh Hill of a structure of the dolmen class, they are to be looked for in a long raised area crowning the elevation, and called Patrick's Bed. It is surrounded by stones on edge, and is about 21 feet long, and 4 or 5 feet wide. O'Donovan says that the people complained that "the sappers removed stones from it, before which it was much more perfect." Its situation would have been just the one for a dolmen, and it is too narrow to have been a church. I carefully examined it, but cannot speak with certainty as to its having been a dolmen, although what it can have been, if it were not, it is difficult to say. No trace of a roofing-stone is visible.

As to the idea that the so-called Cat's Rock was artificial, or that an artificial monument of the dolmen class had been set up beside it, that may be dismissed at once. It is a purely natural, though very curiously shaped outcrop of limestone, 18 to 20 feet high, and 60 feet in circumference, having a gap, or crevice, running through it in a N.E. and S.W. direction. The roofing-stone of this passage is a detached piece of the limestone which has fallen from the upper portion of the mass on to a lower portion. The ope of the gap is about 5 feet wide, and its height 6 feet.

No doubt it was an object of veneration, and the crevice was probably used for creeping through, in obedience to superstitious practices. It appears that a bank of earth has been raised around it, and an intelligent labourer suggested to me that the rock was more deeply embedded in the soil originally, and had, at some time or other, been dug around to expose more fully the crevice and lower portions. I think this not unlikely.

See O.S.L., Co. Westmeath, $\frac{14}{G.~13}$, pp. 69, 72, 73, 117, 150; Proc. R.I.A., 2nd Ser., "Pol. Lit. and Antiqq.," vol. i. pp. 118, 120; Note-book, W. C. B., 1895.

IN THE BARONY OF CLONLONAN.

*1. In the Townland of Labaun, and Parish of Ballyloughloe (the Church of which is in this Townland), was probably a dolmen, not marked in Ord. Surv. Map No. 30.

There is another Townland bearing the name Labaun in the County of Cork.

In the Ord. Surv. Letters, it is mentioned that a "cromlech" existed "near the esker of Ballyloughloe," and that in the Townland of Ballyloughloe there was also a fort called the "Grianan." I have been unable to identify this place, as I find no Townland of the name. The name Labaun, however, seems to point to a leaba, which may possibly be the monument in question.

O.S.L., Co. Westmeath,
$$\frac{14}{G.\ 14}$$
, p. 321.

In the Barony of Moycashel.

*1. In the Townland of Ballybroder, and Parish of Durrow, is a site marked *Slaghta* in Ord. Surv. Map No. 40, and indicated by three rocks.

COUNTY OF QUEEN'S COUNTY.

IN THE BARONY OF STRADBALLY.

I. In the Townland of Grange, and Parish of Dysartenos, is a monument of the dolmen class not marked in Ord. Surv. Maps 13, 14, 18, or 19. It is two miles W. of Stradbally, and three-quarters of a mile S.E. of the Rock of Dunamase, in a field called the *Clash Field*.

Mr. D. Byrne describes "a sepulchre of unusual shape" in this Townland. He also presented sketches of it to the Kilkenny Archæol. Society. The peculiar

shape in question he compares to the print of a shoe for the right foot.

The monument lay about 2 feet beneath the surface, in sandy earth. "It was formed of surface limestones of nearly flag form. The stones were set on their edges and covered over by smaller stones. That part answering to the heel of the shoe was made by small stones set one over the other." The "sepulchre" contained ashes, oak charcoal in small portions, and bones. A great quantity of ashes of oak wood and animal matter lay in the chamber, but the remains of bones were very few.

"The fire appeared to have been very great, as the stones towards the S. were crusted with lime. The circular part of the tomb was about 9 feet in circumference. The entire length of the monument was 21 feet. It varied in breadth from 1

foot 6 ins. to 2 feet, and its depth was from 1 foot 6 ins. to 2 feet."

"Trans. Kilk. Archæol. Soc.," vol. i. p. 138.

- 2. In the Townland of Manger, adjoining that of Coolrush on the S.W., and in the Parish of Tullomoy, is a dolmen marked Ass's Manger in Ord. Surv. Map No. 25. Mainsair Asal, i.e. Asses' Manger, is the name of a dolmen at Galway in Kilkenny.
- 3. In the Townland of Monamanry, and Parish of Tullomoy, a mile and a quarter W. of the *Ass's Manger*, is a dolmen marked *Druids' Altar* in Ord. Surv. Map No. 25.

This is the monument generally described as on the top of Coolrus Hill. Mr. D. Byrne, who characterizes it as "an exceedingly curious cromleac," supplied a notice of it, accompanied by a plan which was not published, to the Kilkenny Archæol. Society.

This monument is certainly of a most instructive character. The removal of earth from it caused the upper stone to slip from its original position, and it consequently rested with its southern edge on the roadside, the other end being supported by two upright stones measuring respectively 4 feet and 5 feet. "At

no time could the upper stone," in Mr. Byrne's opinion, "have been more than I foot 6 ins. above the surface of the hill. Underneath it, however, was a square pit sunk about 5 feet, faced with large flags and dry masonry. The upper edges of the flags which formed this pit were level with the surface of the hill, and, when the upper stone was in its original position, about 2 feet of the pit was left uncovered to the north.

"The upper stone measured 8 feet by 6 feet 6 ins., and was 12 ins. thick.

"To the east, a passage, like a sewer, about 3 feet square, extended 9 feet in an easterly direction from the pit, and opened on the surface of the hill. It was formed by flags and dry masonry well built, and covered over, and had not any communication with the pit, from which it was separated by a large flag which formed the east side of it. Adjoining the west side of the pit, two flags of about 3 feet high were firmly fixed in the earth in a chair-like fashion. Close to these were discovered the calcined remains of a considerable quantity of the bones of some large animals."

"At a radius of about 150 feet from this monument, formerly stood a large circle of upright stones, now removed." "An old man, a resident on the spot, stated that he had found and opened, to the S.E. of the structure, many small rectangular cists, formed of six flags, and containing burnt bones, but no urns, or arms, or ornaments."

I am disposed to regard this monument and also that at Grange above described rather as burning-places in which the bodies were consumed than as dolmens. In some parts of France, as, for instance, near Toulouse, dolmens are termed *cibourniés*, that is, "piles of cinders, or ashes," from the ash-heaps which lie around them. (See Alex. du Mège, "Archeol. Pyrénéennes," vol. iii. p. 9, and note p. 26. See also the description of a monument similar to this in Cornwall, in Part II. of this work, *infra*.)

[&]quot;Trans. Kilk. Archæol. Soc.," vol. i. p. 131.

COUNTY OF DUBLIN.

IN THE BARONY OF COOLOCK.

In the Demesne of Howth, and Parish of Howth, immediately beneath the cliff called Muck Rock, a little over a quarter of a

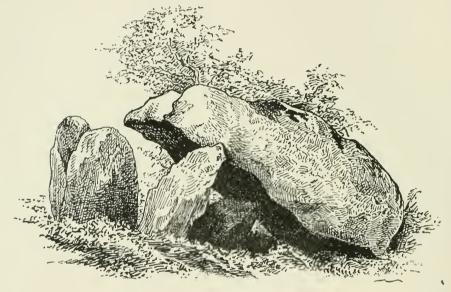


Fig. 353 - Howth. From a drawing by Mr. Henry O'Neil.

mile E. by N. of Saint Fintan's Church, and a quarter of a mile W. of Ballkill Cottage, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 15.

This dolmen was described and figured in 1852 by Mr. Henry O'Neil. In the arrangement of the blocks of stone which compose it, as well as in the colossal proportions of its covering-stone, it bears a close resemblance to that at Kernanstown (Browne's Hill), in Carlow. The material, however, is different, the latter being composed, like that at Mount Venus in the County of Dublin, of granite, and therefore showing a comparatively smooth exterior, while this one is formed of rugged masses of quartzite rock detached by natural causes, like others adjacent, from the precipitous side of the eminence called Muck Rock, which rises immediately behind it.

According to the measurements which are given by Mr. O'Neil, the roofing-stone was 17 feet in greatest length by 12 feet in breadth. The thickest portion measured 6 feet at the least, and the estimated weight was 90 tons.† The vault

[†] See this and other estimated weights of roofing-stones revised in Part II. of this work, infra, p. 433.

or chamber lay E. by N., and was 12 feet long and 4 feet wide. The flooring was of clay. He considered that the chamber had been enclosed by eight stones, three on either side, and one at either end. He adds that there were "several rocky fragments lying around, which in one part formed a sort of rude entrenchment to the monument."

This description fairly represents the structure in its present condition, although the measurements of the roofing-stone require correction.

My own plan of the monument was taken on August 10, 1895. The cross-shaded portion in the upper left corner indicates the point at which the massive and

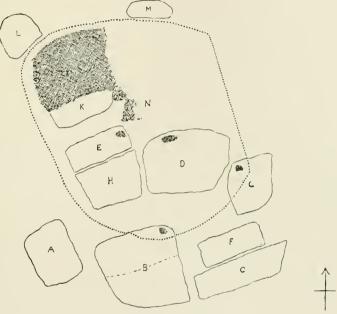


Fig. 354.—Howth. Plan by the Author. Scale 1 inch = 1 foot.

rugged roof-stone impinges on the natural surface; the other and smaller ones the places where it bears on the supports. The measurements of the stones were taken as follows:—

A = 6 feet long by 4 feet broad, lying in a sloping position, the N.E. upper edge being 1 foot 6 ins. above ground.

B = 8 feet long from W.N.W. to E.S.E., and 5 feet 6 ins. broad at the medium. It is 2 feet 7 ins. thick. Only that portion of this rock which lies below the dotted line crossing it in the plan is fixed in the ground, as it stands inclined to the northward, supporting one extremity of the roofing-stone at a height of 4 feet above ground.

C = a pillar-stone standing upright, 7 feet 9 ins. high, 6 feet 8 ins. broad, and 3 feet thick.

D = a large stone resting in an inclined position on the natural soil, its upper and northern side forming one of the points upon which the roofing-stone rests. It measures 6 feet 8 ins. long from E. to W., 5 feet 8 ins. broad from N. to S., 17 ins. thick, and, at its highest point, stands about 3 feet above ground.

E = a stone resting in an inclined position, measuring 5 feet 2 ins. from E. to W., and 2 feet broad from N. to S. Its most elevated point to the W. forms another support of the roofing-stone.

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F = an upright pillar-stone standing parallel with and close to C. It measures 4 feet 6 ins. long on its N.W. face, 2 feet thick, and 6 feet 6 ins. high.

G= a rugged upright block presenting a fairly smooth face only on its W. side, which is turned inwards, and which measures 4 feet 6 ins. broad. Of the other three faces, the S. one is 3 feet broad, the E. one 4 feet broad, and the N. one 3 feet 8 ins. broad. It stands 7 feet 6 ins. high, and affords, at its N.W. point, towards which direction it slopes, the most important prop for the covering-stone, which, near this point, attains its greatest thickness, namely, between 6 and 7 feet. At the angle of the pillar-stone there is a socket-like cleft which receives the weight of the incumbent mass.

H = a stone resting in an inclined position on the natural soil, measuring 5 feet 2 ins. long from E. to W., and 3 feet broad from N. to S. It lies close to E, on the S.E. side of the latter, and rises 2 feet above ground.

K = a stone lying at the back of E, on the N.W. side of the latter. It is a flattish block, and about 2 feet only of its superficial breadth is visible, owing to the inner side of it being the point at which the roofing-stone comes in contact with the ground.

L = a rugged block lying immediately beyond the edge of the roofing-stone at its S.E. corner. It stands about 2 feet above ground, and is about 3 feet square.

M = the position of another stone lying outside the edge of the roofing-stone, the dimensions of which the overgrowth of brambles, fern, and grass prevented my taking.

N = the massive roofing-stone, the dimensions of which are less than those of the Kernanstown monument to be presently noticed, while its position is similar. The circumference, measuring from point to point round the edge, I made 56 feet. The girth, taken at the thickest, round the body of the stone in a direction E. and W., I made 45 feet, estimating, that is to say, 17 feet for the breadth of the top or back of the stone, 18 feet for the breadth of the under surface, 6 feet for the almost precipitous slope to the E., and 4 feet for the corresponding thickness on the W. The length of the stone measured over the incline from N.W. to S.E. cannot be less than 20 feet, in which direction the entire monument, if measured from out to out, that is, from the outer edge of L to the outer edge of C, measures 30 feet. For the weight of the cap-stone, see Part II., infra.

From the S. edge of H to the line, indicated by dots, where B's N. side rests in the ground, measures 6 feet, while from the E. face of A, to the W. face of G measures 14 feet. These dimensions may represent those of an original chamber. The circumstance that the roofing-stone at its N.W. extremity rests solidly on the ground, while of the four stones on which it is propped, the two innermost, E and D, are prostrate, while the two outermost, B and G, are leaning in a N.W. direction, might be taken as justifying a supposition that the roofing-stone had slipped down, and the whole structure more or less collapsed towards that point of the compass. If so-if, that is to say, the chamber had ever been completed, and the roofing-stone been raised to a horizontal position—it is probable that F and C also played their part as supporters. The main difficulties in accepting this view are—(1) the absence of adequate supporting stones on the N.W. side of the monument, which certainly do not seem to lie under it; and (2) the enormous weight of the roofing stone, which one would think must have defied the efforts of man to have placed horizontally on columns three of which measured close on 8 feet high. My own impression is that a compromise between the two views would furnish us with the truth. From the analogy of the Kernanstown dolmen, I think that, ponderous though the roofing-stone was, its S. edge was actually

N.E

raised on to the points of the columns on that side, which would correspond to the pillars C, D, and E in the Kernanstown structure. The N. edge of the roofing-stone would then have rested on the sloping backs of E, H, and D, at a height of some 2 feet above ground, these lower supports corresponding to A and B in the Kernanstown structure, which are exactly 2 feet above ground, and upon which the roofing-stone in that case does actually rest. From these points I think it probable that the roofing-stone in this case has slipped back to the point were it now rests on the ground, dragging with it in its fall the pillar-stones B and G, and causing them to support it diagonally, while F and C were left standing upright in their original places, relieved of its weight.

Whether this supposition is well grounded or not, it would be difficult to conceive two megalithic structures, although composed of different materials, more precisely similar in detail than are the dolmens of Kernanstown and Howth.

"Trans. Kilk. Archæol. Soc.," vol. ii. (1852), Mr. Henry O'Neil's paper, p. 40; W. C. B. Note-book, 1895.

IN THE BARONY OF CASTLENOCK.

1, 2, 3. In the Townland of Chapelizod, a part of Phænix

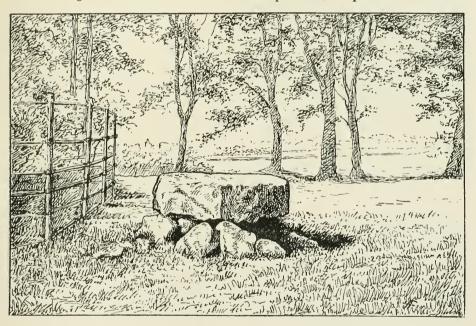


Fig. 355.—Chapelized (Knockmary). Etched from a photograph.

Park, and Parish of Chapelizod, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 18. It is usually called Knockmary. Another smaller one, and also a cist, were discovered not far distant from it, both of which have been removed.

The mound which contained this dolmen was situated on an elevation, but had "long since been removed" in 1852, and the small dolmen which it covered is all that now remains. No traces of a passage leading from the exterior to the central chamber are now apparent, and it is impossible to say whether such existed

or not, and also whether a circle surrounded it. The resemblance of the structure, as it stands, to dolmens inclosed in tumuli of the Carrowmore type, leads us to think it more likely than not that these features once existed. If this were not the case, it would form a link between two classes of monument, namely, the open-passage dolmen, and the cist wholly surrounded and closed in by its tumulus of earth or cairn of stones.

The height of the tumulus was 15 feet, and its diameter 120 feet. In the



Fig. 356.—Urn from Knockmary.

exterior portions of it four small urns containing ashes and fragments of burnt bone were found. These were enclosed in small stone cists.

In the centre of the mound was the "rock-chamber" or dolmen. covering-slab measures 6 feet 6 ins. long, 3 feet 3 ins. wide, and 1 foot The longer axis of it bears N.N.E. It is supported on several stones, enclosing a vault in shape irregularly oval, about 4 feet long by scarcely 2 feet deep. The floor of the chamber, which was below the level of the surface, was of clay. Within the chamber were two skeletons, both of men, the one about forty, and the other, whose skull wants the lower jaw, upwards of fifty. There were also the tops of the thigh-bones of a third

human skeleton, and the bone of an animal supposed to be that of a dog.

A number of small sea-shells (Nerita) were also found, prepared by perforation for stringing, and some of them still retaining the string of seaweed which had



Fig. 357.—Urn from Knockmary.



Fig. 358.—Urn from Knockmary.

served for the purpose. A small bone fibula and a flint knife were also among the contents of the chamber.

The urns are preserved in the museum of the R.I. Academy. The one which

bears the greatest amount of ornamentation, and which has been frequently figured, measures 6 inches high, and about the same in its greatest diameter, that is, across the centre of the vessel.

Both the skulls were dolichocephalic. For their measurements, and for 1)r. Davis's remarks upon them, the reader is referred to that portion of this work which deals with the Anthropological evidence derivable from the contents of megalithic vaults and chambers.

The roofing-stone of the dolmen is calp-rock, and is water-worn. It was probably taken from the bed of the river Liffey, which flows at the foot of the hill.

Another large cist, or rather small dolmen, was removed from a spot in the Phœnix Park, "not far from Knockmary," and placed in the Zoological Gardens at Dublin, where it now stands as re-erected.

Not far from the place where this last one was found, "a dome-shaped cist" was discovered, "constructed of small stones, and closed at the top by a larger one." It contained a skeleton, "the major part of which was placed at the bottom of the cist, with the long bones crossed, and the calvarium at the top, the lower jaw upon it." Dr. Davis considered this skull to be that of a young man about thirty. It was of the brachycephalic type. For further observations upon it, the reader is again referred to the portion of this work which treats of Anthropology.

"Trans. Kilk. Archæol. Soc.," vol. ii. (1852), pp. 274, 275; Wilde's "Cat. of the Mus. R.I.A.," pp. 181-3; Thurnam and Davis, "Crania Britannica," vol. ii. p. 4.

IN THE BARONY OF DUBLIN.

1. Somewhere in the E. suburbs of the City of Dublin there was a dolmen, the site of which is now unknown.

"In November, 1646," writes Walter Harris, in his edition of Ware, "as people were employed in removing a little hill in the east suburbs of the City of Dublin, in

order to form a line of fortification, there was discovered an ancient sepulchre placed S.W. and N.E., composed of eight black marble stones, of which two made the covering, and were supported by the others. The length of this monument was 6 feet 2 ins., the breadth 3 feet 1 in., and the thickness of the stone 3 ins. At each corner of it was erected a stone 4 feet high; and near it, at the S.W. end, another stone was placed in the form of a pyramid, 6 feet high, of a rustick

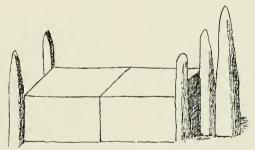


Fig. 359.—Anomalous monument in the "suburbs of Dublin." From an old engraving in Harris's "Ware."

work, and of that kind of stone which is called a mill-stone [? mill-stone grit]. A draft of the monument was taken before it was demolished. Vast quantities of burnt coals [? charcoal] ashes, and human bones, some of which were in part burnt, and some only scorched, were found in it."

I append the illustration which accompanies this account for what it is worth.

"The Works of Sir James Ware," edit. Walter Harris, vol. ii. p. 145; with illustration, id., pl. i. No. 9.

IN THE BARONY OF UPPERCROSS.

I. In the Townland of Ballinascorney, and Parish of Tallaght, in Ballinascorney Commons, nearly one mile N. of Ballinascorney House, is a dolmen-cairn encircled marked *Cromlech* in Ord. Surv. Map No. 24. To the S.E. of it is Raheendhu, and there are other mounds and circles to the westward at sites marked Knockanvinidee and Knockannavea. Two miles to the westward is a pillar-stone. The dolmen-cairn is about one mile W. of the Dodder, and two miles and a quarter to the E. of Saggart Hill.

This must, I think, refer to the dolmen-cairn to which O'Curry calls attention in the "Ord. Surv. Letters." After speaking of cairns on Saggart and Tallaght Hills, he proceeds, "Two cairns on Sliabh Toghail are open. The larger of them was very large and high, and was opened within the last fifteen years (dating back from 1837). It contained a large grave, covered by a very large flagstone, which was broken and carried away, but the supporters still remain, though not in their proper places."

O.S.L., Co. Dublin, 14 C. 23, pp. 52, ct seqq.

2. In the Townland of Woodtown, and Parish of Cruagh, in

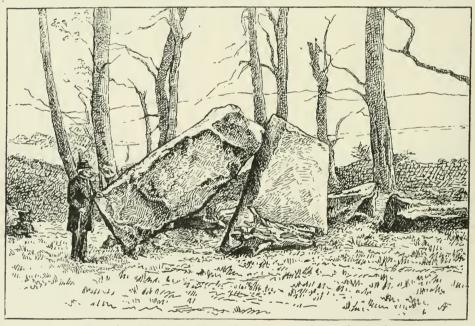


Fig. 360.—Woodtown (Mount Venus). Etched from a photograph.

the grounds of Mount Venus, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 25.

This dolmen, which must be classed with those of Howth and Browne's Hill (Kernanstown), must have been, supposing it ever to have been completed—

supposing, that is to say, that the immense roofing-stone was ever raised on to the summits of pillars of the height of the two which are beside it—one of the most magnificent megalithic monuments in the world.

A vast granite block of tabular form (A), having its longer axis N.W. and S.E., rests at an angle of 45° at its N.W. corner, against the shoulder of an upright block of somewhat pyramidal form, the upper portion of which, broken off from it, lies at a distance of 13 feet from it to the southward.

The greatest measurement along the surface of the inclined stone is 23 feet.

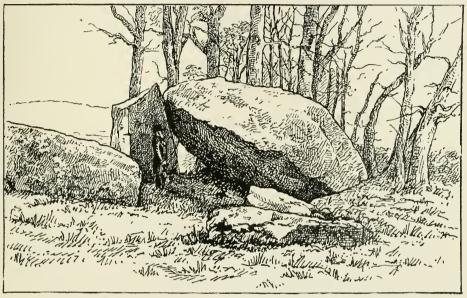


FIG. 361.—Woodtown (Mount Venus), another view. Etched from a photograph.

The S.W. side measures 21 feet, and the N.E. side the same. The S.E. end measures 6 feet 6 ins., and the N.W. end (measured in three divisions of 3 feet, 5 feet 8 ins., and 2 feet 6 ins. respectively), 11 feet 2 ins., giving total circuit of 59 feet 8 ins. The actual breadth (N.E. to S.W.) in the centre was 12 feet. The actual thickness on the N.E. side is 3 feet 4 ins.; on the S.W. 3 feet 8 ins.; and at the S.E. end 2 feet.

The stone has a smooth, flat, and symmetrical appearance, not so much like a boulder as that at Browne's Hill, nor so rugged as that at Howth.

The stone on which it rests (B) stands almost at right angles to it, and, together with it, presents two sides of an oblong ground-plan. It measures at the base 5 feet long on the N.W. side; 5 feet 6 ins. on the S.W. side, 3 feet 5 ins. broad on the N.E. side, and 4 feet on the S.W. side. The highest point of this stone is 8 feet above ground, but the shoulder on the S. side, on which the great sloping stone rests, is 6 feet high.

The severed piece (C) lies, as has been said, to the southward, at the farther end of the area in front of the inclined stone. Its measurements and shape leave no doubt as to its having been the upper portion of B, and prove that the pyramidal form was maintained to the top. It lies on its side, the apex to the E., and measures 6 feet 6 ins. on the S. side, 6 feet 3 ins. on the N. side, and 3 feet on the W. side, tapering to 6 ins. at the E. extremity. Its height above ground,

which, as it lies on its side, is to be taken as its breadth or thickness, is 3 feet, 6 ins., corresponding exactly to the thickness of the upper part of B, at the shoulder. The total height of the two pieces, if C were placed on B, would be approximately 12 feet 9 ins. or 13 feet.

To the N.W. of C. lies a fourth stone (D), which has the appearance of a fallen pillar. It measures 15 feet in extreme length, by 4 feet 6 ins. wide, at the widest, and is 2 feet 2 ins. above ground. Its height, if ever upright, and allowing for several feet below ground, would fairly correspond to that of B + C.

E represents a flattish stone, which, with several others, lies under and around the end of A.

At a distance of 8 feet S.E. of C lies another stone (F), 8 feet 6 ins. long, 4 feet 8 ins. wide, and 1 foot above ground; and 34 feet to the S. of that again, lies yet

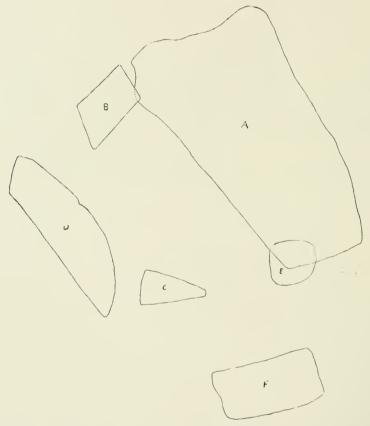


FIG. 362.—Woodtown (Mount Venus). Plan by the Author. Scale & inch = I foot.

another granite block, probably a portion of the original monument, measuring 4 feet 8 ins. long, 3 feet wide, and 1 foot 4 ins. thick.

Evidently, whatever the structure was, it has been much dismantled, and it seems likely that many stones have been carried away by persons recognizing the excellence of the granite for building purposes. A drawing by Gabriel Beranger shows several more stones than are at present in place.

On the whole, after most careful consideration, I am not inclined to believe

that the great inclined block was ever lifted bodily on to pillars on each of its sides, but that, like the Howth and Browne's Hill examples, it rested obliquely upon or against several pillars on the S.W. side, from one of which (B) the long-continued strain of its weight may have cracked off the upper portion C, a circumstance which would not have occurred had the weight been incumbent on the summit of the stone. D may have formed another supporting column, while F and the stone on the S. (not in the plan) may have been portions of others, broken up and partially carried away.

The weight of the inclined stone A is estimated in Part II., *infra*. The floor of the oblong area beneath it is of clay. It has been excavated, and it is said that the sides were found to be faced with small stones set together without mortar. The monument, as Mr. Henry O'Neil remarks, "is remarkable for the sharpness of the angles in every part of it"—as sharp, indeed, "as if recently quarried."

"Trans. Kilk. Archæol. Soc.," vol. ii. (1852), p. 40; drawings by G. Beranger in Lib. R.I.A.; W. C. B. Note-books, 1888, 1892, and 1895.

IN THE BARONY OF RATHDOWN.

1. In the Townland of Ballyedmonduff, and Parish of Kilgobbin, three-quarters of a mile N.N.W. of Glencullen House,



Fig. 363.—Ballyedmonduff. From a sketch in the Ord. Surv. Letters.

on the N.E. slope of Two-Rock Mountain, is a dolmen marked Giant's Grave in Ord. Surv. Map No. 25.

O'Curry speaks of this monument as a "very fine Giant's Grave, resembling the Bed of Callan More on Slieve Gullion, only that it is much more perfect." "I doubt," he says, "if we have met so perfect a pagan grave in any other counties hitherto examined. It was discovered four or five years ago" (he writes in 1837) "by Alderman Blacker of Saint Andrews, Dublin. It was then a tumulus, but now the earth is cleared away, and the grave is to be seen. The country people say that ashes were found in the grave, but I (O'Curry) could not learn from them that anything like an urn, crock, or 'ould thing like a pitcher' was found."

In the "Ord. Surv. Sketches" there is a good ground-plan and elevation of this monument, of which there are also two sections. From these it appears that it was enclosed in an oval tumulus, and that its longer axis, which was also that of the tumulus, was directly E. and W. The chamber itself was coffin-shaped, and towards the W. end was divided into two portions or chambers by a flag on edge, fixed across the area in a manner which showed that it—the partition—was not subsequently inserted, but formed a feature in the original design, since the S. end of

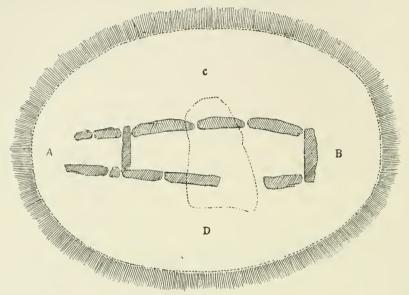


FIG. 364.—Ballyedmonduff; ground plan.

the flag formed part of the S. wall of the entire structure. From this partition an antechamber was extended to within a foot of the edge of the tumulus, where no stone closed its end.

The side stones of the two chambers, or rather of the inner vault or cell, and

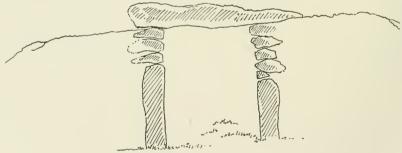


Fig. 365.—Ballyedmonduff; cross section.

its outer portion or portico, were in all ten in number, five on either side, although one was missing near the S.E. corner.

The width of the chamber internally was 2 feet 9 ins. at the E. end; 3 feet 7 ins. at the W. end (that is, up to the cross-flag), and must have been about 4 feet wide at the widest. One covering-stone remained in its place, about 7 feet long by 5 feet wide at the widest point. It was supported by three thin stones on the

one side, and five on the other, resting one upon the other on the top of the main side stones of the chamber, one of which measured 5 feet, the other 3 feet 6 ins. in height, giving to the whole chamber a height of 6 feet 6 ins. This point of construction, it may be noted, differentiates this monument somewhat from the ordinary dolmens in their elongated state, such as the great one at Burren, near Blacklion in Cavan, and brings it nearer to those the roofs of which are formed in corbel fashion.

The length of the chamber is 11 feet 6 ins. The single slab at the end

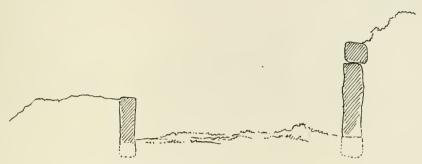


Fig. 366.—Ballyedmonduff; long section.

measures 3 feet 4 ins. in height, a measurement which, when a small stone at the top is added, would give a height to the chamber, at that point, of only 4 feet 4 ins.

The height of the partition-stone which crosses the chamber at the W. end is 2 feet 6 ins., a fact which shows that a cavity existed between the upper edge of it and the roofing-flag.

In breadth the side stones of the chamber measured respectively—those on the N., counting from the E., 4 feet, 3 feet 8 ins., and 4 feet; those on the S., 2 feet (then a gap), 4 feet 2 ins. and 3 feet 2 ins. The side stones of the antechamber measured—those on the N., 2 feet and 1 foot 3 ins.; those on the S., 9 inches and 3 feet.

The little additional chamber or portico—so like those at Blacklion and elsewhere—narrows to about 2 feet 6 ins., where it reaches to within a foot of the edge of the tumulus, which appears from the section to have been steep, so that the entrance would have opened on the side, the end being, as stated above, enclosed.

2. In the Townland of Ballybrack (I.),† adjoining that of Ballyedmonduff on the S.W., and Parish of Kilgobbin, is a dolmen marked *Giant's Grave* in Ord. Surv. Map No. 25. It is half a mile W.N.W. of Glencullen House, a quarter of a mile N. of Glencullen River, on the N.E. slope of Two-Rock Mountain, the sides of which latter are covered with circles and tumuli.

I suppose this is the same dolmen to which Mr. Henry O'Neil alludes as being on the hill on the Dublin side of Glencullen. He describes the covering-stone as

[†] There are in this Barony two Townlands of this name, in each of which is a dolmen. I number them therefore I. and II.

measuring 10 feet long, 8 feet broad, and 4 feet thick, and the chamber as "greatly disarranged."

"Trans. Kilk, Archæol, Soc.," vol. ii. (1852), p. 40.

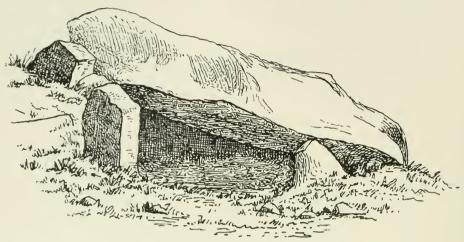


Fig. 367.—Ballybrack (I.). From a drawing by G. Du Noyer.

3. In the Demesne of Kiltiernan, and Parish of Kiltiernan, a quarter of a mile N.W. of Kiltiernan House, and about half a

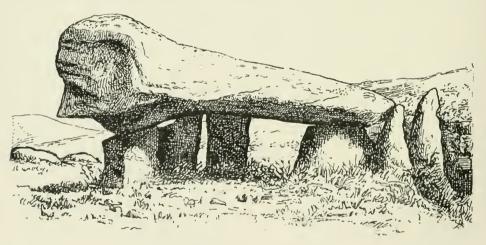


Fig. 368.—Kiltiernan. From a sketch by the Author.

mile W. of Golden Ball, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 26.

The rock which forms the roofing-stone (A) of this dolmen measures 22 feet in extreme length from E.N.E. to W.S.W., and 13 feet 6 ins. in extreme breadth near the N.E. end. At the W. end it is 6 feet thick, but only 2 feet 6 ins. at the opposite end. It rests on four of the stones which form the sides of the area of a chamber beneath, which runs in a direction nearly due E. and W. Some of the stones seem to have been pushed out of position by the weight of the incumbent

block, the circuit of which, measured into the crevices in its sides, is no less than 58 feet 9 ins. For its estimated weight, see Part II., infra.

It appears to me that the mode in which it was brought into its present position was by sliding it down the rocky plateau of the shelving hillside above, from its original bed, from which, if it be not a transported boulder, it may have become detached by natural causes.

As seen at present, the whole monument has the appearance of a sphinx-like monster, advancing out of the rocky hill on some half-dozen short and rickety legs.

The breadth of the chamber (if the area under the covering-stone may be so termed), measures 14 feet 8 ins. long, and varies in breadth from 3 to 10 feet, although so disordered are the stones that it is impossible to decide what was the original shape intended.

The pillar-stone, B, which is the most important supporter, measures 3 feet 8 ins. long by from 3 to 2 feet broad, and is 5 feet high. The next behind it, C, measures 5 feet 6 ins. high, 2 feet long, and 1 foot 10 ins. broad, and on this the

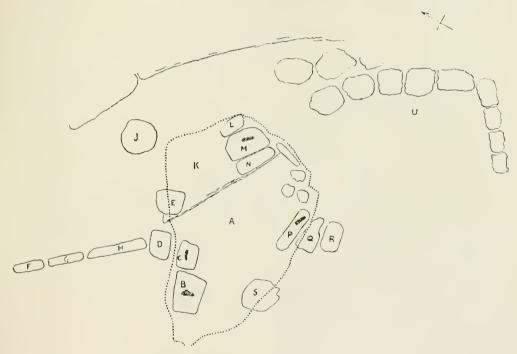


Fig. 369.—Kiltiernan. Plan by the Author. Scale $\frac{1}{8}$ inch = 1 foot.

roof also rests. D and E are, as it were, supplementary stones, which possibly may have formed a portion of an outer range. The former is 4 feet high, 2 feet 2 ins. long, and 1 foot 8 ins. broad; the latter, which leans upon D at its top, is 5 feet high, 2 feet 6 ins. broad, and 1 foot 6 ins. thick. It also leans against the roofing-stone. F, G, H are three stones set on edge, forming a line about 2 feet 2 ins. high, running up to the monument. They are respectively, 1 foot 6 ins., 3 feet, and 5 feet 10 ins. in length. J is a rough block, possibly the end stone of an outer range. K is a natural shelf of rock extending horizontally like a raised floor across the N part of the chamber, and on which rest L, M, and N,—M measuring 3 feet 8 ins. long, and 3 feet 4 ins. deep by about 10 inches thick, and supporting on its

flat face the inner or N.W. end of the roofing-stone. P forms the fourth and last supporter of the roof, and measures 3 feet 8 ins. long by 1 foot 6 ins. thick. It is about 4 feet high. Q, standing behind it, as D does behind C, may possibly have been set there as a buttress, or one of an outer range. It measures 3 feet 3 ins. long, I foot 6 ins. wide, and 5 feet 10 ins. high, sloping against the roofing-stone. Behind it, again, stands R, 2 feet 1 in. long, 1 foot 6 ins. broad, and 4 feet 5 ins. high. S is a block lying at the entrance of the chamber, 3 feet long by 3 feet broad, and I foot high.

At the back of the monument the letter T represents the position of a natural ledge of rocks, above which the slope of the hill rises. At U is an arrangement of rough blocks, perhaps in double line, placed there by human agency, but whether in ancient or modern times it is difficult to form an opinion.

W. C. B., Note-books, 1888 and 1895.

4. In the Townland of Brenanstown, and Parish of Tully, by

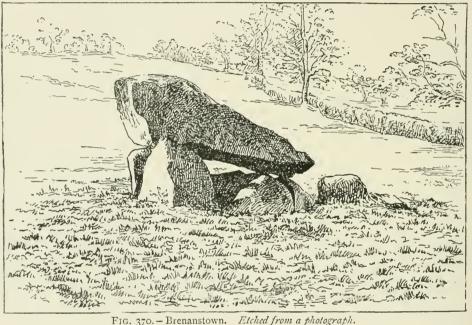


Fig. 370. - Brenanstown. Etched from a photograph.

the side of a stream running through a valley commonly called Glen Druid, half a mile W. of Carrickmines, is a monument marked Cromlech in Ord. Surv. Map No. 26.

This dolmen is a very interesting one, since it affords an example of a perfect and typical chamber and portico, surmounted by a roofing-stone which in size and weight approaches the immense blocks at Browne's Hill (Kernanstown), Howth, Woodtown (Mount Venus), and Kiltiernan, under neither of which can it be said that a perfectly arranged chamber exists, the reason, I believe, being that, in these latter instances, the weight of the roofing-stone and the consequent difficulty of setting it in place has either made the construction of a chamber impossible, or has crushed it out of place when partially formed. In point of construction, having regard to the size of the roofing-stone, this Brenanstown dolmen is more nearly in accord with the W. end of Leaba Callighe, near Fermoy.

My measurements of the roofing-stone agree with those of Mr. Henry O'Neil. I made it 15 feet 6 ins. in length from E. to W., and 15 feet in breadth from N.

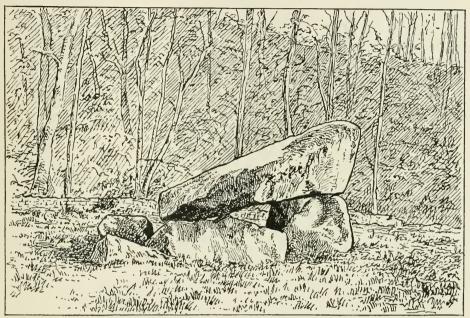


FIG. 371.—Brenanstown. Etched from a photograph.

to S. The thickness is from 3 to 5 feet. Mr. O'Neil consequently estimates its weight at about 60 tons. (See Part II., infra.) The stone is granite, the under

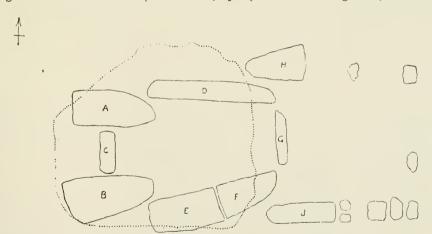


Fig. 372.—Brenanstown (Glen Druid). Plan by the Author. Scale $\frac{1}{8}$ inch = I foot.

surface smooth, while in the upper surface are two deep depressions, from the E. one of which two ducts lead to corners of the stone.

The chamber measures internally 10 feet 6 ins. long, by 4 feet 8 ins. broad at the E. end, 9 feet 6 ins. in the centre, and nearly 4 feet at the W. end, where the

terminal stone forms the partition between the main chamber and the antechamber beyond. The height in the centre from floor to roof is 7 feet 2 ins.

The ante-chamber measures 5 feet wide at the entrance, 4 feet r in. at the E., or inner side, 3 feet 2 ins. deep on the S. side, and 2 feet 5 ins. on the N. The roofing-stone rests on the two anta, or sides of the portico, and on each of the large side-stones of the chamber, the S. one of which, since it is in two parts, may possibly have been cracked by its weight. The chamber lies due E. and W. Beyond the E. end is a quadrangular arrangement of stones set in the ground. Two of these, standing next the monument and a little outside it, may have formed part of an outer range. As to the rest, they suggest the presence at some time or other of a modern building, or adjunct of some sort. The floor of the chamber is considerably below the level of the surrounding field, while this square enclosed space is even with it.

The measurements of the side and end stones are as follows:-

Length.		Thickness.			Hei	ght.	
ft.	ins.	ft.	ins. ft.	ins.	ft.	ins.	
A = 6	0	3	O to I	8	5	2	
B = 7	0	3	6 to 1	10	5	0	
C = 2	8	I	7 to 1	3	3	9	(outside)
D = II	0	I	2		3	6	(outside)
E = 5	6	3	0				long stone broken
F = 5	0	3	o to I	0	5	6	(sloping) one stone broken.
G = 4	0	Ö	7		2	9	(inside)
H = 4	6	3	0101	2	2	0	
J = 4	6	I	IO		2	10	

"Trans. Kilk. Archael. Soc.," vol. ii. (1852),—Mr. O'Neil's paper, at 40, et seqq.; W. C. B. Note Books, 1888 and 1895.

5. In the Townland of Shankill, and Parish of Rathmichael, by the side of the road, midway between Shankill House and Shankill Castle, was a dolmen marked *Cromlech* in Ord. Surv. Map No. 26.

In Cromwell's "Excursions" a drawing by Petrie is given of a dolmen at this place. Mr. Henry O'Neil states that he had heard it had been carried away.

Cromwell's "Excursions through Ireland," vol. iii. p. 159; "Trans. Kirk. Archæl. Soc.," vol. ii. (1852),—Mr. O'Neil's paper, p. 40, et seqq.

6. In the Townland of Ballybrack (II.), and Parish of Killiney,

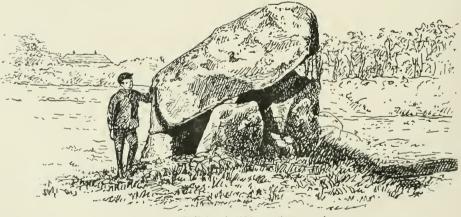


Fig. 373.—Ballybrack (II.), or Shanganagh.

[†] Not to be confused with the other of that name; see above, No. 2.

in the Townland next to that of Shanganagh, half a mile E. of Loughlinstown, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 26.

This is usually called the Shanganagh dolmen. Mr. Henry O'Neil gives a



FIG. 374.—Ballybrack (II.) (Shanganagh). Etched from a photograph.

description and illustration of it. The supporting-stones are four in number, two on either side. One of them is broken off in the middle, and the one opposite to it has fallen in. On these the covering-stone rests. It is nearly 7 feet 6 ins. square, by about 3 feet thick. The under side is, as usual, nearly flat. The weight of the stone is probably about 12 tons. The chamber lies E. and W., and measures 6 feet 7 ins. long by 2 feet 6 ins. wide. It was probably 5 feet high. The floor is of clay, and the material of the dolmen granite.

"Trans. Kilk. Archæol. Soc.," vol. ii. (1852). Mr. O'Neil's paper, p. 40, et seqq.

7. At Carrig-Gollane, on the S. flank of the mountain so called, was a dolmen.

Among the sketches of Mr. Du Noyer there is one of a dolmen at this place, which I do not find, however, in the Ordnance Maps. It is mentioned also in Miss Stokes's MS. list, but not in her printed "Carte des dolmens d'Irlande."

 7^* . In the Townland of Taylor's Grange, and Parish of Whitechurch, $1\frac{3}{4}$ mile S.W. by S. of Dundrum, in the grounds of Glensouthwell, is a stone monument called "The Druid's Chair," possibly the remains of a dolmen. Beside it was another stone since destroyed.

The Rev. M. H. Close, M.R.I.A., has kindly given me the following notes upon it: "It consists of three blocks of granite, forming the N., W., and E. sides. The stone on the W. side measures 9 feet 3 inches in height, that on the N. 8 feet 1 inch in height, and that on the E. 8 feet 9 inches in vertical height, but measured

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along its median height its length above ground is 9 feet 4 inches. This last stone leans against the N. one, and it also leans towards the S. at an angle of 23° from the vertical. The flat faces of the three stones, clearly joint planes, form three sides of a rectangle, whose open side looks S. 10° W. (S. 5° W., true).

"The 'chair' had formerly a large block of granite beside it to the E. by N.

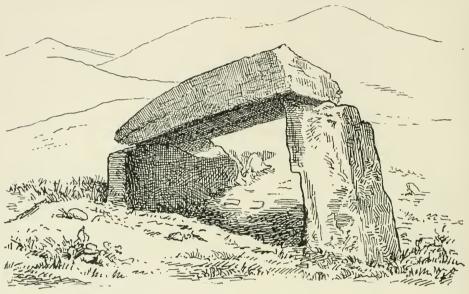


Fig. 375.—Carrig-Gollane. From an original drawing by G. Du Noyer.

This was broken up by blasting just about twenty years ago, say 1876. It was described by Gabriel Beranger in 1776 as a 'cromlech' in itself. He made a drawing of it, not very accurate, on account of its being enveloped in thorn bushes, and states that the supporting-stones were three in number, although only two are shown in the sketch."

Mr. Close adds that when, in 1861, he made a careful sketch of this stone, it was lying on the ground beside the "chair," and he makes no mention of supporters. The stone was 6 to 7 feet in diameter, and 4 feet thick.

It appears to me to be more probable that this stone was either a part, or intended to be a part, of the "chair," than that it was an independent monument.

8. In the Townland of Kilmashoge, and Parish of White-church, in the grounds of Larch Hill, $3\frac{1}{4}$ miles S. of Rathfarnham, $1\frac{1}{4}$ mile from the Glensouthwell monument, and less than $1\frac{3}{4}$ mile from Woodtown. It is $\frac{3}{4}$ of a mile from a cairn with a vaulted chamber on the summit of Tibradden Hill, an urn taken from which is in the Mus. R.I. Academy, and $1\frac{3}{4}$ mile from a cairn on the top of Two-Rock Mountain, not yet explored.

The Rev. M. H. Close, M.R.I.A., has kindly given me the following notes upon this dolmen:—"It is surrounded by a circle of six stones lying half-buried. Four stones of the dolmen are still in place, and there are two smaller blocks near which evidently belonged to it. There are two side-stones measuring respectively

5 feet 6 inches and 6 feet in height, one of which is still upright, while the other has succumbed to the weight of the cap-stone. This latter measures 12 feet 4 inches long, 8 feet 4 inches broad, and 2 feet thick. It rests upon the prostrate side-stone in such a position that it keeps the side-stone from falling flat on the ground. Its upper end is distant 2 feet 9 inches from the side-stone which still remains upright, and Mr. Close observes that it appears utterly impossible for it ever to have touched this side-stone, and then slipped back to where it is. As, therefore, it was being edged up to the standing-stone, upon the top of which presumably it was intended to rest, some accident seems to have happened, so that it fell against the side-stone on which it rests, and knocked it down. It is therefore an unfinished structure. Behind the cap-stone, at the inner side of the cist, rises a pillar-stone, perfectly upright, measuring 9 feet 10 inches high, with an almost square horizontal section, averaging 3 feet 5 inches in the side.

I found a pillar-stone similarly placed behind a small dolmen buried in a tumulus, and beneath which were burnt bones, in a tumulus at Tregissian in the

Parish of Buryan, Cornwall. (See "Nænia Cornubiæ," p. 107.)

COUNTY OF CARLOW.

IN THE BARONY OF RATHVILLY.

1. In the Townland of Ballybit, and Parish of Rathvilly, was a dolmen not marked in Ord. Surv. Maps Nos. 3 and 4.

Mr. R. Malcolmson states that a "cromleac of hexagonal form, rudely carved at the top" [!], existed on this estate. An urn was found "under a granite boulder" in the same Townland.

Carlow Sentinel, Nov. 23rd, 1861; "Kilk. and S.E. of Ir. A.S.," New Ser. (1862), vol. iv. p. 12.

2. In the Townland of Haroldstown, and Parish of Haroldstown, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 9.

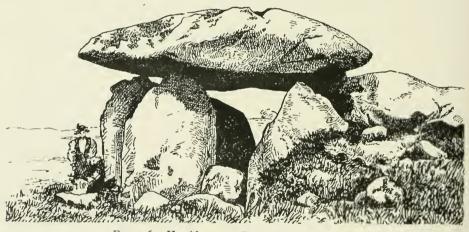


Fig. 376.—Haroldstown. Etched from a photograph.

It stands on the E. bank of the River Derreen, opposite the Townland of Tobinstown, and in the land adjoining Acaun (or Accaun) Bridge.

This dolmen' has been sometimes called the Accaun, and sometimes the Tobinstown dolmen. Grose's description of it is extremely inaccurate. He regards, for example, the two long covering-stones as one stone, to which he gives a length of 23 feet. He mentions, however, the very interesting fact that in his day "from the portico"—as he terms the arrangement of stones at the N. end of the structure—stretched "a sort of avenue about 40 yards long, formed of some irregular hillocks," and "which led to the portico." Since this feature is shown in his otherwise worthless drawing, and as the river appears from it to have been

nearer the dolmen than it is at present, I reproduce it from his "Antiquities of Ireland."

A family at one time lived in this dolmen, which has a singularly house-like

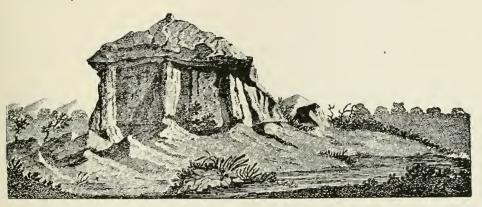


Fig. 377.—Haroldstown. From Grose.

appearance, and in order to keep the cold out, plastered up the interstices with cob, some of which is still to be seen between the stones.

The chamber lies, according to my compass, nearly due N. and S., although Grose speaks of the higher end, where the portico is, as the W. end. In the centre it has an internal breadth of 9 feet, but I think several of the stones on the W. side have suffered displacement. From this point it narrows to 4 feet broad at the S. end, under the smaller of the two

cap-stones. It is 12 or 14 feet long.

The larger and higher roofing-stone is somewhat pear-shaped superficially, and when looked at vertically resembles a mushroom top, being thicker at the middle than at the edges. It measures 13 feet 6 ins. in length, about 13 feet in extreme breadth near the S. end, tapering to 4 feet where it protrudes over the portico. It is flat on the under side, but on the top it is deeply channeled and hollowed into basins, and what might be called cups, evidently by the action of water. At the N. end it rests upon the end stone of the chamber and upon the two side-stones, which, together with it, form the antechamber, or portico. The arrangement is exactly similar to that at Brenanstown in Dublin. At the S. end the large roofingstone rests on the N. end of the second and lower one. This latter measures 10 feet from E. to W., by 8 feet from N. to S.

Fig. 378.—Haroldstown. Plan by the Author.

At the S. end it is partly buried in a

bank of earth and stones. The upper surface is also channeled and pitted like the larger stone. The thickness of the larger stone is from 2 feet to 3 feet 9 ins.; that of the smaller about 2 feet.

The E. side of the chamber, including the portico, is composed of five stones, marked A to E. A measures 4 feet 5 ins. long, 4 feet 2 ins. high externally, where a bank abuts on it, but about 6 feet internally, and 14 ins. thick; B = 3 feet 4 ins. long, 6 feet 6 ins. high internally, and I foot thick; C = 2 feet 9 ins. long, 3 feet 8 ins. high externally, and 1 foot 6 ins. thick; D = 4 feet long, 3 feet 5 ins. high, I foot 4 ins. thick; E = 3 feet long, I foot high, I foot thick. The W. side of the chamber may also be said to be composed of five stones, marked F, G, H, K, L. F = 4 feet 3 ins. long, 6 feet 2 ins. high, and 1 foot 2 ins. thick. Between it and the lumpy block G, which is out of line, as also is H, behind it, is a sort of entrance into the chamber, formed, I suspect, by the people who inhabited it, and no part of the original design. This stone, G, = 2 feet 8 ins. long, by 2 feet broad, and about 3 feet high; H = 5 feet long, 5 feet 5 ins. high, and 2 feet broad; K = 5 feet 9 ins. long, 3 feet 8 ins. high, and 10 ins. thick; L = 3 feet long, and almost buried. An artificial bank about 6 feet broad, and containing several large stones, rises against the side of the structure on the S.W. The stone which forms the partition between the portico and the chamber measures 6 feet high, 3 feet 6 ins. broad, and 2 feet thick in the centre. The portico measures internally 3 feet on the E. side, 2 feet 6 ins. on the W., and 3 feet 6 ins. on the S. It is, therefore, nearly a square, with the N. side open, over which the end of the cap-stone protrudes about 2 feet 6 ins. The area of this portico is choked up with large stones, and others of equal size lie in disorder in the bank without. A line of stones buried in a bank, and running parallel with A, represents possibly the remains of an outer range, or peristyle.

"Antiquities of Ireland," by Grove, vols. i., xi., and plate; "History and Antiquities of Carlow," by John Ryan (Dublin, 1833), p. 353; Proc. R.I.A. (1882), Paper by Mr. Kinahan, with plate; W. C. B., Note-book, 1895.

IN THE BARONY OF CARLOW.

1, 2, 3. In the Townland of Kernanstown, and Parish of Urghin, two miles E. of Carlow, to the N. of Browne's Hill, or Browneshill House, also called Mount Browne, are three dolmens. The largest of the three is marked *Cromlech* in Ord. Surv. Map No. 7.

There are three dolmens on this hill. One is of enormous proportions, the two others are smaller. The former has been described by Ryan, Ledwich, and G. Du Noyer. Of one of the latter there is a drawing and plan in Miss Stokes's collection of drawings of dolmens. The remaining one is situated a distance of 50 yards to the N. of the latter.

The great dolmen stands in the centre of a large flat field in permanent pasture, and has no trace of a bank or cairn near it. It consists of a splendid block of granite, the longer axis of which is N. and S., raised at an angle of 35 degrees to the horizon, upon four blocks, three of which, pillar-like, support its E. side, at a height of 6 feet above the floor, while one sustains its lower and W. side, at a height of only about 2 feet above ground.

The following are my measurements of the block thus elevated into position: Superficial measurement from N.E. to S.W., $23\frac{1}{2}$ feet; ditto from N.W. to S.E.,

22 feet; girth, 65 feet; thickness at W. side, 6 feet; at S. side, 5 feet; at E. side, 6 feet; and at N. side, 4 feet.

Mr. Du Noyer's measurements make it somewhat less. He makes the length

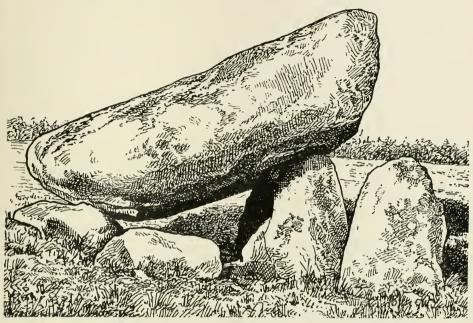


Fig. 379.—Kernanstown. Etched from a photograph.

of the stone 22 feet 10 ins., the breadth 18 feet 9 ins., and the thickness 4 feet 6 ins. Even then his estimate for its weight was 110 tons, but it is not so much. (See estimated weights

of covering-stones in Part II.)

In any case, it is, I believe, the largest block raised from the ground by the dolmenbuilders which is known, not only in the British Isles, but on the continent of Europe.

It covers what may be called a chamber, open at each end, the greatest width of the opening at the N. end being 8 feet, and at the S. end 4 feet. On the E. side at the S. end of the line of three pillars stands a fourth block, which does not support the incumbent rock.

With regard to the block on which it rests on the N.W., and to another which lies beside it to the S., and which together form

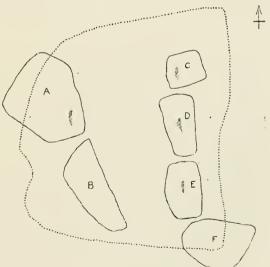


Fig. 380.—Kernanstown. Plan by the Author.

the W. side of the passage or vault, the question naturally arises as to whether

they ever stood upright, like those opposite them, and sustained the block on their summits. I do not think they did, for had they done so, and subsequently fallen, they would not have fallen into the positions in which they now lie. The measurements of these two stones are—A, from N.W. to S.E, 7 feet 6 ins.; from N.E. to S.W., 7 feet 3 ins.; height variable, but about 2 feet. B, length 8 feet; greatest breadth 2 feet 8 ins.; height 2 feet. The four stones on the E. side measure—C, 3 feet 3 ins. long, 2 feet 9 ins. broad, 5 feet high; D, 5 feet long, 2 feet 9 ins. broad, 6 feet high; E, 4 feet 6 ins. long, 3 feet broad, 9 feet high; F, 6 feet long, 4 feet broad, 6 feet 6 ins. high.

Ryan, "Hist. of Carlow," Dublin, 1833; Ledwich, "Antiquities of Ireland;" Du Noyer, "Kilk. Archeol. Journ.," vol. i. (1868), p. 40; Kinahan, Proc. R.I.A. (1882); Miss Stokes, MS. "Notes on Dolmens;" W. C. B., Note-book, 1895.

IN THE BARONY OF FORTH.

1. In the Townland of Ballynoe, als. Newtown, and Parish of Ardoyne, at Aghade Lodge, on the River Slaney. The dolmen is not marked on Ord. Surv. Map No. 13. On the N. of the

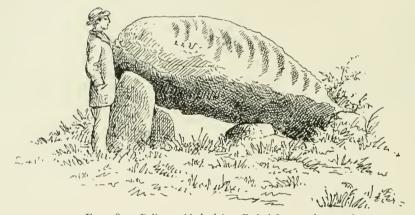


Fig. 381.—Ballynoe (Aghade). Etched from a photograph.

Townland of Aghade, which lies on the W. side of the river, opposite to that in which Aghade Lodge is, the holed stone called *Clochaphoill* is marked.

At this place was "a dolmen and several pillar-stones," some of the latter 8 feet in height, described in the Ord. Surv. Letters as being "channeled from the tops on all sides to the middle." "This dolmen," it is added, "possessed a peculiar roofing-stone, having grooves down the side, giving it the appearance of the body of an animal with protruding ribs; or, on the underpart, that of a sow's dugs."

This peculiarity of grooves, or ribs, is not uncommon in waterworn boulders of granite. In several parts of Ireland natural rocks are to be found presenting this peculiarity, as near Bunbeg on the coast of Donegal; and wherever this is the case, it seems that some superstition attaches to them.

COUNTY OF KILDARE.

IN THE BARONY OF NARRAGH AND REBAN EAST.

1. In the Townland of Colbinstown, and Parish of Davidstown, a quarter of a mile from the boundary of the County of



F1G. 382.—Colbinstown (Killeen Cormaic). From a drawing by Sir Samuel Fergusson.

Wicklow, is a chambered tumulus marked Killeencormack Graveyard in Ord. Surv. Map No. 32.

This tumulus is mentioned and a plan of it and the country surrounding are given by the Rev. W. Shearman, in his "Loca Patriciana." A drawing of it by Sir Samuel Fergusson is published in the Proc. of the R.I.A. The end of a natural "esker" is fashioned into an oval tumulus, on the summit of which an oblong depression marks the site of a primitive church. There is a central vault or chamber under the tumulus, and on the E. side of the mound was a grooved stone similar to ones found in the dolmen of Carrickglass in Tyrone, and in a passage at Dowth, which seemed to have been one of the jambs of the entrance to it. There was another chamber on the other side of the mound, the entrance to which was closed by a thin slab. The whole mound was covered with graves, and there was also an inscribed stone on which were both Roman and ogham letters.

Proc. R.I.A., vol. i. (1879), p. 123; Shearman, "Loca Patriciana."

COUNTY OF KILKENNY.

IN THE BARONY OF GALMOY.

1, 2. In the Townland of Ballynaslee, and Parish of Durrow, were two dolmens, called respectively *Cloghan-carneen*, and *Mainsair Asal*. Two stones are marked in Ord. Surv. Map No. 4, near a fort in this Townland.

At this place, according to Tighe, was "a great stone, called in Irish Cloghan carneen. It was about 15 feet long by nearly 8 feet broad, and 20 inches thick, and was supported on six or eight large stones which stood in the side of a cavity, and raised it 3 feet above the ground. Beneath was a place hollowed out and floored with stones." The monument was destroyed, the hollow place only remaining, in one angle of which, when the stone was broken, was found a heap of bones, with teeth like those of pigs.

On the hill, a hundred yards above, a cavity appeared, from which the great

stone might have been raised, and slipped down upon its supporters.

Not far from this dolmen, adds the same writer, was "a square enclosure, formed of four large, upright stones, with two others forming a roof. Three or four side-stones had been taken away. On digging within, human bones, it was said, had been found. The earth around it was raised. The entrance was at an angle.

This latter monument was called in Irish Mainsair Asal, or the Asses' Manger, a name which occurs again in the case of a dolmen at Manger in the Queen's

County, about 12 miles to the N.W.

On the hill above was "an elliptical enclosure, 40 yards by 34, surrounded by a bank of small stones. A pit and heap had been made in it. To the N. and E. of this, on the side of the hill, were marks of small enclosures, and foundation walls showing the site of an inconsiderable town. A small, oblong building was said to have been a chapel. Among these enclosures were seven or eight circular pits, mostly filled up, about 12 feet wide at top, narrower below, their sides formed of stones. Between this hill and the river, a great many human bones have been found, and among others, a skeleton enclosed between flags.

"Stat. Account of the County of Kilkenny," by W. Tighe (Dublin Society, 1802), p. 625.

3. In the Townland of Ballyspellan, and Parish of Fertagh, was a dolmen not marked in Ord. Surv. Map No. 8. There is a large rath, or ring, in this Townland. The dolmen is called "Cloch-Bannagh, or the Stone of Blessing, by the country-people."

Tighe describes this as "a very large stone, which was formerly supported on smaller ones." "Not far from it was a conical stone lying on its side."

[&]quot;Stat. Account of the County of Kilkenny," by W. Tighe, p. 625.

IN THE BARONY OF FASSADININ.

1. In the Townland of Coan West, and Parish of Dysart, was a dolmen or cist not marked in Ord. Surv. Maps Nos. 6 or 11.

Dr. Anderson stated that it was reported to him that "a large sepulchral chamber, covered by a massive stone, 6 feet long, and containing an earthen vessel filled with burned human bones, which was destroyed," had been discovered at this place, some years before he wrote.

"Trans. Kilk. Archæol. Soc.," vol. i. (1849), p. 28.

IN THE BARONY OF GOWRAN.

1. In the Townland of Dangan, and Parish of Columbkille, to the S.E. of Thomastown, on the E. bank of the river Nore, is a dolmen not marked in Ord. Surv. Map No. 28.

The dolmen here is thus described: "The cap-stone measures 12 feet square. It rests quite flatly on three supports, and weighs about 3 tons. There is a remarkable feature in it, namely, that these supports, which appear, however, to be only 18 inches in height, are not single stones, as is usually the case, but that each one consists of two or three joints, or different pieces." This mode of construction is found in the case of some of the dolmens of North Africa.

"Near it are some groups of standing-stones; and, within the limits of three townlands around, are no less than thirty-six large and perfect barrows.

"Near one of these barrows a gold torque was found in ploughing."

"Trans. Kilk. Archæol. Soc.," vol. i. (1849), p. 26.

IN THE BARONY OF KNOCKTOPHER.

1, 2. In the Townland of Ballylowra, and Parish of Jerpoint



Fig. 383.—Ballylowra (I.). From the "Trans. Kilk. Archaol. Soc."

Church, are two dolmens, one *at* Ballylowra, the other a quarter of a mile distant. The second is called "Cloch-na-Gobhar.' Neither is marked in Ord. Surv. Map No. 32.

The existence of a dolmen at Ballylowra is mentioned by the Rev. James Graves in describing the Cloch-na-Gobhar.

The latter, to judge by the drawing which Mr. Graves gives of it, is very

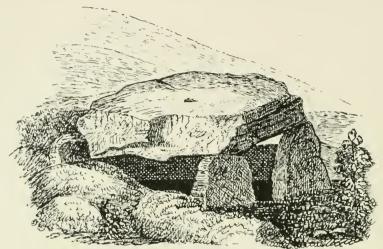


Fig. 384.—Ballylowra (II.). From a drawing by the Rev. James Graves.

similar to that called the *Cloiche-leithe* in the Townland of Glencloghlea (*vide infra*). It is, he says, of peculiar construction, one end of the covering-stone resting on the rocky surface of the hill, and the other on two uprights. The covering-stone measures 12 feet 4 ins. long by 6 feet 10 ins. wide, and is, on an average, 1 foot 8 ins. thick.

"Trans. Kilk. Archæol. Soc.," vol. i. (1850), p. 130.

3. In the Townland of Derrynahinch, and Parish of Derrynahinch, was a dolmen not marked in Ord. Surv. Map No. 32.

This monument is described as "one of those ancient stone enclosures called "Leaba Diarmada is Ghrainé." It is of an oblong form, having eight upright stones on the S. side, six on the N., and one at the W. end, the stones varying from 4 to 6 feet in height, and from 4 to 3 feet in breadth.

O.S.L., Kilk.,
$$\frac{14}{E. I}$$
, p. 131.

4. In the Townland of Castlemorris, and Parish of Aghaviller, between Castlemorris and Kilmacoliver, was a dolmen not marked in Ord. Surv. Map No. 31.

There was a dolmen here, and also a pillar-stone prostrate at the date of the Ord. Survey.

O.S.L., Kilk.,
$$\frac{14}{E.}$$
, p. 130.

5, 6. In the Townland of Ballynoony West, and Parish of Kilbeacon, there were two dolmens. Neither of these is marked in Ord. Surv. Map No. 40; but one of them is perhaps indicated by a circle of stones around a central one. It is near the hamlet of Ballynoony South.

The name of this Townland has been derived from baile-inneona, i.e. "town of the anvil." Within its limits there is "a Giant's Grave," 12 feet long, and 4 feet wide. This monument was originally enclosed by lines, or, rather, a fence of large standing stones, three of which remained at the time of the Survey on the N. side, about the middle, one on the S. side, and one at the E. end. They varied from 3 to 4 feet in height, inclining very much inwards.

There was another monument of the same character about half-a-mile N.E. of this one, of which two of the stones only remained upright, while some half a dozen or so lay prostrate.

The Lackmore marked on the map in this townland is a large menhir. Near this was a cairn in which cists and urns were found.

7. In the Townland of Ballymartin, and Parish of Listerlin, is a dolmen not marked in Ord. Surv. Maps Nos. 36 or 40, called by the people "The Pooka's Grave."

The Rev. P. Moore records the existence of a dolmen in this Townland. It was of the class known to him as "Giants' Graves," and measured about 14 feet long

and 4 feet wide, its sides secured by coarse upright flags, which were quite perfect and uninjured in 1849. It lay E. and W. The spot where it stood was considered a favourite haunt of the "Good People."

In a rock forming the bed of an adjoining stream, is a track somewhat resembling the impression of a human foot, which the people call the "Pooka's Footprint."

"Trans. Kilk. Archæol. Soc.," vol. i. (1849), p. 12.

8. In the Townland of Kilmogue, and Parish of Fiddown, is a dolmen marked *Leac-an-Scail* in Ord. Surv. Map No. 35. Tighe calls it *Lachan Scahl*, and Mason, *Leac-an-Sgail*. The name is derived from *leac*, a "flagstone," and scal a "champion". This name is

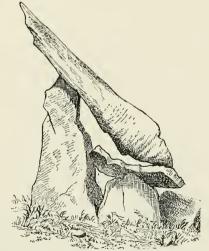
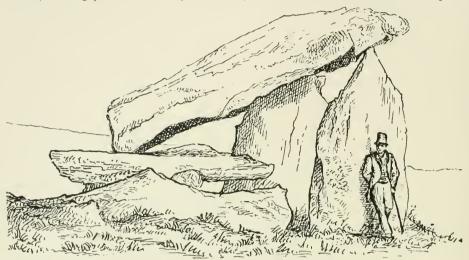


Fig. 385.—"The Leac-an-Scail," Kilmogue. Reduced from a large drawing by G. Du Noyer.

scal, a "champion." This name is also given to a dolmen in the County of Kerry.

Of this dolmen, which is the most remarkable in the County of Kilkenny, Tighe says: "The upper stone is 45 feet in circumference, and is supported before upon three upright stones, two of which are 12 feet high, and one 9 feet high, being further in. The other end rests on an horizontal stone, propt up by others, forming (with side-stones, in all nine) a small enclosure under the lower part



F16. 386. - "The Leac-an-Scail," Kilmogue. From a drawing by Wakeman in the Ord. Surv. Sketches.

of the great stone, which is 6 feet from the ground at the lower end, and 15 feet at the upper. It slopes to the S.S.W. The stones are all silicious breccia."

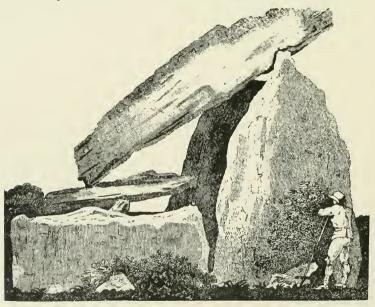


Fig. 387.—Leac-an-Scail, Kilmogue. From the "Archaologia," vol. xvi. pl. 18.

Mason, after describing other Kilkenny dolmens, says: "But the most

stupendous work of this nature, as well as the most perfect, is that called *Leac-an-sgail*... The vast altar-stone is 16 feet in length, 12 feet in breadth, and 2 feet 6 ins. in thickness, with an elevation from the E. of upwards of 15 feet... It is supported by high rocks, standing upright on their edges, in such a manner as to strike every beholder with awe and astonishment."

The Rev. James Graves says that the highest point of the covering-stone is 18

feet above the base of the monument.

As in the instance of the dolmen in the "Giant's Ring," at Ballinahatty in Down, a circular embankment, or *rath*, formerly surrounded the spot where this dolmen stands.

Eugene O'Curry, in the "Ord. Surv. Letters," describes this dolmen as "the finest he ever saw." He says that Mason (Sandys) "has well described it," and terms Tighe's account as "accurate also." It has been sketched at various times, and from several points of view, by G. Du Noyer, W. F. Wakeman, and others.

"Stat. Account of the County of Kilkenny," by W. Tighe, pp. 621, 624; "Trans. Kilk. Archæol. Soc.," vol. i. p. 129; O.S.L., Kilk., $\frac{14}{E.~6}$, p. 208, et seqq.; "Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey of Ireland," vol. i. pp. 364, 365.

IN THE BARONY OF KELLS.

I. In the Townland of Frankfort, and Parish of Killamery, was a dolmen not marked in Ord. Surv. Map No. 30, but a tumulus is indicated in Frankfort East.

Mr. Dunn records the fact that in a tumulus levelled at this place by a farmer shortly before the year 1849, "a cromleac" had been found, the scattered stones of which were then to be seen. It was in the centre of the tumulus, but it was not ascertained whether human bones had been found in it.

"Trans. Kilk., Archæol. Soc.," vol. i. (1849), p. 26.

IN THE BARONY OF IVERK.

I. In the Townland of Mullenbeg, adjoining that of Boolyglass on the S., and Parish of Fiddown, was a dolmen marked *Cromlech* in Ord. Surv. Map No. 35. There is also a rock marked *Carricktriss*.

There is a dolmen in this townland, and a large rock, which seem to be wrongly placed by the writer of the "Ord. Serv. Letters" in the townland of Boolyglass, or Bolliglas.

2. In the Townland of Garryduff, and Parish of Owning, was a dolmen marked *Leaba-na-con* in Ord. Surv. Map No. 35.

Eugene O'Curry describes this as an oblong enclosure, fenced in by large upright stones, three of which remained standing on the E. side, one on the West, and one prostrate near it. Four more of them had been thrown out of their places—three on the W., and one on the E. side. The people of the place asserted that the stones of this enclosure amounted to over fifty in number, forty years previous to

the Survey. The "grave" appeared to have been 3 feet 9 ins. wide. The highest of the standing stones was 5 feet by 4 feet 6 ins. broad.

At the foot of the hill was a large flagstone, 11 feet high, and from 5 feet 6 ins. to 2 feet wide, and 2 feet thick. The S. side of it was very rough, the other sides smooth.

Tighe mentions these monuments, and also stone circles near them. "On the upper part of the hill of Garriduff," he says, "is a place called Leibe-na-cuhn, or the Dog's Grave. It is somewhat hollow in the centre. There were sixteen stones, placed in four rows, but two or three have been taken away. The largest are about 6 feet high. The two centre rows were 4 feet distant, and had five stones each, close to each other. The outer rows were closer to the others, and had three stones each. There might have been more stones. A large stone lies against the ditch near it, and there were said to have been formerly stones covering these, and forming cells. Some burnt bones were said to have been found near the surface." "Lower down," he adds, "on the lands of Garriduff, were the remains of enclosures, or stones deposited by art, and about 300 yards lower down stands a tapering stone, 10 feet 8 ins. high, at the base 6 feet round, in thickness varying, from one side to the other, from 2 feet to 10 inches. In other places upright stones, as well as some ancient heaps, were seen."

"Stat. Surv. of the County of Kilkenny," by W. Tighe, p. 627; O.S.L., Kilk., $\frac{14}{E.~I}$, pp. 193, 208; "Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey," vol. i. p. 364.

3, 4. In the Townland of Owning, and Parish of Owning, were two dolmens, one of them marked *Druid's Altar* in Ord. Surv. Map No. 35. It is a short distance N. of Owning Church, and near it is a well called *Toberuna*.

Mason mentions the "cromleac" here as being "of the same construction as that at Carrick-na-gawg" (see below), but the altar-piece (so he calls the covering-stone) "had fallen from its position." The length of the covering-stone was about 9 feet 6 ins., its breadth 7 feet, and its greatest thickness 2 feet. It rested on three supporters in front and two behind, and sloped to the S.S.W. It had two side-stones, making a cell.

There was, he adds, another "cromleac" on the side of the hill, entire, but low, and filled up with loose stones.

"Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey," vol. i. p. 364.

5, 6. In the Townland of Ballyhenebery, and Parish of Owning, were two dolmens not marked in Ord. Surv. Map No. 38.

Eugene O'Curry mentions a prostrate dolmen at this place. It was supported, he says, by four or five upright stones, three of which were standing in their original position, the others being prostrate. The covering-stone was 16 feet long, 10 feet 4 ins. broad, and 3 feet thick.

It would appear that there was a second dolmen on the same townland, a mile E. of the one at Killonerry (see below). The length of the covering-stone was 15 feet, its breadth 12 feet 6 ins., and its thickness 3 feet.

7. In the Townland of Killonerry, and Parish of Whitechurch, is a dolmen not marked in Ord. Surv. Map No. 38.

The covering-stone of this measured 12 feet long, 9 feet 9 ins. broad, and 1 foot 6 ins. thick. The monument had partly fallen.

"Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey," vol. i. p. 364.

8. In the Townland of Raheen, and Parish of Fiddown, to the N.W. of Bessborough, and adjoining on the W. the Townland and Wood of Tinnakilly, is a dolmen not marked in Ord. Surv. No. 39.

This is mentioned as a "small cromliagh."

"Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey," vol. i. p. 364.

9. In the Townland of Tubbrid, and Parish of Tubbrid, is a dolmen not marked in Ord. Surv. Map No. 39. Saint Bridget's Holy Well is in the same Townland.

It is stated that there was a "cromliagh" on this townland.

"Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey," vol. i. p. 364.

10. In the Townland of Licketstown (written by Mr. Moore, "Lickerstown," and in Irish, *Baile-au-Cheadaich*), and Parish of Portnascully, N. of Moonveen, in a bend of the River Suir, is a dolmen not marked in Ord. Surv. Map No. 45.

"The grave," says Mr. Moore, "is about 25 feet long, and 10 or 12 feet wide. It was lined by huge flags, and at the head and foot were enormous stones, about 16 feet in height. On one of these there were some indentations." The grave was opened about the year 1790, and a skeleton of gigantic proportions and a "huge sword" said to have been found (see the tradition about this dolmen, infra).

"Trans. Kilk. Archæol. Soc.," vol. i. (1849).

a dolmen. Carrick-na-Gawg is a mountain between the Barony of Kells and that of Iverk. The meaning of the name is "Rock of the Cleft, or Chink."

"The covering-stone of this dolmen measured 13 feet long, 6 feet 9 ins. broad, and 1 foot 9 ins. thick. It was supported by four other bare stones, placed upright. Its elevation from the ground was about 5 feet." Mr. Sandys adds that "it seems to have been one of that description called cairns, composed of heaps of loose stones, piled together, which are so frequently found on the tops of mountains in Ireland."

"Stat. Account of the Union of Fiddown," by J. Sandys, in "Mason's Survey," vol. i. p. 363; O.S.L., Kilk., $\frac{14}{E_L}$, p. 208.

IN THE BARONY OF IDA.

I. In the Townland of Brownstown, between Inistioge and Rosbercon, and Parish of Listerlin, is a dolmen not marked in VOL. II.

Ord. Surv. Map No. 37. It lies on the E. slope of the hill, near the wood of Brownstown.

Mr. Moore describes this dolmen as "a deep trench, about 12 feet long by 4 feet 6 ins. wide, lying nearly N. and S. in a level field, unaccompanied by any barrow or artificial elevation of the ground. Its bottom is carefully floored, not flagged, but the clay trodden or beaten hard. The sides and ends were lined with large upright stones or coarse flags. The monument was partially destroyed by the farmer, who used the greater portion of the side-flags to pave the yard around his dwelling. Nothing was found during the excavation. The grave had been uncovered within the memory of man."

"Trans. Kilk. Archæol. Soc.," vol. i. (1849), pp. 11, 12.

2. In the Townland of Glencloghlea, and Parish of Shanbogh,

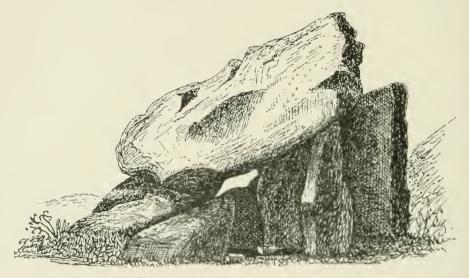


Fig. 388.—Glencloghlea (Gleann-na-cloiche-leithe). From a drawing by the Rev. James Graves.

is a dolmen called "Cloiche-Leithe," about a mile and a half W.S.W. of Rosbercon, not marked in Ord. Surv. Map No. 37.

The Rev. James Graves states that this dolmen measured 8 feet in height, from the surface of the field. The supporting-stones were five (? three) in number, the tallest of them being 5 feet high, 5 feet wide, and 1 foot thick. These were at the N. end. At the S. end the covering-stone rested on a third stone, which inclined very much to the N. The covering-stone measured 9 feet 10 ins. long, 7 feet wide, and, on an average, 3 feet thick. Two of the uprights were slate, a third was granite, as, also, was the covering-stone. The latter sloped towards the S., at an angle of 40 degrees from the horizon. It was difficult to stand on its sloping and uneven surface.

"Trans. Kilk. Archæol. Soc.," vol. i. (1850), p. 129.

Note.—In the Demesne of Mr. Neville, at Marymount, was a dolmen, described as one of the smallest of its class. The

covering stone measured 27 feet in circumference, and was supported on three others. The two front supporters were 8 feet high, and on these, when it was described, it still rested. The hinder one had slipped away and been broken. All the stones were limestone, and beneath there was a flat stone, under which it was said bones had been found.

COUNTY OF WICKLOW.

IN THE BARONY OF RATHDOWN.

1. In the Townland of Tonygarbh (? if Toneygarrow), and Parish of Powerscourt, was a dolmen not marked in Ord. Surv. Maps Nos. 3 and 7; called locally "The Giant's Grave."

O.S.L., Co. Wicklow,
$$\frac{14}{G_{*,21}}$$
, p. 9.

This monument is described as "a place 6 yards long, and 2 yards broad."

2. In the Townland of Parknasillage or Barnasilloge, and Parish of Powerscourt, was a dolmen marked *Cromlech* in Ord. Surv. Map No. 7. It is W. of Knocksink Moat, half a mile W. of Enniskerry, and N. of the main road through the Townland. It is called locally "The Giant's Grave."

"There is," says O'Curry, "a perfect, unmutilated cromleac here." "There is first a square enclosure measuring 36 feet in length by 18 feet in breadth. Ten of the large stones which formed this enclosure remain, but those on the S. side have been removed. Immediately within this is a small, circular enclosure, unbroken, and consisting of ten large stones, some laid flat but deep in the ground, others set on edge. In the centre of this circle is the *cromleac*, consisting of an horizontal flag, 5 feet square, and 1 foot 2 ins. thick, supported by three rude stones placed on edge, lengthwise—one on the N., one on the S., and one on the E., each 5 feet long and 2 feet 2 ins. high. The space between the side-stones is 2 feet, and thus a cavity is formed, 5 feet long, 2 feet broad, and 2 feet high. It is open at the W. end, but completely closed at the E. end by the supporters.

3. In the Townland of Glaskenny, and Parish of Powerscourt, is a dolmen marked *Cromlech* in Ord. Surv. Map No. 7. It lies N. of the Glencree River, and has the Townland of Lackendarragh on the W. The country-people call this dolmen "Donnchadh Dearg," that is, says O'Curry, "'The Red Donogh,' but why, no one knows."

"There is," says O'Curry, "a very fine *cromleac* in ruins at this place. The horizontal stone measures 10 feet long, 8 feet broad, and 2 feet thick. It lies with its end on the ground, reclining against the two eastern of six upright stones, which

at one time had supported it. The upright stone at the W. end is 10 feet high above the surface of the ground. The stones at the E. end are about 5 feet high.

O.S.L., Co. Wicklow,
$$\frac{14}{G.21}$$
, p. 10.

IN THE BARONY OF TALBOTSTOWN UPPER.

r. In the Townland of Baltinglass East, and Parish of Baltinglass, half a mile S.E. of Baltinglass, marked *Remains of Cromlech* in Ord. Surv. Map No. 27.

IN THE BARONY OF NEWCASTLE.

I. In the Townland of Parkmore, and Parish of Derrylossary, was a dolmen marked *Giant's Grave* in Ord. Surv. Map No. 24. It is to the N.E. of Moneystown Hill, and about six miles W.N.W. of Wicklow.

IN THE BARONY OF BALLINACOR NORTH.

1. In the Townland of Ballintombay Upper, and Parish of Knockrath, is a dolmen marked *Giant's Grave* in Ord. Surv. Map No. 29. It is near the bed of a stream, and is S.E. of the top of Kirikee Mountain.

IN THE BARONY OF BALLINACOR SOUTH.

1. In the Townland of Mongnacool, and Parish of Ballykine,

is a dolmen not marked in Ord. Surv. Maps 34 or 35. It is called "Labbanasigha" in Irish, and in English, "The Fairy's Bed." It lies on a slight eminence in a boggy flat, on the E. slope of the high ground between Ballynaclash and Aughrim.

Mr. Kinahan describes this monument as being constructed "in an oval mound of clay, measuring 30 feet long, and 20 feet wide." The chamber lies along its length, this longer axis being in a direction N.N.W. and S.S.E. The chamber itself measures 21 feet long, 5 feet wide, and from 3 to 5 feet high.

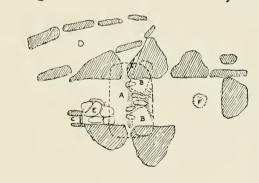




Fig. 389.—Mongnacool. From plan and section by Mr. Kinahan. A, cover-stone, slipped off; B, a second one, under it, broken in two; C, small chamber; D, supplementary chamber; E, a layer of flags; F, charcoal; G, soft yellow clay; H, hard white clay; K, yellow clay; L, hard brown clay; M, broken flags, stones, and clay; N, confused mass of stones and clay.

At one end of the main chamber is what Mr. Kinahan terms a small parallel

chamber, or rather, as it may be, perhaps, more properly described, a cist within the larger structure.

Over the main chamber one roofing-stone was in place, and another Mr. Kinahan regards as possibly so, having been placed "over what was perhaps the entrance." "The mound had been originally surrounded by flagstones on edge, some of which remained."

An exploration of the interior of the chamber resulted in the discovery of charcoal, but no bones. The detailed results of the exploration may be gathered from the explanatory section which is subjoined, and which is copied from Mr. Kinahan's paper.

Mr. Kinahan is of opinion that this structure is allied to those in the Aran Islands in Galway.

Journ. R.H.A.A.I., 4th Ser., vol. v. (1879-82), pp. 253-257; Proc. R.I.A. (1879), p. 161, and pl. ix.

IN THE BARONY OF ARKLOW.

I. In the Townland of Castletimon, and Parish of Dunganstown, is a dolmen marked *Cromlech in ruins called the Long-Stone* in Ord. Surv. Map No. 36. It is near Castletimon Church to the N. The next Townland to the S. is called Brittas.

This must be the Brittas dolmen described by Mr. Tuomey, and by Eugene O'Curry. When the former saw it the covering-stone had been thrown off. It (i.e. the covering-stone) was of circular form, and measured 14 feet by 12 feet 6 ins., this measurement "including the thickness of one of its curved edges." Its weight was estimated at about 26 tons. Four pillar-stones had formed its supports. Of these the first measured 6 feet 9 ins. "in slant height from the grass." Its breadth was from 3 feet to 1 foot 2 ins. The second, also standing, measured 5 feet in height. The third had a height of 7 feet 5 ins., and a breadth of 5 feet 7 ins.

In O'Curry's notice of this monument, he says that the covering-stone is 3 feet thick, and the space enclosed under it 8 feet by 4 feet.

"Trans. Kilk. Archæol. Soc.," vol. iii. (1854–58), p. 137; O.S.L., Co. Wicklow, $\frac{14}{G.\ 21}$, p. 283. In the Barony of Shillelagh.

1. In the Townland of Moylisha, and Parish of Moyacomb,

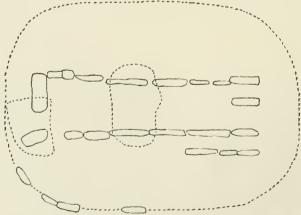


Fig. 390.—"The Labba-na-Sigha," Moylisha. From a plan by Mr. Kinahan.

is a dolmen marked *Labbanasighe* in Ord. Surv. Map No. 42. It is indicated by a circle of six stones, with one in the middle.

This must be the dolmen mentioned in the "Ord. Surv. Letters" under Moyacomb. It is simply noticed as a "Pagan Grave," bearing the name, not of Labbanasighe, as in the map (with which we may compare the name of the Mongnacool monument), but of Leaba-na-Saighe, explained Lectus Canis Venaticæ, "where it is supposed a famous huntsman of old interred a favourite greyhound."

O.S.L., Co. Wicklow, $\frac{14}{G.21}$, p. 110.

COUNTY OF WEXFORD.

IN THE BARONY OF GOREY.

*1. In the Townland of Cummerduff, and Parish of Crosspatrick, is a structure not marked in Ord. Surv. Map No. 2. It is locally called the "Quaker's Hut."

I am not sure whether this structure is entitled to be considered a genuinely ancient monument or not. If it is so, it belongs to the class of chambered tumuli. A passage, running E. and W., terminates at its inner or E. end, in a circular structure. The length of the passage is 20 feet 5 ins. and its width only 15 inches. The diameter of the circle to which it leads is 16 feet. In the centre of the circular chamber is a pit 6 feet in diameter.

To Mr. Kinahan, who describes it, it appeared never to have been used as a habitation; but, as far as the question of antiquity went, it bore, he thought, an ominous resemblance to kilns, used for drying flax in Ulster. There were traces of a fire having been lighted in the pit.

Near this anomalous structure there were others, and in the vicinity of Cummerduff some fine urns (one of them said to have been nearly 2 feet high) had been found, as well as cists, etc. The place has been described by Mr. Kinahan in the Proc. R.I.A.

IN THE BARONY OF BANTRY.

1. In the Townland of Bree (Brea), and Parish of Clonmore;

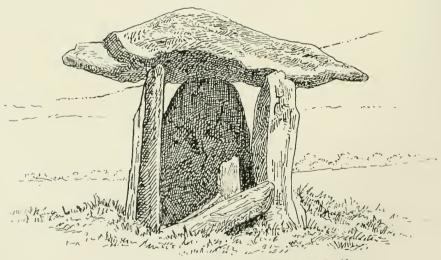


FIG. 391.—Bree, looking W. From a drawing by G. Du Noyer.

near the River Slaney, to the W.; about four miles and a half S.

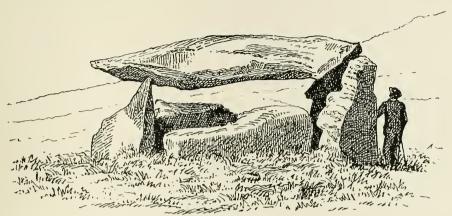


Fig. 392.—Bree, looking N. From a drawing by G. Du Noyer.

of Enniscorthy, is a dolmen not marked in Ord. Surv. Maps Nos. 25 or 31.

The sketches which I am able to give of the dolmen on "Brea Hill" are copies from those in Mr. George Du Noyer's collection of drawings in the R.I.A.

IN THE BARONY OF FORTH.

1. In the Townland of Saint Vogue's, and Parish of Carn, a quarter of a mile

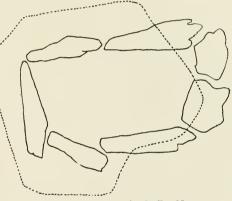


Fig. 393.—Bree. Plan by G. Du Noyer.

S. of the chapel and well of Saint Vogue, on the extreme point of the promontory of Carnsore, was a dolmen marked *Giant's Grave* in Ord. Surv. Map No. 32.

At the time of the Survey the remains of this monument were "nearly effaced." O.S.L., Co. Wexford, $\frac{14}{G.\ 17}$, p. 297.

The foregoing catalogue of Irish megalithic monuments is formulated under three heads: first, the dolmens properly so called according to my definition,† presently to be given; second, the chambered tumuli, also according to definition, differing from

the dolmens in the essential particular of the construction of the roof, but connected with them in certain details of plan and section, and, presumably, in purpose. To these, in spite of my best efforts to avoid the necessity of doing so, I have been obliged to add a third division, the notices of which on the list I simply desire to be regarded as indicative. Under it are comprised certain monuments marked in the Ordnance Surveys by various names, some of which are no longer extant, some of which I believe may be dolmens, but have been unable to visit, and which I therefore commend to the attention of those with antiquarian tastes who may happen to be within reach of them.†

The total number in each of these divisions is as follows:-

				Dolmens.		Chambered Uncertain.			in.	Total.
Cork					1	tumuli.				So
7.7	• • •	• • •	• • •	71	• • •	_	• • •	9	• • •	26
Kerry Limerick	• • •	• • •		22	• • •		• • • •	4	• • •	
		• • •	• • •	13	• • •	_	• • • •			13
Tipperary	* * * *	• • •	• • •	19	• • •	_		3	• • •	22
Waterford		• • •	• • • •	15		_		_		15
Clare	• • •		• • •	94	• • •	_	• • •			94
Totals for Munste	r			234		0		16		250
										_
Galway	• • •		• • •	30	• • •	_	• • •	2		32
Mayo	• • •	• • •		45	• • •	3		2	• • •	50
Sligo	• • •	***	• • •	163	• • •	2	• • •	10	• • •	175
Leitrim		• • •	• • •	4	• • •			I	• • •	5
Roscommon				6	• • •		• • •	I	• • •	7
						-		_		
Totals for Connau	ght	• • •	• • •	248	• • •	5	• • •	16	• • •	269
Cavan				12				_		12
Tyrone				10				6		16
Fermanagh				29				I		30
Donegal				82		_		14		96
Londonderry				22				i		23
Antrim				29						29
Down				19		2		3		24
Monaghan				14		1		3		18
Armagh		• • •		10		2		1		13
										- 3
Totals for Ulster				227		5		23		261
Louth				4				2		6
Longford				3						3
Meath				2		39		_		41
Westmeath				_		37		3		3
Queen's Cour	nty			3		-		_		3
King's Count						_		_		ő
Dublin				14				I		15
Carlow				6						6
Kildare						1				1
Kilkenny				28						28
Wicklow			• • •							9
Wexford		• • •		9			• • • •		• • •	3
11 CX1010	• • •	•••					• • •		***	3
Total for Leinster						40			• • • •	118
rotal for Leinstei	* * * *	***		71		40		7	• •	110
Grand totals				780		50		68		898
				•		9				

This list does not include any cairns or tumuli which are not

[†] These uncertain monuments are marked * in the list.

known to contain or to have once contained a dolmen or a chamber, nor any stone circle or other stone-setting unless it surrounds one of these monuments, or was otherwise attached to it. Pillar-stones are also omitted unless in proximity to a dolmen or chamber.†

The venerated natural rocks, the menhirs, the circles, or other settings of stones, the great unexplored cairns, as well as the cairns and earthen tumuli which, having been explored, have been found to contain comparatively small cists, with urns, etc., together with cists uncovered by cairns and their contents, are not contained in the list. The chambered tumuli, such as those at Newbliss, Annaclochmullin, Slieve na Callighe, New Grange, and Dowth, have been added because their structural details prove them to be connected with the dolmens proper, presumably in relation to an identical cultus of the dead shared by their respective builders. The ornamental details which occur in some of them, and which belong to the Bronze and Iron Ages, afford points of comparison with early decoration in the Mediterranean, thence transferred by northern trade routes to the shores of the Baltic, the German Ocean, and the English and Irish Channels, and belong to a new epoch in archæology, in and through which, however, dolmen-building survived.

[†] I may here add, however, the following examples of circles and pillar-stones which, amongst others, have come under my notice. Other examples of circles in Ireland will be found in the second and comparative portion of this work.



Fig. 394.—Circle at Caugh Hill, near Banagher, Co. Londonderry. From an oil painting by G. Petrie.

This circle is one of several still remaining on the mountain. In the "Life of George Petrie," by Dr. William Stokes, mention is made of this picture at p. 19: "The tall stones of the circle raise their dark forms against a saffron sky,"—the effect impressively indicating "the solitude and silence" of the spot on which they stand. According to the tradition of the peasantry of the district, these circles are the tombs of the chiefs slain in a great battle fought here, from which the mountain has received the name of Caah (i.e. Cathach), or Battle Hill. This same word "Cathach" (pronounced Caah or Caugh) was the name of the famous relic of Saint Columbkille.

In searching for dolmens in the County of Cork, I met with a small and very curious one (fig. 395) standing on high ground at Caolkil. It is oval rather than circular, measuring 7 ft. 8 ins.

from N. to S., and 10 feet from E. to W. Nine feet to the N.E. of it stands a dallan 7 ft. 6 ins. high and 5 feet broad. Fifteen feet to the W. of this stood another, which has fallen, having

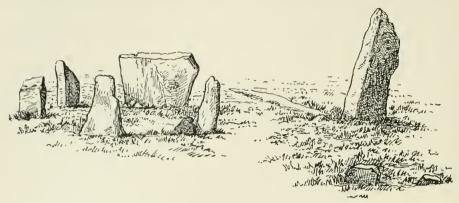


Fig. 395.—Circle at Caolkil, Co. Cork. From a sketch by the Author.

broken from its base. When upright it must have been 17 ft. 9 ins. high, and 3 ft. 4 ins. broad. Twenty-seven feet S.E. of the circle were the remains of two long stone graves or cists which had been apparently covered by a cairn.

The next three examples I subjoin are also in the County of Cork.



Fig. 396.—Circle at Knuck-na-Nyrk, near Kilmurvy. It is 11 feet in diameter, and one of the stones has two hollows in the upper surface. From a drawing by J. Windele.

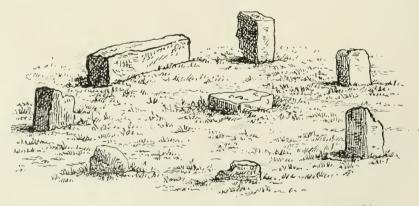


Fig. 397.—Circle near Lettergorman. From a drawing by J. Windele.

That at Lettergorman has a central stone like the "domrings" of Scandinavia, which see *infra*. That called Dallan-crom-na-thittim is at Knocknakilla, and is itself called also the "Cill."



FIG. 398.—"Dallan-crom-na-thittim." From a sketch by J. Windele.

The diameter is 9 feet, and the pillar-stone, called "Crom," from its slanting position, is 12 feet S. of it. The stones of the circle are about 4 feet high.



Fig. 399.—Circle at Dromiskin, County Louth. Etched from a photograph. The fourth circle is at Dromiskin, in the County of Louth.



Fig. 400.—Pillar-stone at Bawnatoumple, Co. Cork. From a sketch by the Author.



Fig. 401.—The "Long-Stone," Furnace, Co. Kildare.

The first of the three monoliths which I also subjoin is in the vicinity of Gougann-Barra in Cork. It stands on high ground at Bawnatoumple. It measures 19 ft. 8½ ins. above ground, by 3 ft. 6 ins. wide, and 1 foot 6 ins. thick. At a distance of 500 or 600 yards S.W. of it stood a



Fig. 402.—Pillar-stone at Doonfeeny, Co. Mayo. From a drawing by W. F. Wakeman.

second, which has fallen and is broken into three pieces, measuring respectively 14 ft. 6 ins., 9 feet,

second, which has failed and is broken into three pieces, measuring respectively 14 it. o his., y feet, and 5 feet.

The second monolith stands in the centre of a rath in the Demesne of Furnace, or Forenaghts, in Kildare. It is a four-sided pillar of granite, 20 feet in height, and is mentioned in the Survey of the County of Kildare by T. Rawson, p. iii.

The third monolith is at Doonfeeny in Mayo. It was no doubt of pagan origin and unsculptured, before the Christian cemetery was formed around it, and the interesting cross carved on its face. It measures about 14 feet in height.



Giants and Dwarfs building the Dolmens of Drenthe; Picardt's representation of the popular tradition.

PART II. THE DOLMENS AND CHAMBERED TUMULI.

CLASSIFICATION, CONSTRUCTION, AND DISTRIBUTION.

The definition which I propose for a dolmen is somewhat wider in its scope than archæologists have hitherto adopted; but it has been, as it were, forced upon me, owing to the difficulties I have found in drawing any line of demarcation between what Irish antiquaries have termed *Cromleacs* and those they have termed *Giants' Graves*, between the more square and upstanding monument, that is to say, roofed with a single stone, on the one hand, and the trough-like monument on the other, roofed with a succession of slabs. I had, indeed, commenced my work by making this very distinction between what the French call the *dolmen carrée* and the *dolmen allongée* or *allée converte*; but experience has caused me to re-write my pages for reasons which I will presently demonstrate.

A dolmen, then, is a covered structure formed of slabs or blocks of stone in such manner as that the stone or stones which constitute the roof are supported in place by the upper points or edges of some or all of the other stones which, set on end or edge, enclose or partially enclose an area or vault beneath.

A chamber differs from a dolmen *constructively*, in the circumstance that the roof is not formed by a single slab spanning the vault, but by successive layers of slabs approaching each other as they rise, the lowermost resting on the tops of the perpendicular side stones which surround the vault, and the uppermost supporting the large flat slab or slabs which, laid across them, serves at once to close in the central space so as to form the apex of the dome, and, by its weight, to consolidate and keep in place the overlapping layers which support it.

Over structures so formed a superincumbent cairn or mound was essential in order to make the structure impervious to the elements, and, by pressure from without, to give strength to the whole. In cases where the roof of the vault or passage has fallen in, the tumulus, on being explored, is found to contain two parallel lines of slabs or walls, often compared by explorers to a sewer, the space between them being filled with small stones like paving-stones, which once formed the layers of the roof.

The varieties in ground-plan exhibited by some of these structures are exceedingly curious, and serve to differentiate them from the dolmens. Nevertheless, they have points in common with the latter, and sometimes are found in close association with them, as near Lough Arrow in Sligo, and in Achill Island in Mayo. From a constructive point of view, the magnificent dolmen of Labbacalle, near Fermoy, would at its higher and west end approach the chamber class, since the roofing-stone does not actually rest on the side stones, but on two, probably once on three, narrower stones placed respectively on the terminal upright slab and each of the side ones. Again, in the case of the monument at Annacloghmullin, in Armagh, the roof construction is that of a chamber, while the plan is precisely that of a typical dolmen.

It is impossible, then, to separate these structures from the dolmen series, and in the sequel I hope to show that a similar cultus was provided for in the one class of monument and in the other. The chambers bear witness, however, to an architectural departure which seems to mark the limit where the "rude stone" roof gave place, not, I would say, to the embryo arch, as a discovery made by the insular natives, but to a barbaric attempt to

copy in unhewn materials some elaborate models of hewn-stone domes and arched vaults which had become known to the builders through contact with the cultivation of the Mediterranean or the Black Sea coasts,—the tomb of Atreus, for example, or the vaulted chamber tombs of Etruria. The sculptures they contain may be rude copies of decorative art in the same districts.

Meanwhile, to return to the dolmen, I believe that, in common with the chamber, but in distinction from the cist, it was the intention and object of the builders that access should be had to it from without. At the same time I think that it was invariably surrounded by a cairn or mound, but that sometimes so slight was the envelope, that it only reached the edges of the cap-stone. Sometimes, again, it was covered by an immense tumulus, the result, in some cases, of the veneration of ages, such a veneration as brought together the vast pile of stones which surrounds the holy-well in Glencolumbkille in Donegal; in others, of the labours of the thousands of hands which assisted in the construction of the original tomb.

It was the opinion of Mr. John Bell of Dundalk, an antiquary of no mean repute for painstaking and observation early in this century, and who was said to have disinterred over sixty "cromleacs" from cairns in Ulster, that all dolmens were covered by tumuli—a view which, as I need hardly say, has commended itself to English archæologists, and found a specially strong exponent in the late Rev. W. C. Lukis.

That dolmens answering to my definition have been entirely denuded of their envelope, and left standing in their simple nakedness, with hardly a stone of the cairn which formerly covered them about them, and that within the last few years, is certain. Monuments marked *cairns* in the earlier Ordnance Survey, and where then no trace existed of the megalithic structure, will in several places have to be marked *dolmens* in subsequent surveys, since the cairn has been removed and the structure exposed to view. Of this fact a good example occurs in the Townland of Leana in Clare.

Again, the magnificent monument, as it must have been, at Carnbane in Armagh, the destruction of which is more to be deplored than that of any other known to have existed, was brought to light from its cairn between the years 1744 and the end of that century, when it was removed for building purposes.

Large tumuli, however, such as these, were not essential to the dolmen structure. All that was necessary was that the walls of the cell or crypt should be impervious to the elements and to wild animals. Indeed, that no more than this was aimed at by the constructors of those of the type which is almost universal in Munster, is shown by the proximity of the peristyle, or outer range of stones which girdled the monument, to the sides of the main structure itself. This outer range evidently formed the basement or outer retaining wall, within which and between which and the side slabs of the dolmen a kind of hedging of stones, bound together probably with clay and turfs, was raised to a sufficient height to meet the overlapping edges of the covering-stones, and so fill up the interstices between the side slabs which supported the roof. In the case of the Labbacalle, where, on the north side, this filling between the ranges has not been removed, its effect in closing out the light from the interior of the structure may be observed even at the present day; and in the case of the Giant's Grave at Drumcliff, in Sligo, Col. Wood-Martin's plan shows that between the outer lines and the walls of the structure the filling was still in place. Now, since the peristyle marked the outmost circuit, in almost every case, of monuments of this type, it follows that the monument was not buried in a mound, nor indeed is it possible to conceive (had such been the case) what could have become of every stone of the superstructure in situations where, for example, the dolmen stood on a mountain-side, or on a limestone plateau, or in the middle of a bog, in any spot, indeed, to which access was difficult—far removed too from stone dwellings or fences or roads for which the material might have been requisitioned.

I have been speaking here more particularly of the long wedge-shaped dolmens which are particularly plentiful in Munster, and have endeavoured to account for my view that, in the majority of cases at least, the envelope of the dolmen did not reach higher than the edges of the cap-stone, or, if it did, only surmounted it by a slender covering of stones and turf. I come now to another type of monument, where the dolmen is surrounded by a circle, as in the examples common on the north-west coast of Antrim, at Carrowmore, and elsewhere. Col. Wood-Martin has drawn a distinction between two types of these dolmen-circles, namely, (a) those in which the circle is subordinate in size to the dolmen,

and (b) those in which the dolmen is subordinate in size to the circle. In the latter case the so-called dolmen may sometimes be merely a closed cist, to which there was no access from the side of the mound. In both cases the circle or circles—for there were frequently concentric ones—formed, I feel sure, the basis and enclosing wall of a cairn or earthen tumulus which covered the entire monument, the cap-stone of the dolmen being enveloped to a depth of several feet at least below the apex of the original pile.

Although, however, this type differs so materially from that of the wedge-shaped monuments with their parallel outer ranges of stones, there are points of construction common to both, as well as forms which hold an intermediate place. A reference to several of the plans of the Carrowmore group † will show that the interior crypt was not intended to be absolutely closed, but that, as in the case of the dolmen of Yr Ogof in Wales, of many Portuguese examples, of the covered dolmens of Brittany,‡ and of the chambered tumuli of Great Britain and Ireland, a creep or passage communicated with the edge of the mound.

There is one example, owing its state of preservation to the

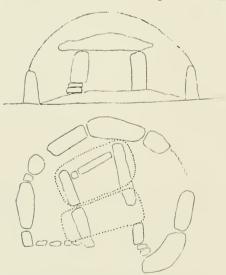


FIG. 403.—Plan and section of dolmen in tumulus at Brane. By W. C. Lukis and W. C. Borlase.

sandhills which covered it, at Streedagh in Sligo, planned by Col. Wood-Martin, which affords an excellent illustration of the combination of types, a wedge-shaped dolmen with its peristyle being surrounded at a distance nearly equal to its length by a circle of stones, which seems, when perfect, to have been double and concentric.

In the Land's End district of the county of Cornwall, on the farm of Brane, and in the Parish of Sancred, a locality in which Irish types are pre-

valent, I discovered many years ago a monument of the

[†] E.g. Nos. X., XXXVII., and Col. Wood-Martin's R.S.M., p. 78. ‡ For plans of these, see infra. § p. 128, supra.

wedge-shaped type surrounded by a circular peristyle in close proximity to it, and the little conical mound over which was still perfect. It was one of many others which had been removed, and it owed its preservation to its fitness for a goathouse. In the circumstance of the peristyle being circular while the structure within is wedge-shaped, it occupies an intermediate position between the two types to which I have just referred. It affords an excellent example of the truth of my contention that where a peristyle is found to be in close proximity to the structure, the covering of the latter was comparatively slight.

Having now seen reason to draw a distinction between dolmens of the long-oblong, or wedge-shape, and the dolmen-circles, I return to the question whether a further distinction should be drawn between the former class of monument popularly known as the "Giant's Grave" in Ireland, and the structure for which the name of "Cromlech" has been specially reserved, and which consists, as at present seen, of a single stone raised on the summits of two or more pillar-stones, forming the end and sides of a more or less irregular vault below, almost invariably open at one end.

Such a distinction has, I may say, been drawn by every Irish antiquary who has dealt with the subject, as well as by many authorities in Scandinavia, France, and Germany, and it requires, therefore, some assurance, which I would mingle with all deference to the opinion of those who have preceded me, to meet and attempt to controvert an opinion so long held and so frequently asserted.

At first sight, certainly, no two monuments could seem more distinct than the "Cromlech" and "the Giant's Grave." We need not go further than Ballymascanlan, near Dundalk,† to find a typical specimen of each at a distance of only about 80 yards apart in one and the same field. The "Cromlech" is the most lofty in Ireland, consisting of a huge granite boulder poised in an inclined position upon the points of three blocks, two of which are fixed in the ground, while the third is wedged into place by the weight of the cap-stone and its impingement on one of the pillars, and at its lower point on two small stones in the soil. Viewed from the "Giant's Grave," the whole structure looks like a gigantic fellow in grey bending beneath the weight of a huge and well-filled sack, which he is making off with away from you

[†] See pp. 305-307, supra, "Proleek."

towards the west—an appearance which gave rise to its name, the "Giant's Load."

The "Giant's Grave" at the same place presents, on the other hand, an equally excellent example of the long wedge-shaped structures which have been compared to troughs, their sides lined with flags, slabs, or blocks, and the space between covered over with from two to five proportionately large roofing-stones.

Now, in the case of these latter monuments, it may be laid down as a rule, in the case of the Irish examples, that one end is higher than the other. That end is generally the west end, and if you climb upon the monument at the other extremity, and the cap-stones are all in place, you will find yourself ascending step by step until you stand on the summit of the block which covers the higher end. It is at that end that the structure is most consolidated, both the pillar-stones and the end stone, as well as the roofing-stone, being the largest superficially, and the most ponderous, and, consequently, the most difficult to throw down or carry away.

Supposing, now, that the smaller stones composing the lower end were to be removed, a structure would remain which in ground-plan and general appearance would be a "Cromlech," in the sense in which antiquaries have used that term as distinct from a "Giant's Grave." Take the monument at Brenanstown, in the county of Dublin.† It is called a "Cromlech," but its ground-plan shows it to be the ponderous western end of a "Giant's Grave," the eastern end of which dwindled away into insignificant proportions, and the stones of which have been removed. Take, again, the monument at Haroldstown, in the county of Carlow.‡ That is also, to all intents and purposes, a "Giant's Grave;" but take away all the stones except the northern covering-stone and its three supporters at that end, and you have a "Cromlech," the roofing-stone of which would probably have toppled over for lack of support at its southern end, and would be resting in an inclined position against the two uprights (A and F in the plan).

It comes to this, then, that the "Cromlech," hitherto technically so called, is the more megalithic portion of the "Giant's Grave," also technically so called, and that both types, despite the differences in their appearance in the condition in which we now

find them, belong to one and the same class of dolmen, originally of elongated form, in all probability surrounded by a peristyle either parallel to the sides, or circular, or oval, and closed in, it may have been, up to the edge of the roofing-stone, but, in the case of the larger structures especially, I think no higher.

The constructive details of these dolmens at their higher

extremities next call for Sometimes, as remark. in the striking example called Kit's Coity House in Kent, only four stones are left, consisting of two side stones on edge or end, a transverse stone, also on edge, crossing the centre of the space between them, and a roofingstone covering the whole. An exactly similar arrangement is observable at Brenanstown and Haroldstown, but in the latter cases the presence of other portions of the structure prove clearly what the intention

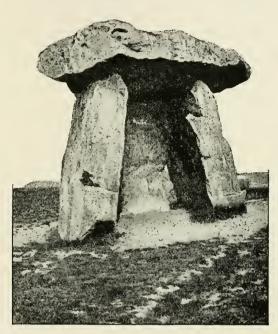


Fig. 404.—"Kit's Coity House," Kent.

was, namely, to leave on the one side of the transverse stone an open outer crypt or porch, and to construct on the other side of it a chamber or cell, of the sides of which the inner ends of the side stones formed part.

In examples where the entire sides of a monument were formed each of an immense slab, as is frequently found to be the case in Clare, the transverse stone was placed at a short distance within the ends of the slabs, so as to form the portico, over which the cap-stone protruded; and such an arrangement is in some cases observable also in the case of the terminal stone at the opposite end of the monument. For examples, I refer to the dolmens at Ballyganner-South, Leana, and Tully Commons.†

Sometimes, again, the transverse stone crossed the entire structure, the side slabs of the cell within and of the porch

without being set at right angles to the ends of its faces. For examples of this, I would refer to the dolmens at Ardaragh in Bear Island (Cork), at Burren (Cavan), and at Gortakeeran (Sligo).†

The likeness which, when viewed from the open side, this arrangement of stones presents to a porch or portico, has been frequently noticed. A review of the plans which I have taken myself, in addition to other considerations, causes me to feel sure that porticoes they in reality and designedly were; that they were always intended to be open—that is to say, that they were never entirely enclosed in a mound and inaccessible from without; and that some means of communication, either through, or under, or at the side of, or above the transverse stone, was always provided for with the inner vault or cell.

Rude as they are, they may be as truly called porticoes to the cell within, as were the ant α or $\pi a \rho a \sigma \tau \acute{a} \delta \epsilon_s$ to the cella of the Romans and to the $\nu a \acute{o} s$ of the Greeks. To those points of similarity between shrines and dolmens I shall recur later on.

From a constructive point of view, dolmens may be divided into two classes: (a) those in which the formation of a regular and symmetrical vault or crypt, was the first consideration, and the question of the size of the roofing-stones, although they were always massive, subordinated to it; (b) those in which the performance of a colossal feat of strength in raising and placing in position the most enormous block for a roofing-stone obtainable was evidently the first consideration, and the symmetry of the crypt beneath, which would of necessity be liable to be upset during the process, a secondary one.

All dolmens covered in with slabs or stones of moderate but sufficient size, are examples of the first class. Examples of the second class are those at Mount Browne (Carlow), Mount Venus, Howth, and Kiltiernan (Dublin), and Ballymascanlan (Louth).

The dolmens of Labbacalle in Cork, and those of Haroldstown and Brenanstown in Carlow and Dublin, and "the Labby" at Carriglass near Lough Arrow in Sligo, stand in an intermediate position, the roofing-stones, especially in the latter case, being very massive, while the chamber beneath is symmetrically formed.

[†] See pp. 41, 201, 180, supra.

The following are the estimated weights of some of the larger covering-stones:—†

						tons.			
Kernanstown, i.e. Browne's Hill, or Mount Browne (Carlow)									
Carriglass (Sligo)	••			• • •		72			
Howth Demesne (Dublin)	•••	•••	• • •	•••	•••	70			
Woodtown, or Mount Venus (I	Oublin)		•••	•••	•••	44			
Kiltiernan (Dublin)			•••	•••		43			
Brenanstown (Dublin)				•••		38			
Ballymascanlan or Proleek (Lo	uth)			•••	•••	30			
Labbacallee (Cork)						24			

At Kernanstown, Howth, and Woodtown, it can scarcely be said that a chamber exists at all, the incumbent block being in each case supported by a pillar or pillars on one side only, and on the other or lower side, resting, in the case of Kernanstown on low stones, and in those of Howth and Woodtown on the natural soil. In the Kiltiernan example the crypt is much disarranged, owing, apparently, to the weight of the roofing-stone.

The Howth cap-stone rested, probably, originally at its lower end on the backs of two low stones still in place, from which it has seemingly slipped back, carrying perhaps with it out of their perpendicular several of its supporters. If this supposition be right, the monument at one time bore the closest resemblance to that at Kernanstown.

In spite of what might seem precedents at Ballymascanlan or Kiltiernan, I cannot bring myself to believe that either of these three inclined blocks of Kernanstown, Howth, or Woodtown, were at any time raised upon pillars at that side which is at present the lower.

The question to which such a list of mighty weights naturally leads, and to which we should surely be prepared with some rational answer, is, "By what agency were such masses transported to the spots in which we find them; and how could people, in the savage state which the natives of Ireland must have been in in the days when they were erected, have brought appliances to bear to raise them into the positions in which we find them?"

As to the question of transportation, so much requiring

[†] For assistance in estimating the weights of these stones I beg to accord my best thanks to Mr. Thomas Matthews, C.E., of the Trinity House, and also to the Rev. M. H. Close, Treasurer of the Royal Irish Academy, to whom (after he had made personal visits to Kernanstown, Howth, Kiltiernan and Woodtown) I am indebted for a revision of my own estimates of the weights of those stones. The 100 tons, at which figure the first of these is estimated, rests on no merely approximate guess, but is based on measurements most carefully checked.

explanation in the case of the blocks which form the pyramids of Egypt, I do not think it need trouble us much. The stones are approximately in situ geologically, either portions of the bed-rock naturally detached, or erratics left upon the surface. The quartzite block at Howth is a portion, unusually large, of talus which lies under the Muck Rock immediately behind it. The Kiltiernan stone is one of a thousand granite masses like it on the hillsides around it. The same may be said of the Woodtown mass, and that at Brenanstown has found its way from the granite mountains into a valley below, and lies beside the stream which once in flood-time left it where it is.

The Kernanstown stone is also a granite boulder, resting where it has ever rested since the "Great Ice Age," and only tilted up on edge on other stones by man.

The great flat limestone slabs which form the Clare dolmens are, perhaps, as interesting from the point of view of their material as any used in these structures, and excite the wonder of the intelligent farmers of the locality, who impressed on me again and again the fact that no such splendid blocks were to be found on the surface of the "crag" (as the broken surfaces of limestone are called) nowadays.

Three modes suggest themselves by which the immense covering-stones of dolmens may have acquired the positions which excite our wonder.

In the first place, it is possible to conceive that there may be cases in which the block may never have been removed from its position in situ at all, but may have been undermined, and the side stones of the crypt inserted beneath it, the surrounding ground being then removed, and the block left to rest upon the upper edges of the stones forming the walls. In examples where the under face of the overlapping edges of the roof-stones are close to the level of the surrounding soil, and where the vault it covers seems to be a lined pit beneath it, this view suggests itself strongly. The huge block at Carriglass, near Lough Arrow, is a case in point, and so, also, planted as the crypt is in the alluvial soil of the valley, I have sometimes thought the Brenanstown dolmen might be. No such theory, however, would be for a moment tenable in the case of a monument such as that at Ballymascanlan, where the surrounding ground shows no sign of having been levelled, and where the block rests upon the points of pillars 8 or 9 feet high.

The agency by which one of these covering-stones was lifted into place was probably that which was applied to them all, and therefore I do not hold that even in some few cases this first theory of the block being *in situ* is tenable.

The second mode is that of which His Majesty the King of Denmark made himself the exponent many years ago, namely, that the covering-stones of dolmens were worked up into place over an inclined plane or bank. No theory appears to me so hopelessly impossible as this with regard to such structures in general, and to those in Ireland in particular. Such a bank of new-made material, in a climate notoriously wet, would be a hopeless impediment to moving onward and upward, a rock weighing 60 or 70 tons. It would literally "stick in the mud" beyond all possibility of extrication. In addition to this, in the majority of localities where dolmens abound, the question might fairly be asked from whence could any hard material of the kind necessary have been obtained, or what can have become of it since the object for which it would have been collected had been gained? The savage people who had brought the stuff together would not have been so excessively careful to have swept away every trace of their preparatory work when once the monument stood perfected on the mountain-top or the moor.

In one sense, and one alone, the theory of an inclined plane may possess truth with regard to the erection of Irish dolmens. We have seen that, when in their perfect and elongated state, they rise step by step (generally, but not universally, from E. to W.). One end is low and narrow, the side-stones approaching each other closely at the small end of the wedge (which in shape they resemble), and gradually expanding from each side, and becoming taller as they approach the end on which is to rest the largest covering-stone. Now, it is quite possible, and I think probable, that over this incline so formed, each cap-stone, the larger one first, was slid upward in turn—a theory which would account for the frequent disarrangement noticeable in the lines of the sidestones of the crypt. The stone on edge would have afforded a solid support such as no bank could give, and the presence occasionally of buttress-stones, placed at right angles against their sides, may be taken as evidence that they were prepared to sustain unusual pressure from above. Be this as it may, enormous leverage would have been required to move the huge

masses into position, which brings me to the third theory as to the mode of their erection, which is that which I adopt, and which may be stated in a few words.

The very existence of these megalithic structures appears to me to be an indication—if, indeed, such were needed to demonstrate the fact—that Ireland was once a well-timbered country. It must have been by the power of mighty leverage that these stones were lifted into place, and such leverage could only be obtained with felled timber. The trees once felled with the aid of chisels of stone or bronze and the application of fire, and points for purchase being obtained beneath the rock, four or five trunks, heavily weighted at the opposite extremity, could, with the aid of the united action of a fairly large body of men, be brought to bear at once in lifting the stone little by little. As the work of elevation went on, stones would be inserted to prevent the mass from falling back. The pillar-stones destined to support it would then be fixed in the ground beneath its edge, the small trigging stones gradually removed, and the mass allowed to sink on to the summits of the uprights.

Mr. Du Noyer has supplied a drawing † of a monument which he regarded as a dolmen in an unfinished state, showing a mass of small stones inserted beneath a ponderous rock, in an inclined position, illustrating, if my theory be right, that stage in the process of elevation which preceded the insertion of other columnar supports than that up to the point of which one end of the stone has been raised.

Timber was doubtless used also for the removal of stones, both for rollers beneath them and levers to propel them. An old friend of mine resident in Clare showed me the root-crown of a tree which his workmen had discovered in a bog, and which bore on its upper surface thousands of marks made by the narrow wedges, probably of flint or other stone, with which in remote ages the trunk had been cut through.

For the construction of a dolmen large gangs of human beings would be doubtless required, and, as in the case of the pyramids of Egypt—to compare great undertakings to comparatively small ones—these monuments are silent witnesses to human misery in days when slavery was predominant, but in a land where the means of subsistence was readily obtainable.

A dolmen in Ireland is more or less rugged in its appearance according to the nature of the stones which the district provides. The most symmetrical one which I have seen—the slabs being as well squared by nature as those of a mediæval altar-tomb by artis that on Slieve Callan, in Clare.† With almost equal neatness, resembling boxes which children build with cards, many of the great limestone dolmens of the Burren in Clare are formed. Where, again, the material is altered slate, or quartzite, or greenstone, a ruder appearance is the result, and the internal area of the chambers is often rendered shapeless. In the case of granite, which often presents one smooth face, that face is always turned inward, so that the crypt is symmetrical within, both as regards roofing and side-stones, though rugged without. The upper side or back of the cap-stone is often found to be traversed with channels and hollow basins, the result of exposure to the action of water or other disintegrating influences. It has often struck me that, both with regard to dolmens and other megalithic monuments, stones with some natural peculiarity were pre-The channeling on the roof of the Haroldsferred to others. town dolmen is especially curious, and natural cups and hollows are almost the rule, and certainly not exceptional. On one of the cap-stones of a dolmen I myself unearthed in a tumulus at Tregaseal in Cornwall was a most peculiar excrescence,‡ rising perpendicularly more than 6 inches above the surface of the granite, and rounded at the top; in another was an artificial bowl or rock-basin such as the Irish call a bullán. Artificial cupmarkings are also found on the cap-stones of some dolmens. Circles are carved on the supporters of one in Meath. Rude scribings are incised occasionally, both on roofing- and sidestones, and, in one instance at least, a stone with an artificial basin, or bullán, stands on the threshold of a dolmen-crypt.

Details of these points in Irish examples have been already given. Meanwhile there remain some few amplifications and varieties of type to be noticed in the plan and arrangement of the monuments.

At Magheraghanrush (Sligo), at Ballyglass (Mayo), and at Cashel § (Donegal), are large oval areas of peculiar but distinctive form, having arrangements of dolmens at either end of the oval,

[†] See p. 79, supra. ‡ See fig. 408, p. 442, infra. § Called the Cloghán in Glenmalin.

as well as, in the Donegal example, in the side. The two former monuments are free-standing, but the latter was partially, if not entirely, covered over by a pear-shaped cairn.

Three or four examples may be quoted of dolmens arranged in lines, as many as six forming the line, as at Mac Kee's farm in Glenmalin in Donegal.

In some districts—Antrim especially—two dolmens, the one smaller than the other, occur in close proximity.

In no case have so many been found together, contained in so limited an area as at Carrowmore in Sligo. Here, with the exception of the great dolmen described by Dr. Walker to Sir William Wilde, and of which one side-stone of the cist, or crypt, measured 16 feet long and 6 feet broad, and of the chamber at Clover Hill, all the examples are of the *dolmen-circle* type.

The builders of the dolmens of the long wedge-shape type often placed their monuments in groups of four or five, or even more; but as a rule they are rather grouped in districts than in adjoining fields, and lie a mile or two apart, as parish churches do.

The chamber-cairns were gathered together in large groups on the Boyne and at Loughcrew. They do not, so far as I know, occur in Munster, but examples of them are found in Mayo, Sligo, Monaghan, Fermanagh, and Armagh.

Dolmens of the wedge-shaped type are more evenly distributed over Ireland than are those of either of the other classes. They are sometimes found by the seaside, occasionally close to the sea, but they are found in inland districts as well, which cannot with like truth be said of the dolmen-cairns, such as those of Carrowmore. In Sweden, the Danish islands, and the southern coasts of the Baltic the same two types of monument occur, and there also it is the dolmen-cairns which hug the shore, and the wedge-shaped monuments which lie by the lake-sides in the interior. In these latter districts the wedge-shaped dolmens, with their peristyles, are referable to the early Bronze Age, and in the Iberian Peninsula, where they are also found, the same observation has been made. Further remarks, however, on the age and purpose of the dolmens would be premature, until we have compared the Irish examples with those in other countries.

Miss Margaret Stokes, in her "Carte des Dolmens d'Irlande," has laid some stress upon the distribution of Irish dolmens in riverbasins, on the coast, and in mountainous districts respectively.

A large proportion of her sea-coast examples are dolmencircles and dolmen-cairns. As to the position of those in mountainous districts and spots which are now wild and bare, we must remember that it is certain that in most cases these heights and moors were richly wooded, affording a plentiful supply of timber,—the material necessary for the purposes of leverage,—for the work. Even the limestone flats of Aran, and the apparently verdureless Burren of Clare, that might be taken for an ice-field upheaved, with its deep crevices, where the maidenhair and geranium flourish snugly and warmly deep down and out of sight, were once overshadowed with fir, and oak, and ash. In the clearings of these glades, sometimes at the summit of a "divide," so as to attract the veneration of the traveller,—sometimes on the top of the mountain itself, above the forest line, sometimes by the side of a lake, the veneration for which survives, maybe, in some weird legend; sometimes close to a spring-well or a stream, for water was in some way connected with the cultus of the dead, stood the dolmen, no mere sepulchre made once for all and forgotten, but the goal of the pilgrim who sought the abode of the spirit,—the ancestral shrine at the porch of which the dead were communicated with, and the accustomed offerings made. Indeed, where dolmens occur in river-basins, it is generally on the hillside, or by a lake or stream that they must be sought. From the flat lands of Westmeath and Meath, of the King's County and the Queen's County, and Kildare, they are almost entirely absent. Two in Carlow are on river-banks, and one, the largest in Ireland, in the same county is upon a richly wooded hill.

Such were the spots ever chosen for the cultus of the dead, whether the objects of the worship were the *Sidhe*, as in Ireland, or the *Sitte*, as in Lapland, or the *Shinto* or *Sinto*, as in Japan at the present day.

STRUCTURAL COMPARISONS IN THE BRITISH ISLES.

As might reasonably be supposed, the closest resemblances to Irish megalithic monuments are found in those examples which are located on the opposite coasts of Britain. The Cornish series may, indeed, be said to be identical; and upon that, since I have myself either planned or assisted in planning every individual structure, many of which I have also explored, I may be permitted to offer some preliminary remarks. The dolmen-cairn or dolmen-

circle type is found, as in Ireland, hugging the coast, while the wedge-shaped dolmens occupy positions on the hills further inland.

The ground-plans of the Zennor and Trethevy dolmens might have been designed and the structures erected by the same persons who set up those at Ardaragh in Bear Island (Cork), at Brenanstown (Dublin), or any of the Clare series. The same details have been carried out in each case. There is the feature of the ante-chamber or portico, and the hole or creep connecting it with the inner cell, a characteristic specially marked in the case of Trethevy.

In the Land's End district and in the Isles of Scilly, examples occur of long-oblong, or wedge-shaped structures, each surrounded by a peristyle, which forms the base, from which a tumulus rises just high enough to overtop the covering-stones. Dr. Borlase has described two of these in Scilly. The mouth of the first was 4 feet 6 ins. wide, the length of the cell 13 feet 8 ins., and the height 3 feet 8 ins. It was covered from end to end with large

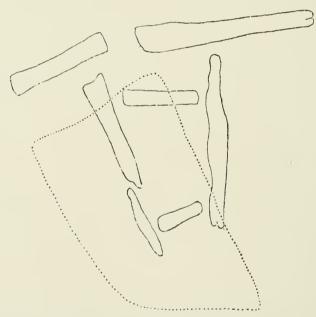


FIG. 405.—Plan of Zennor-Quoit, Cornwall. By W. C. Lukis and W. C. Borlase.

flat stones. The second was entered at its E. end by a passage, 1 foot 8 ins. wide, "betwixt two stones set on end." The cell was 4 feet 8 ins. wide in the middle, 22 feet long, and 4 feet 10 ins. high. At the W. end—it bore nearly E. and W.—it was terminated by a large flat stone on edge, and from end to end

it was covered by great flags. In Scilly these monuments were called "Giants' Graves" by the natives. In one respect they, or some, at least, of them, seem to have differed from Irish

examples, for their side walls were formed not of single slabs, but of layers of stones. Those on the mainland, however, are, with one exception, formed in the usual manner.

One of the latter, that at Brane (Par. of Sancred), near the stone hill-fort of Caer-Bran, I have already mentioned as illustrating the mode in which dolmens of this class were covered. Of another,

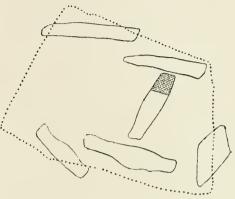


Fig. 406.—Plan of Trethevy, Cornwall.

near the stone-circles of Tregaseal (Par. of St. Just-in-Penwith), I made a most careful examination. The cairn, which rose from an oval peristalith, just overtopped the two covering-stones

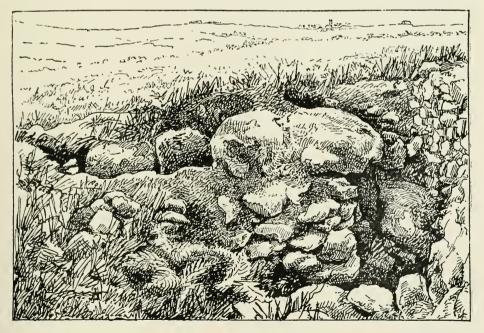


FIG. 407.—Dolmen in tumulus, Tregaseal, West Cornwall. Etched from a photograph.

of the cell, which were still in place. The interior measurement was II feet 3 ins. long, and at the entrance, 2 feet wide, but the VOL. II.

vault expanded as it approached the N.W. end, and was 4 feet high.

At the inner and broader end a sort of *dais*, raised platform, or table had been formed in the manner indicated in the section (fig. 409). Generally throughout the floor, but mostly upon and under this table, was a stratum, or "mat," of a dark substance,

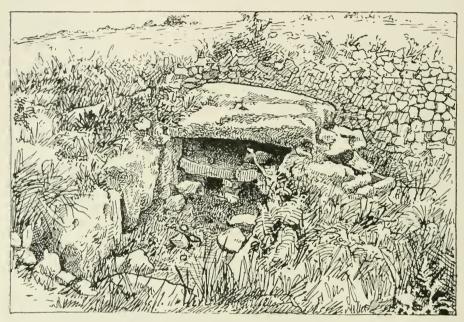


Fig. 408.—Interior of dolmen at Tregaseal, showing stone platform and excrescence on roofing-stone. Etched from a photograph.

which proved to be composed of charcoal, small burnt fragments of human bones, and a great quantity of broken pottery, many of the specimens of which were decorated. The confusion in which they lay caused me to form the opinion that the vessels, some of which had probably once contained the bones, had never



Fig. 409.—Section of dolmen-mound at Tregaseal.

been placed whole in the vault, but thrown in in the shattered condition in which I found them. On the platform, however, some of the bones appeared to have been arranged in

little piles. In the stratum was a perforated whetstone.

Immediately beyond the outer end of the terminal stone, and almost in the centre of the tumulus, a rude cist had been formed,

which contained an urn about 2 feet in height, with two large handles, highly ornamented round the upper portion, and having

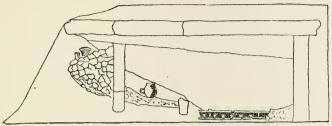


FIG. 410.—Section of tomb near Hallé.

a cruciform design raised in relief on the inner surface of the bottom, a design which is almost exactly reproduced on the

exterior of the bottom of an urn taken from a cist on Knockmunion, near Navan in Meath. The Tregaseal urn was inverted over burnt human bones.

In 1826, Herr Hartmann, of Hallé, explored

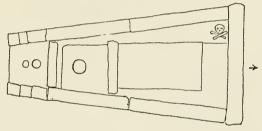


Fig. 411.—Plan of tomb near Hallé.

a structure buried in a tumulus 53 paces long, 34 paces wide, and about 10 feet high, at Niedleben, near Hallé in Saxony, which so much resembles this one at Tregaseal that I shall not reserve it for my section on Germany, but notice it at once. The vault was formed by two slabs on edge on either side supporting two covering-stones, and closed at the inner or N. end by a single large slab. At the S. end three smaller stones on either side supported another covering-stone, and formed a sort of ante-chamber or narrow portico, separated, apparently, from the main cell or vault by a stone slab which nearly reached the covering-stone. whole structure the writer describes as divided into three sections. viz. entrance, vestibule, and vault. I do not find that the dimensions of the vault are given, but it appears to have been about 10 feet long. The sandstone slabs which covered it were 10 inches thick. It was wedge-shaped, expanding from about 2 feet wide at the entrance, to about 5 feet 6 ins. at the inner end. At this inner end was placed a wooden table-slab about 3 feet long, 2 feet broad, and 2 inches thick, which had been joined to another slab with oblique ridges which went right across it, and with square holes at its ends, through which wooden pegs were fixed. The entire vault was covered at the bottom with ashy earth mixed with small pieces of charcoal. This stratum was continued under the table, where it contained fragments of decorated urns, and dish-like vessels, one of which latter was covered by a wooden



Fig. 412. — Inscribed stones from a wedge-shaped tomb in tumulus near Hallé. From Kruse, "Deutsche Alterthümer," 1827, tab. iv.

lid. Urns were also found both within and without the stone which partitioned off the vestibule. In the N.W. and in the N.E. corners of the vault respectively, were a skull and a backbone, and between them the ribs and leg-bones. Kruse mentions in a note that over a hundred perforated boar's teeth were found when the earth was sifted, besides numerous flint knives or chisels, a flaying instrument (? a stone celt), several pieces of amber, one of them perforated and in the form of a little round hammer, but no object of metal.

The side stone in the centre on the W. had a few roughly carved marks at its base, and opposite to it on the slab in the E. side was a + regularly cut. Herr Hartmann speaks of the incised marks on the W. slab as "urn decoration." One of the figures reminds us of the fern-like pattern at

New Grange, while others are not unlike *ogams*, and others, again, resemble wild runes.

With regard to the pottery, Kruse considered that one of the





Fig. 413.—Specimens of pottery from the tomb at Hallé.

larger urns probably served for meat-offerings, and a smaller one for drink-offerings. He compares the whole structure to one

explored at Farrenstadt,† and thinks that it belongs to the same race of people. The feature of the ante-chamber is more than once noticed by him, as, for example, in the case of a "grave-hill" near the Zschörnhugel, near Langendorf, upon which Herr Bergner, the explorer, remarks that "as it" (i.e. the ante-chamber) "was large enough for a person to sit in," he considered that it was formed with the object of affording "a place for praying to, or visiting the dead." This latter tomb was also wedge-shaped, narrowing from 8 feet to 4 feet 6 ins. in the middle, and to 3 feet at the further end. Bones and teeth of animals, several decorated vessels, a copper needle with an eye, and some flint implements, were found here.

Had these German antiquarians seen the wedge-shaped dolmens of Ireland, or been present at the exploration of that in Cornwall, with its wedge-shaped form, its stone table-slab, and its stratum of ashes and broken pottery, they must, I think, have come to the conclusion that, in spite of the fact that inhumation had been practised in the German instances, and cremation in the Cornish one, both belonged to one race, one state of culture, one order of customs, and approximately to one date.

The evidence of the Cornish tumuli proved to me that in that district the practice of inhumation preceded that of cremation, and that the latter custom, including urn-burial, was still in use in the Roman epoch. In two great tumuli on the edge of the cliff near Newquay, I found in each case a stone cist containing an unburnt body, representing the primary interment. Upon the roofingstone of one of these a fire had been kindled, which, to judge by the immense quantity of burnt earth and stone above it, must have been kept alight for a very considerable time. With the skeleton in this tumulus lay a beautifully polished stone axe-hammer 4 ins. long, and showing no marks of wear, exactly similar to a Scottish example taken from a cairn at Fardenreogh, in Ayrshire,‡ in which an unburnt body was also found. In the case of the Cornish tumulus, I discovered near the top of the mound, and many feet above the cist, a little pile of burnt human bones, representing a secondary interment, placed without urn or cist in a hole dug

[†] The stone structure in this case consisted of "two oblique rows of stones inclined towards one another. Two entire skeletons, fragments of a very thin little vessel, a tusk of a pig perforated, a pig's snout over one of the skulls, a vessel six inches high, and other small pigs' teeth with holes were found in this structure." See Kruse, "Deutsche Alterthümer," Bd. 2, Heft 2, 3; pp. 27, et seqq.

‡ Dr. J. Macdonald, "Ayr and Wigtonshire Archæol. Assoc.," vol. iii. p. 78.

to receive it. These Newquay mounds, with their central cists, roofed in each case by a large thick stone, and containing unburnt remains, belong to the end of the Neolithic, and beginning of the Bronze Age, and are precisely comparable to the tumulus and cist at Knockmaraidhe, in the Phænix Park, Dublin.†

Chambers, such as those in Scilly and West Cornwall, which



Fig. 414. - Section of dolmen in tumulus at Tregiffian, West Cornwall. By the Author.

resemble the long dolmens, except that their sides are formed of walling instead of single slabs, are of later date than the purely megalithic structures, and belong to the age of incineration. Some

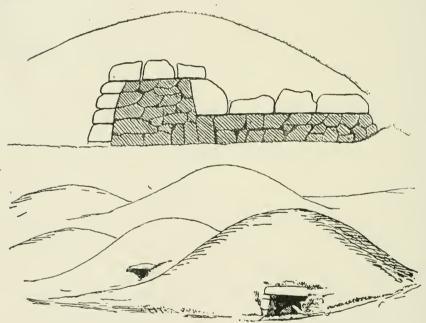


Fig. 415.—Dolmen-mounds, and section of an incineration chamber in one of them, in Japan-From Morse. Popular Science Monthly, 1880.

of them, like the chambers in the sepulchral tumuli of far-distant Japan, which they closely resemble, were actually the burning-places, or *crematoria*, in which the fire was kindled for the destruction of the body. I explored one such at Tregisfian, in the same parish as the Tregaseal monument (Fig. 414).

A narrow passage (running N.E. and S.W.), 4 feet 6 ins. long, 2 feet wide, and 2 feet 6 ins. deep, more like a creep, or sewer, or the draught-hole of a furnace than an entrance, led into a chamber roughly square in shape, measuring 4 feet 6 ins. each way. The lower portion of it was constructed in a pit sunk in the natural One single block of rugged granite, 6 feet long by 5 feet wide, roofed it in. In the debris, resting on the floor-level, were found the fragments of an urn, and on the floor itself, burnt into the surface of clay which formed it, was a stratum of calcined human bones, mixed with the ashes of a peat fire. This conglomerate of burnt bones, charred wood, ashes, and clay extended for some 3 feet into the passage adjoining. Burnt stones found in the chamber, as well as indications of great heat on the walls and roof, testified unmistakably to the fact that the fire which consumed the body had been made in this instance within the structure itself.

For the sake of comparison, I give, side by side, a section of this monument, and that of one of the incineration chambers in the Japanese prehistoric dolmen-mounds.

The Tregiffian structure is precisely comparable to that at Coolrus, in the Queen's County, where a square pit, sunk 5 feet in the ground, and faced with flags and dry masonry, was roofed in by a stone 8 feet long, 6 feet wide, and 12 ins. thick, and approached by a "sewer-like" passage extending 9 feet in an easterly direction. Near the Coolrus monument many small cists were found containing burnt bones, which may have been calcined in the pit.

At another place, also called Tregiffian in Cornwall, but in the Parish of Buryan, adjoining that of St. Just-in-Penwith, and forming one of a group of megalithic remains, including a circle, three menhirs, and several other cairns, I explored a dolmencircle of exactly the same type as those at Carrowmore. A monolith, now prostrate, once stood on the tumulus beside the little dolmen. Upon the top of the covering-stone of the latter lay a large quantity of ashes, burnt and splintered human bones, and among them a flint flake or knife. Under the covering-stone a very considerable quantity (enough to fill a cart more than half full) of calcined bones mingled with ashes was taken up; and under a smaller flat stone, placed beneath the S. edge of the large one, was an entirely separate and more carefully arranged

deposit. The small pit in which it was placed was lined with shell sand, peculiar to a particular cove—not the nearest cove—but one situated some three or four miles distant. The bone chips and ashes in this deposit would have filled a quart measure. No pottery or metal object was found. The dolmen had been enclosed in a ring of stones which formed the base and retaining wall of the tumulus of stones and earth which covered it.

Thus we see that these types of Irish dolmen,—firstly, the wedge-shaped elongated one; secondly, the dolmen-circle or dolmen-cairn; thirdly, the *crematorium*, such as that at Coolrus—are severally repeated in Cornwall.

The one type which would seem to be absent in Cornwall is the chamber-tumulus, which I believe, however, is represented in a way by such examples as that at Tregiffian, where the narrow portion does not correspond to the narrowing termination of the wedge-shaped dolmens, as in Clare, which were, I think, always closed at the lower end, but open at the higher, but to structures entered through a passage, as at New Grange.

It is further to be observed that Cornwall possesses its stone circles, and menhirs, and stone cathairs, and cliff castles, and earthen raths, and hut-towns, and hut-clusters, just as Ireland does, and of types which are identical. The Caer, i.e. Cathair, for example, of Chywoone, stands close to a fine dolmen, just as is the case with several of the cathairs in the Burren of Clare. Beehive huts, similar to those at Mount Eagle in Kerry, are to be found in various places in the Land's End district, and, beneath them (for they are generally on hillsides), almost every headland on the coast is traversed by its lines of primitive fortifications, as is the case on the Irish coast. A comparison of Cornish hutclusters with some near Glencullen on the Dublin mountains. and of both with Welsh examples in Carnarvonshire, can leave no doubt as to the identity of the series. These hut-towns, however, were inhabited as late as the days of the Roman occupation of Britain, so that from the Age of Stone, to which the earliest dolmens belong, through that of Bronze, to which the cisted tumuli pertain, and far into that of Iron, when a mining population dwelt in the clustered beehive-huts, the Dumnonian peninsula (for Dartmoor, with its alignments, and avenues leading to cairns, and stone cathairs reproducing exactly those at Slievemore in Achill, must not be excluded) was, as far as the races or tribes by whom it was

visited and settled were concerned, in the closest relation ethnologically with Ireland and Wales.

From Cornwall the transition to Wales is only natural. The occurrence of dolmens on either side of the British Channel—or (as it was once euphoniously called) the "Severne Sea"—those at Pawton in Cornwall, for example, and Drewsteignton in Devon, on the one side, and those in the Gower peninsula and up the W. coast of Wales, on the hills N. of Barmouth especially, on the other, coupled with the fact of their absence in North England, and their great scarcity in Scotland, while the coasts of Ireland possess them in plenty, all tend to give plausibility to a theory that the route by which those who erected them arrived was from the south, either down the English Channel or up the western coast of Europe, and so round the Land's End and up St. George's Channel and around the entire coast of Ireland, which island they specially made their own.

In the peninsula of Gower are a very considerable number of

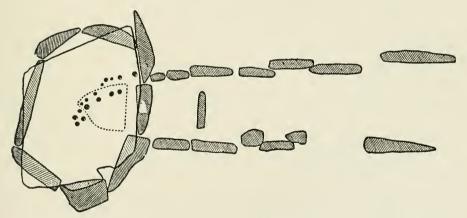


Fig. 416.—Plan of the Anta de Paço da Vinha. From Cartailhac. Scale 0 oi m. = 1 oo. Showing cup-marks on cap-stone.

prehistoric remains, pre-eminent among which is the immense dolmen called Arthur's Quoit, on the northern slope of Bryn Cefn,



Fig. 417.—Plan of the chambered tumulus of Gavr-Inis. After Bertrand.

surrounded by upwards of eighty cairns. The cap-stone, although pieces have been broken off it, still measures 14 feet 6 ins. long,

6 feet 8 ins. broad, and 7 feet 5 ins. high. It is said to have rested originally on ten or eleven supporters. In size and rugged-

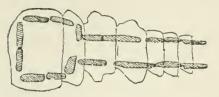


Fig. 418.—Plan of dolmen at Kercado. From Mortillet.

ness it is comparable to such structures as Kiltiernan and Ballymascanlan, in Ireland.

Another point of comparison between Welsh and Irish dolmens is to be found in the circumstance that two monuments are fre-

quently found in near proximity to each other. In the case of those between Carnarvon and Barmouth, I have observed

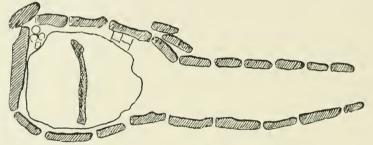


Fig. 419 .- Plan of the allée converte at Mané Lud. From Bertrand.

several instances of this, which recall examples in the counties of Antrim and Donegal.

Among the dolmens of Wales is the extremely interesting

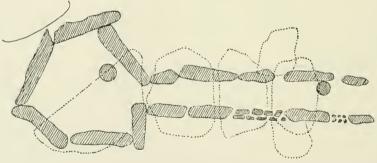


Fig. 420.—Plan of the dolmen of Yr Ogof. Etched by the writer from that by Captain Inkis in the "Archael. Cambr.," 1869.

passage-dolmen of Yr Ogof,† a structure of a class which, while it is well represented in the long covered dolmens in Brittany, such as those at Mané Lud‡ (Locmariaker), Kercado (Carnac), and Gavr Innis,§ finds almost, I may say, its double, both as regards

the form of its chamber and the passage approaching it, in the passage dolmens of Portugal † (Fig. 416). It is, according to my definition, a dolmen and not a chamber, being roofed in with flat



Fig. 421 .- Pillar-stone at Temair. After Petrie.

flags; but it takes its place, not among the wedge-shaped structures, which were closed at the lower and narrower end, but midway between a monument such as that at Coolrus, consisting of an avenue and covered pit, and the chamber of the tumulus of New Grange, of which latter, again, the Loughcrew cairns in Meath and some of the Caithness and Argyllshire examples are reproductions in miniature.

The shaded circles in the plan of Yr Ogof are pillar-stones abraded or worked in circular form so as to be described as "nearly polished." That in the inner chamber has been removed. It appears that it was free-standing, that is to say, it did not touch the original roof. It must have resembled the pillar-stone commonly called the "Bod Fergusa" at Tara, and Captain Lukis compares it with the *styles* on altars in India, against which stone celts were customarily placed. In the older plans of New Grange, as we have seen, a conical stone is shown as having been at one time in the centre of the principal chamber there.

In the peninsula of Gower is the Cwm Park tumulus explored by Sir John Lubbock, with which and others of like type in

[†] Cartailhac, "Ages Préhist. de l'Espagne," fig. 254, Anta de Paço da Vinha.

Britain, namely, those of Plas Newydd in Anglesey, of Uley and Rodmarton in Gloucestershire, of West Kennet in Wiltshire, of Stoney-Littleton in Somersetshire, and that known as Wayland Smith's Cave in Berkshire,† are to be connected the Irish chambered tumuli, all situated in the counties of Meath, Armagh, Monaghan, Sligo, and Mayo.

According to Canon Greenwall, all monuments of the elongated type are developments of the Long Barrows of the Yorkshire

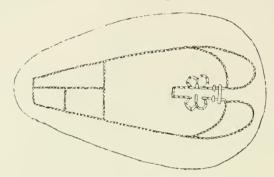


Fig. 422.—Plan of the tumulus and chamber at Uleybury. From Thurnam.

wolds, that strange class of structure which the same authority and Professor Rolleston attribute to the earliest inhabitant of Britain, the dolichocephalic monopolist of the previously unpeopled isle.

Whether a Long Barrow of this primitive type has ever been found in Ireland is doubtful. Mr. Plunkett, t of Enniskillen, examined a mound in Fermanagh, which he took to be one, but his excavations were without result. It is necessary that we should have a right conception of what a Long Barrow is, and for this purpose I turn to Canon Greenwell's work. It is, then, a tumulus in the form of half a pear divided lengthways, and placed with the flat side downwards. The higher and broader end of the mound is usually towards the east, the longitudinal axis of the pile lying E. and W. In cases where the drain or passage beneath terminates in a chamber, the entrance to this passage is almost invariably at the eastern extremity, although examples occur where it is in the side. This entrance is not unusually in the centre of a semicircle formed by hornshaped protuberances either spreading out from the mound, or recurved, like rams' horns, into it, flanked in either case by low

^{† &}quot;Congrès Internat." (Norwich, 1868), p. 46. ‡ Proc. R.I.A., 2nd Ser., vol. i. p. 323. § "British Barrows."

containing-walls of stone. Where these horns spread outwards, the whole structure, if looked down upon from above, would not be unlike a bovine head.

To examples of these types we shall return. At present we are only dealing with the simpler class. These latter are to be found in the north of England, in parts of Yorkshire especially, where Canon Greenwell and Professor Rolleston have thoroughly investigated the structure and contents of several examples, the only drawback to the account they have published being that the descriptions, although lucid, are unaccompanied by plans.

The simpler mounds do not attain the great dimensions of the chambered tumuli, nor, as has been said, do they possess the feature of "horns." Their form, however, their rude and peculiar internal arrangements, their contents, and in especial the distinctive type of the human remains they cover, justify the conclusion (supposing, with Professor Rolleston, that *custom* in this case may safely be taken as a test of race) that they are the work of one and the same people with those who constructed the chambered examples, although it may be at an earlier period, and in a less forward stage of savage existence.

In the process of construction in the Yorkshire Long Barrows, the preliminary operation seems to have been the placing upon the natural surface of the ground a long layer of clay or a pavement of flagstones, which was destined to occupy a position immediately under the centre line of the tumulus when subsequently piled up.

Upon these floorings it is usual to find deposits of bones, both of man and beast. In some cases, as in that of the Westow Barrow in the North Riding, "it seemed almost certain that some of the human bodies . . . had been buried in an entire condition, and with the bones in their proper order and juxtaposition;" but this condition of things appears to have been rather the exception than the rule. Indeed, in this very same deposit the bones of other bodies were found "in a broken and dislocated state." Speaking of a Long Barrow at Rudstone, Canon Greenwell remarks, "In this, as in some other Long Barrows, there was apparently no burial of what seemed to have been an unmutilated body, all the bones having been, before they were deposited in the mound, more or less disjointed, and, in some cases, perhaps, fractured."

Sometimes the remains of as many as five bodies were found upon the central area beneath one of these barrows, all of them being in a disjointed condition. This phenomenon, to whatever custom or cause it is to be assigned, is not confined to the barrows of the ruder sort, but is observable also in the case of the remains found in the more elaborate chambered tumuli of the south-west of England, that is, in Gloucestershire, Wiltshire, and Somerset.

Over the bone-deposit was raised, in the case of the Yorkshire barrows, a pile of stones intermixed with turf or wood. Upon this heap the tumulus was raised, and (what is most singular) after this had been done, as it would appear, fire was applied to the interior of the mound, kindled, seemingly, in cross trenches or in holes which are found filled with ashes at the end of the tumulus, and thence driven by means of a draught through a duct, or through hollow stones, into the part where the bones were, with the result that the latter are found to be partially or wholly calcined, according to the strength of the fire introduced, and its power to reach the part furthest from where it was kindled.

Upon this curious feature in the arrangement the explorer observes that "it is not easy to say how the fire was applied in the first instance, but it is not unlikely that the cross-trench at the S.E. end of the mesial deposit" in some barrows, "and the holes found in a similar position" in others, "were connected with the ignition of the pile." In one example "there seemed to have been a further provision for continuing the operation of burning, by means of side openings along the line of the mesial deposit. The mode of arrangement of the stones in the form of a ridge-shaped pile by means of which a draught might be kept up, and which corresponds with the manner of placing the limestones in certain descriptions of kilns for burning lime at the present day, seems to show how the fire would gradually spread from the place where it commenced until it reached the limits sought to be attained. This complete ignition was not always effected, for, in the cases of two barrows, the burning gradually decreased in intensity towards the W. end of the deposit of bones, where it was found to have died out, leaving them entirely uncalcined. . . ." "It is probable," adds Canon Greenwell, "that at the end of the deposit furthest from that where the fire was applied, there was a construction of the nature of a chimney through which to carry the draught; of this, however, I have not met with any distinct signs, though there was somewhat of such an arrangement in one barrow."

"In one instance," however, "there was an evident provision for creating a draught, made by narrow chimney-shaped upright flues, connected with the line of burning along the centre of the mound. The way in which the ordinary material of the mound was affected by heat appears to make it certain that the whole of the barrow was thrown up before the fire was applied; and, though it does not seem to be an easy operation to ignite any material covered up by incombustible matter in the way in which it is found to be enclosed in these barrows, yet, when the peculiar arrangement of the stones immediately overlaying the bones is considered, it does not appear to be at all impossible. The men who were employed in opening one of these barrows were accustomed to burn lime, and they all agreed that there would be no difficulty in setting on fire and igniting the deposit in which the bones were placed, even though that was covered by the ordinary material of the mound; indeed, it became quite clear to them how the operation had been completed before my doubts on the subject were resolved."

This most interesting account makes it clear that tumuli of this class were not sepulchres in the ordinary sense of the word, but that they were raised over the sites where some savage ceremonial had been performed, presenting phenomena quite distinct from what would have appeared if either simple inhumation or cremation on a funeral pile had been practised.

The fact is that, instead of looking for simplicity of custom among the savages of primitive ages, we should expect to find the reverse. Civilization has tended to divest the rites connected with death and the disposal of the dead of the superstitious practices and barbarous orgies which accompanied them when the fetich faith was the only form of belief known to man, when Death and Deity were synonymous, when the cultus of the inanimate, and especially of that form of it which had been animate—the worship, that is to say, of dead ancestors—was the sole and universal religion of the world.

As to the fact that the bodies had been severed into pieces, that need not imply, as some have thought, the practice of cannibalism. Diodorus Siculus states that the inhabitants of the Balearic Isles, who, it must be remembered, were Iberians, had a

strange custom with regard to the burial of the dead: "They cut the corpse into fragments with wooden knives or axes, and placed all the several portions in an urn." The use of wooden instruments for the performance of a rite, at so late a period as that in which this author wrote, when iron was ready to their hand, points (like the stone knife employed in the rite of circumcision in the East) to the premetallic antiquity of the custom. The MM. Siret found that a similar method of disposing of the body had prevailed in South-Eastern Spain, and Herr Schliemann states that he found jars containing human remains at Hissarlik. In Smith's "History of Cork"† will be found an illustration representing a jar containing human remains found in that county. It was found with three others, placed in a kind of triangle in the earth, and made of fine clay, each capable of holding about 16 gallons. Around their rims was "a rude kind of carved work." Each urn was 4 feet high, 2 feet in diameter at the centre, and 16 inches at mouth and bottom. "In one of them was the skeleton of a man. The ribs and smaller bones were bundled up, and tied with copper wire, rusted green, as were those of the thighs, arms, etc. The skull was placed near the mouth of the urn. None of the bones had passed through the fire." In the second urn was an anomalous substance, supposed to be the remains of the flesh; and in the third, a small quantity of pieces of copper of irregular shape, like chipped money devoid of in-

Some similar mode of disposing of the body, perhaps by its having been left exposed for a considerable time and allowed to fall to pieces, may account for the presence in neolithic sepulchres in various parts of Europe, of little piles of bones carefully arranged, and having the skull disposed on the top of them.

There is, however, another question which I will postpone until I have briefly noticed the chambered tumuli in England and Scotland, which may be regarded as developments of this primitive type. That question is, "Do the phenomena presented by the Long Barrows point to the practices either of anthropophagy or human sacrifice, or of both?"

The Cwm Park tumulus in the Gower peninsula contained

[†] Vol. ii. p. 410, and pl. xi. ‡ Can they have been copper arrow-heads, such as are found in Spain?

a regularly built passage and chambers,† in which latter the remains of at least forty human bodies were discovered. The bones were jumbled together in a state of utter confusion, and were *unburnt*. They were not accompanied by any implement or object of metal. The entrance consisted of a funnel-shaped passage which led to the cells, and the excellence of the dry masonry of its retaining walls led Fergusson to the just conclusion that this approach was "meant to be seen and kept open."

The Plas Newydd tumulus presents a similarly wide-splayed entrance. It is near a fine dolmen with two covering-stones. The mound in this case measures 50 yards long. The funnel-shaped entrance is at the E. side. The chamber measures 7 feet long and 3 feet 3 ins. wide, and is roofed by two slabs. An avenue of stone leads up to the entrance, another proof that it was intended to be visited. Two holes have been pierced in the slab which crosses the entrance, a feature which I will notice separately and at more length.

The Uley tumulus is very similar in its internal structural arrangement to that at Cwm Park. In each case there are four cells, two being placed on either side of the passage. The mound measures 120 feet long, 85 feet wide, and 10 feet high. The chamber is 22 feet long, 4½ feet wide, and 5 feet high. As at Cwm Park, a confused mass of unburnt bones was found.

The West-Kennet example is a mound measuring 336 feet long



Fig. 423.—Plan of chambered Long Barrow at West Kennet. Scale 60 feet = 1 inch.

From Thurnam and Davis.

by 75 feet wide at its broadest part. In common with that at New Grange, one of the Clava cairns, and others, it was originally surrounded by a peristyle, as is shown in the curious drawing by Aubrey in 1665 (Fig. 424). The passage is 15 feet long by 3 feet

6 ins. wide, and leads to a chamber 8 feet long by 9 ins. wide. Dr. Thurnam found here six original interments under a stratum of black, sooty, greasy matter, 3 to 9 ins. thick. The bones were



FIG. 424.—Barrow at West Kennet. From a sketch by Aubrey in 1665, from the "Crania Britannica."

not burnt, and, in the case of two of the skulls, fractures had been made, which the eminent craniologist who explored the chamber considered to have been the cause of death, and to have

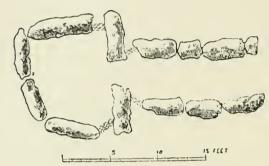


Fig. 425.—Ground-plan of chamber at West Kennet.

been purposely inflicted by human agency. Other skulls were found entire. Pieces of coarse black pottery were also present in remarkable quantities. No vessels were found whole, but there were fragments of fifty at least, piled together in corners. Flint

implements, chippings, and cores accompanied these remains, but nothing of metal.

In point of plan and construction, the West-Kennet monument

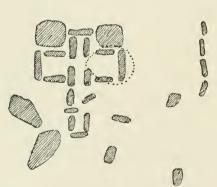


FIG. 426.—Weyland Smith's Cave. Scale 20 (cet = 1 inch. From the Norwich Congress of Prehist. Archwology, 1868.

may be said to be *identical* with that of the Hünengrab of Naschendorf, in Mecklenburg.† Sir John Lubbock has remarked the resemblance of the former to one in the island of Möen, and it may be compared also with that known by the name of "Harold Hildetand's Tomb" at Lethra, in Zeeland. In these Scandinavian examples the bones are unburnt, as has also been found to be the case in the very similar

Hünebedden of Mecklenburg, Hanover, and Drenthe.

[†] Schröter and Lisch, "Friderico-Francisceum," Leipzig (1824), pl. xxxvi. Vide infra.

Two varieties of these structures in England remain to be noticed, each of which has its counterpart in respect of its characteristic feature among the chambered tumuli of Scotland and Ireland. The first variety is the cruciform arrangement of the chambers or cells, of which in Ireland we have examples at New Grange, Loughcrew, and in the island of Achill; and of which the Orkney Islands afford us so notable an example in that of Maeshowe (Fig. 427),† a structure, by the way, the ground-plan of which recalls those of the Siva temples of India.

The English example of this cruciform arrangement meets us in the case of no less noteworthy a monument than that called "Weyland Smith's Cave," in the county of Berkshire, a plan of which I have given above (Fig. 426).

"Congrès int. d'Anth. et d'Archæol." (Norwich, 1868), p. 46.

The second variety is that displayed by those tumuli in which the so-termed horns at the extremity do not curve backwards like rams' horns, and so form a funnel-like entrance, but turn

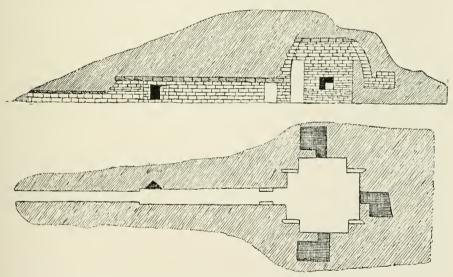


Fig. 427.—Plan and section of chambered tumulus at Maes Howe.

outwards in a semicircular or crescent-shaped form. In Ireland the best example of this peculiarity is to be seen in the ground-plan of the chambered cairn at Annacloghmullin,‡ in Armagh. It is also observable in that near Newbliss,§ and in the form of the tumulus at Doohat, in Fermanagh. The two latter

monuments have their exact counterparts in cairns in Argyllshire, Caithness, and the Western Islands. The Armagh example presents us with a far more interesting comparison, namely, in the "Tombeaux des Géants" of Sardinia, examples of which I will presently subjoin.

For English examples of this feature we may turn to Sir John Maclean's paper on tumuli on the Cotteswold Hills, in

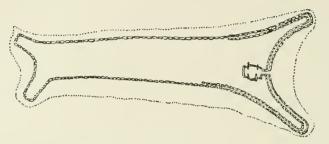


Fig. 428.—Ground-plan of chambered cairn at Yarhouse. From Anderson.

Gloucestershire. One of these, which may be taken in illustration, called the West Tump Barrow, measures 149 feet long, 76 feet broad at one end, and 41 feet at the other. The height, at the highest point, is 10 feet 3 ins. "Horns" forming a semicircle are placed at the broader end, which faces the S.E. There is no sign of a similar arrangement at the other end, as in several, if not all, of the Scottish examples.

For an account of the exploration of the Caithness cairns we turn to Professor Anderson's "Scotland in Pagan Times." Two very large cairns lie from E. to W. across the crest of a hill overlooking the southern end of the loch of Yarhouse. Both are of elongated form, and both have at either end horn-like projections, "falling gradually to the level of the ground." The larger cairn measured 240 feet long, 66 feet broad at the E. end, and 36 feet at the W. end; 12 feet high at the E. end, and 5 feet at the W. end. In this respect—namely, that the most elevated point was towards the E.—these cairns present a parallel to the Long Barrows of Britain, and to the Hünebedden in Drenthe, but differ from the wedge-shaped dolmens of Ireland, the highest point in which is almost invariably towards the west, the monument sloping downwards and diminishing also in breadth towards the east.

At Yarhouse, in the centre of the semicircle, is the entrance to

[†] The volume entitled "Bronze and Stone Age," p. 230, et seqq.

a passage, 2 feet wide, 10 feet long, and 4 feet high at the inner end, where it communicates with a chamber 12 feet long by about 6 feet broad, the walls of which, after rising vertically for 7 feet, are replaced by an overlap which forms the first stage of a vaulted roof, as at New Grange. The chamber is divided into three sections or compartments, following on each other consecutively, as at Annacloghmullin in Armagh (where there are four), by divisional stones projecting from the side walls, so as to leave an aperture about 2 feet wide between their inner edges. The third and innermost chamber differs from the others in the construction of its roof, which is not formed in the beehive fashion, but consists of a single enormous block of stone, resting in front on the second pair of partition stones, and supported at the back by another great slab set on edge. Were the rest of the chamber and the cairn to be removed, this portion would exactly resemble a dolmen. The height of the cell beneath the roofing-stone was not more than 3 feet in front, and 2 feet at the back. The entrance into it was closed by a slab fitting the aperture. The interior was found to have been filled with stones from floor to roof. Taken together, the three compartments did not occupy more than a twentieth part of the entire length of the cairn. The floor of the compartments was formed of a dark-coloured clay, in which rough paving-stones had been partially and irregularly laid. The surface of the clay was hard, like a well-trodden floor. The substance of the floor was a compacted mass, about 5 ins. thick, of earthy clay, plentifully intermixed with ashes, charcoal, wood, and calcined bones in a condition of extreme comminution. The amount of bone-ash in it was very large, but no fragment of bone in it measured above an inch in length. About a dozen chips of flint, and two fragments of pottery, well made, hard-baked, thin, and of black paste, were also found in it. In these details it will be noticed how exactly the contents of these chambers correspond with those of the Cornish examples explored by me.

The second cairn was almost precisely similar to the first, with the exception that the innermost of the three compartments of the chamber was semicircular, and seemed to have been included under the same vaulted roof which covered the other two. On the floor of the first compartment, to the left of the entrance, a cist had been placed, formed by slabs set on edge, and covered by smaller slabs. It measured 4 feet 4 ins. in length, 20 ins. in width,

and 9 ins. in depth, and upon the floor of it was a whitish layer of bones, in dark, earthy clay. At the E. end of this cist were the softened fragments of an urn, ornamented with parallel bands of impressions of a twisted cord, with which a necklace of small beads of lignite had been deposited. With this smaller cist within the chamber I should venture to compare those discovered by me in the Ballowal tumulus in West Cornwall, described in the "Archæologia." The floor of the chamber itself consisted of a layer of clay and ashes, intermixed with charcoal and burnt bones, both human and animal. On the surface of this compacted floor, which was 6 ins. in depth, was a loose layer in which were fragments of human bones unburnt. In the corners of the compartments were numbers of human teeth. No pottery or flint was found here.

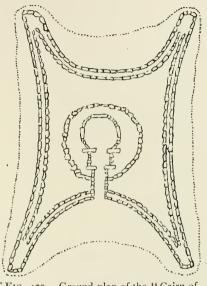
Other cairns in the same neighbourhood showed variations from the type presented by these two. In one instance two passages entered the tumulus from one side, one of which was of the usual tripartite construction, the other a long straight passage, 17 feet in length, terminating in a small and roughly circular cell, having a beehive roof. In the former of these chambers was the usual compacted mass of clay and ashes, mixed with burnt bones, human and animal, and upon it, in a loose layer, a few fragments of skulls and other human bones, mingled with splintered bones of the horse, ox, deer, and swine. No pottery or flints were found in this case.

Another variety of these cairns is of a shorter form, the chamber occupying the centre, and the horns giving to the groundplan a cruciform appearance. In some cases the explorations disclosed a layer of ashes extending under as well as over the pavement of the chamber, a circumstance also found by me to be present in Cornish chambers. The natural subsoil underneath was occasionally deeply pitted, the pits being filled with the same compacted mass of ashes and bones. In one chamber as many as thirty fragments of skulls were found. The bones were very irregularly burnt, some being merely charred for a part of their length, a fact which is to be compared with what is found in the Long Barrows of Yorkshire, as also are the evidences that rites connected with fire had been practised on the surface previous to the erection of the chamber or tumulus. Besides human bones, those of animals and birds were distinguishable, namely, of the horse, ox, deer, dog, swine, and leg and wing bones of fowls.

Fragments of pottery, of dark round-bottomed vessels, hard and smooth, but without ornament, were found, as also flints, in one instance a flint knife and arrow-head, and a finely polished instrument of grey granite perforated.

To this truncated and cruciform variety belongs the Cairn of

Get, lying in a hollow among the hills at Garrywhin, near Bruan. In this case the floor was composed of the usual compacted mass of ashes and bones. Four unburnt skeletons were found here, the skulls lying close to the wall on the right of the entrance. The quantity of human and animal bones in this instance was very great. Flints, chips, and flakes also occurred, pottery of a blackish colour, belonging to round-bottomed vessels, and three leaf-shaped arrow-heads. The positive identity of this structure with one near Newbliss in Mona- Fig. 429.—Ground-plan of the "Cairn of Get." From Anderson. ghan will be seen at a glance on



turning to the plan of that monument (Part I., p. 269).

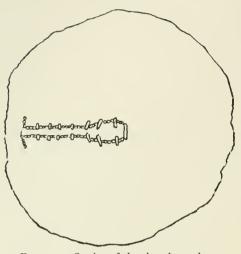
Another variety of these cairns is circular. One at Camster, measuring 75 feet in diameter, has a long passage leading to a high central chamber. The plan and section of this is so exceedingly like New Grange that I reproduce it here. "A number of



Fig. 430.—Section of chambered cairn at Camster. From Anderson.

bones, both human and animal, were found on the floor of the chamber. Among these bones, on the surface of the floor, was an iron single-edged knife or dagger-blade, about 4 ins. in length. Two human skulls, with the bones of the upper extremities, were found among the stones with which the passage was filled.

usual, a layer of burnt bones and ashes formed the floor of the chamber, from 9 ins. to 1 foot in thickness. Human bones were mixed with those of animals, for the most part burnt. Three different human skeletons, at least, had gone to form the fragments.



F1G. 431.—Section of chambered tumulus at Camster. From Anderson.

Many pieces of pottery were found, all of which had belonged to round-bottomed vessels, thin, black, and hardbaked. Some of the vessels had thickened and others everted lips. One of them was pierced with holes immediately under the rim. Very similar vessels occur in the *Grafheuvels* of North Brabant.† A small and finely formed flint knife was also found among the *débris*."

All these cairns show evidence of the same structure

internally, namely, a tripartite chamber. In one instance the third chamber opens off the second, not from the end, but from one side, being thus placed at right angles to the passage, an arrangement which may be regarded as a commencement of the cruciform



Fig. 432.—Section of chambered cairn at Achnacree. From Anderson.

shape of structure observable at New Grange, at Slieve Callighe, and in many other examples.

The chambered cairns of Argyll and Orkney show the same general features as those of Caithness. That at Achnacree, in Argyllshire, is in section as strikingly like that of New Grange as is that of Camster, just mentioned. The cairn in which it is, is approximately circular, with a diameter of 75 feet. On the floor fragments of urns were found, of a fine, dark-coloured, hard-baked paste. One of them is a wide-mouthed, thick-lipped, round-

[†] Prosper Cuypers, Nijhoff, Bijdragen, vol. iv. p. 194, pl. ii.

bottomed vessel, 7 ins. in diameter and 4 ins. deep. Canon Greenwell explored a cairn at Largie measuring 130 feet in diameter. In the centre was a chamber 19 feet long, divided into four compartments by partitional slabs set across the floor, the number of septa therefore corresponding to that of those at Aunaclochmullin. In the largest compartment was a cist placed in one corner, as at Yarhouse. The substance of the floor was dark, earthy matter, plentifully interspersed with burnt bones, human and animal, together with flakes, knives, scrapers of flint, and barbed arrowheads unburnt. Close to the side of the chamber was found a vessel, 6 ins. in height and 12 ins. in width at the mouth. It is round-bottomed, and has a broad, flat lip. It is composed of a dark, hard-baked paste, and the surface is ornamented with vertical flutings. At Kilchoan another cairn was opened by the Rev. R. K. Mapleton. It contained three compartments, in which were found burnt bones, flint knives, scrapers and flakes, and the fragments of a well-made urn.

On the Holm of Papa-Westra is a chambered cairn 115 feet in length, 55 feet in breadth, and 10 feet in height. The entrance is in the middle of the eastern side, and consists of a low passage I foot 10 ins. in width, 2 feet 8 ins. in height, and 18 feet in length. The chamber measures 67 feet in length by 5 feet in width, and is divided into three compartments, the central one being 45 feet in length, the one at the north-eastern end 7 feet, and that at the south-western 12 feet. Opening off the long passage-chamber are a series of cells, round or oval in form. One is placed at either end, and six on either side. They average 4 feet in length by 3 feet in width, and from 3 feet to 5 feet 6 ins. in height. No results attended the exploration of this most curious cairn. In the case of another cairn, also at Papa Westra, having a tripartite division, as at Caithness, the chamber being 12 feet in length, the entire floor was strewn with bones of animals, and in it were imbedded the remains of at least ten human skeletons unburnt. The bones of animals included those of common domestic kinds. Among them were also no less than eleven pairs of the antlers of red deer.

At Burray is a cairn with horned or crescent-shaped endings, as at Caithness. Near the opening into the entrance-passage ten human skulls, unburnt, were discovered. Bones of domestic animals were also found here, and among them seven skulls of dogs.

At Unstan, near Stennis, is a chambered cairn measuring 50 feet in diameter. A passage on the south-eastern side, 2 feet in width and 14 feet in length, opens into a chamber 21 feet in length by 6 feet 6 ins. in width in the centre, but narrowing to 4 feet in width at one end and to 5 feet at the other, giving the whole a boat or barge-shaped appearance. It is divided into five compartments. Across the entrances to the two terminal compartments slabs had been placed in the manner of doors. Upon the floor was a large quantity of bones, human and animal. Evidence of cremation was present in burnt bones and charcoal. Pieces of broken pottery were exceedingly numerous. They were the fragments of large, shallow, round-bottomed vessels, with more or less vertical rims. One measured 14 ins. in diameter, and 5 ins. in depth in the centre. The pattern round it is composed of alternate triangles, filled up with diagonal and horizontal lines. The prevailing type of vessel here, as also in Argyllshire, found in cairns is round-bottomed, with vertical brim, and thick, flat, or bevelled lip. The composition is a hard, dark-coloured paste. The ornamentation is that which belongs to the Bronze Age, and the shape somewhat resembles that of vessels found in the artificial cave of Palmella, in Portugal.

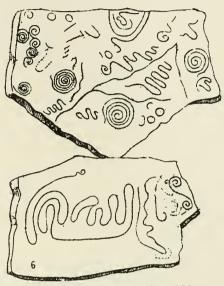
From the floor of the Unstan cairn were also taken up numerous flint implements, such as arrow-heads, scrapers, and knives, which had passed through the fire. "Taking the Orkney group of chambered cairns as a whole," says Professor Anderson, "we find it presenting the same essential characteristics as are exhibited by the groups which have been described on the mainland of Scotland. There is considerable variation in the arrangement of the chambers, and a strongly marked tendency to a grouping of smaller cells round the main chamber, which may be regarded as a local peculiarity of the Orkney Islands." "Comparing the general features of all the groups (namely, those of Caithness, Argyll, and Orkney), we find that while the typical relationship is abundantly obvious, there is also obvious a strong local differentiation in each of the groups, which imparts to it a special character of its own."

A chambered cairn at Clawa, in Strathnairn, near Inverness, may here be mentioned before we part with the Scottish series. It is circular in shape, with a diameter of 50 feet, and a height of 10 feet. A ring of large blocks—a peristyle, that is to say, as

at New Grange—surrounds the base. A passage, 18 feet in length and 2 feet in width, enters a circular chamber 13 feet in diameter. In structure this chamber was a beehive. On the floor were burnt

bones and fragments of urns. Of these urns it is remarked that they were larger, thicker, more rudely formed, and less carefully fired than those from the chambered tumuli of Argyllshire.

Taking into consideration, therefore, the structural affinities between the chambered cairns just described and those of New Grange, Dowth, Loughcrew, Annaclochmullin, and Newbliss in Ireland, we may safely conclude that a race, possessing similar customs, inhabited, at that epoch, the North-West of Fig. 433.—Canary Islands. From "Mat. pour l'Hist. de l'Homme." Scotland and the islands, and



also portions of North Leinster and Ulster. These districts are those which tradition assigns to the Picts. A comparison of sculpturings, both on the walls and lintels of the so-called "Picts'" House at Papa Westra (Fig. 351), and on covering-

stones of cists such as those of Carnwath (Fig. 436) and Annan Street (Fig. 437) near Yarrow, with the Irish examples, show parallel affinities. The concentric circles, with the line to the central cup in Fig. 435, connects these patterns with those in ruder

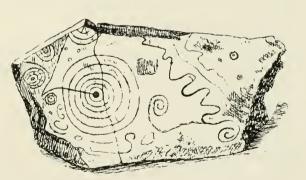


Fig. 434.—Cover of a cist at Carnwath.

sculpturings, as, for example, one found near Youghal now in the museum at Kilkenny.† The cist-cover (Fig. 437) shows also the simpler type. It is a very remarkable fact that similar sculpturings occur not only in Brittany, as we shall see,

but in the Canary Islands, where the typical boat (Fig. 341,

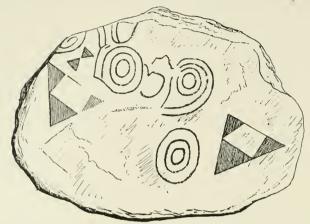


Fig. 435.—Sculptured cover of a stone cist at Carnwath (Scotland). From Anderson's "Scotland in Pagan Times," "Stone Age," p. 87.

New Grange), the spiral, and the serpentine figure are all present †

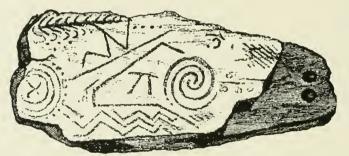


Fig. 436.—Annan Street, near Yarrow. From D. Wilson, "Prehist. Ann. of Scotland," p. 334.

Some antiquaries have denied the existence of dolmens, as

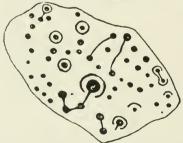


Fig. 437.—Cover of a cist, Bakerhill, Rossshire. From Simpson, "Archaic Sculpturings."

distinguished from cisted cairns and chambered tumuli, in Scotland. This is, however, untrue. Dr. Angus Smith ‡ has proved the existence of two, at all events, on Ledaig Hill in Achnacree-Beg, near Loch Etive. So near together were they that the circles of the cairns which surrounded them must

[†] See M. S. Berthelot, "Antiquities Canariennes," 1879, pl. 18, Fig. 8. The sculpturings are at the entrance of a cave at Belmaco in the Ile de la Parma. See also Figs. 1, 3, and 5 for marks similar to those on rocks in Ireland. See also pl. 3 in the same work for a dolmen habitation at Fortaventure.

† "Loch Etive," p. 237.

have met. One of them he describes as a large granite table on ten boulders; the other as a smaller one upon five boulders. Near a well on this hill it was customary to hang pieces of cloth or string on the bushes.

CANNIBALISM AND HUMAN SACRIFICE.

Before extending my comparisons of the Irish dolmens and chambers beyond the limits of the British Isles, I would here return to the question, "Was the primitive and dolichocephalic inhabitant of these islands a cannibal, or, whether he was or was not so, does the exploration of the monuments tend to prove that he offered human or other sacrifices at these places?"

The rites performed by those who raised the Long Barrows of the Yorkshire Wolds were, as we have seen, of the most barbarous kind. Limb had been separated from limb, and the bones broken, and all this before the tumulus had been raised over the remains. In addition to this, the human bones were accompanied by those of animals, which had been treated, apparently, in a precisely similar manner. We should not hesitate to regard the latter as evidence of feasting—what are we to say of the former?

The eminent Danish antiquary, Worsaae, has made the curious remark that in the fetich stage of the worship of ancestors, the eating of the body may have borne some direct relation to the religious ideas which gave occasion to the feasting, and he throws out this hint to account for the discovery in the shell-mound refuse of Denmark, of disjointed fragments of the human body, and bones artificially split, just such phenomena as the Long Barrows present.†

Sr. Delgado regards the natural caves of Césaréda, on the Tagus,‡ as the "halls for cannibal feasts." In these Spanish caves, marks of posthumous trepanning have been found, which must have been the work of human agency, and if it be concluded that the object of making such incisions was to extract the brain, all doubt on the subject would be removed.

In the Province of Reggio (Émilie), in Southern Italy, the

[†] Mr. Morse noticed in the shell- and refuse-mounds of Japan human bones which had been broken in the same manner as those of the animals which were found with them.

‡ Commissão geologica de Portugal, "Noticia acerda das grutas de Cesareda," Lisbon, 1867.

Abbé Chierici explored a natural cavern in which he considered that there were evidences of human sacrifice. The primitive population of this district was dolichocephalic. In the inner end of the cave was a raised platform, formed by stones set along the wall, to the height of half a métre. This platform measured 5 m. long, and from 1.50 m. broad. Upon it were deposited the remains of skulls which had been subjected to fire, while scattered around were human jawbones unburnt. There were distinct traces of a fire having been kindled within the cave, the floor of which was composed of layers of carbon, burnt earth and stone, stone axes and other implements, and broken pottery, and interspersed with this mass of débris, human bones dismembered and scattered about, together with those of animals-pig, dog, and sheep. A bronze nail and a vessel of bronze were also found. To quote the words of the explorer: "La caverne contient, en effet, tous les élèments nécessaires pour representer des semblables sacrifices. Pour dire toute ma pensée, je pense qu'au sacrifice s'ajoutait la distribution des membres du victime, ce qui expliquerait la confusion, et la dispersion des ossements."

This writer adds a very curious theory with regard to the unburnt jawbones. He states, and truly, that in other cases in Western Europe, where human remains have been found in connection with burning-places, the jaws have been found without the other portions of the head, and he might add that the other portions of the head have been found without the lower jaw. This fact, he thinks, affords evidence of identical observances.

With regard to the sacrificial uses to which caverns in Apulia had been put, M. Regnoli, as a result of explorations made in them, came to a similar conclusion.

I will quote M. Chierici's own words in support of the theory he was led to adopt—

"Les déductions que je viens d'émettre sont confirmées et complétées par la tradition. Rappelons-nous le célèbre oracle de Dodone aux Pélasges qui allaient émigrer vers l'Italie: 'Allez chercher une terre (Saturnia) des Sicules, et une réfuge $(\kappa o \tau \dot{\nu} \lambda \eta \nu, \sin u m)$ d'aborigènes où surnage une île. Conjointment avec ces aborigènes vous enverrez la dime à Zébus (Phæbus), et vous offrirez des têtes au Ténébreux (Dites) et des enfants mâles

au père (Saturnus).'† Macrobe ajoute qu'en effet les Pélasges établis en Italie 'diu humanis capitibus Ditem et vivorum victimis Saturnum placare se crederent.' Et nous avons aussi, chez les Latins, la formule exécratoire 'hominem, caput consecrare.' Virginius, levant son poignard, s'écriait vers Appius Claudius, 'Te tuumque caput hoc sanguine consecro.' En outre, on sait que les sacrifices à Dites se faisaient 'in loco abdito, sub effossa humo.' Plus tard des mœurs adoucies ont substitué aux têtes humaines des petites têtes d'argile (les oscilla), et, aux victimes des Saturnales, des effigies qu'on jetait chaque année dans le Tibre, après les avoir exposées en public. Il est curieux de constater qu'un usage semblable s'est conservé dans ma patrie, même jusqu'à nos jours." ‡

The writer concludes with two observations on the words of the oracle—

"Il dit expressément," he says, "que les Pélasges devaient accomplir les sacrifices à Dites et à Saturnus avec le concours des aborigènes. Ceux-ci participèrent donc à ce rite, et il est permis de reconnaître en eux nos peuples italiens de l'âge de la pierre polie. D'autre part, les têtes humaines destinées à Dites sont désignées par l'oracle sous le nom de $\kappa\epsilon\phi\alpha\lambda$ às, mot signifiant d'une manière précise la partie de la tête qui contient le cerveau. Cette interprétation ne nous apprend-t-elle pas pourquoi les crânes trouvés sur l'autel (*i.e.* in the cavern he explored), sont tous brûlés, tandis que les mâchoires éparses alentour ne le sont pas?"

The absence of the lower jaw has been frequently remarked in the case of Irish skulls from cists in tumuli. That the sacrifices of human beings (infants where a good harvest was required and famine to be averted, and prisoners of war, malefactors, and strangers, where the war-god or the national deity was to be specially honoured or appeased) took place throughout the whole of North-Western Europe—in Ireland, in Britain, in Scandinavia, in Germany, and in Gaul—we have ample testimony, not from

[†] Στείχετε μαιόμενοι Σικελῶν Σατούρνιαν αἶαν 'Ηδ' 'Αβοριγινέων Κοτύλην οὖ νᾶσος ὸχεῖται, Οἶς ὰναμιχθέντες δεκάτην ἐκπέμψετε Φοίβφ, Καὶ κεφαλὰς Κρονίδη καὶ τῷ πατρὶ πέμπετε φῶτα. Dionys. Hal. "Ant.," i. 19; Macrob. "Saturn.," lib. i. c. 7.

[‡] A precisely similar modification of the ancient observances which ordained that human victims should be slaughtered on the grave-mounds, took place in Japan, when, by command of an Emperor, well within historic times, little figures of men, formed of baked clay, were buried in the tumuli in place of the real human subjects who had previously had to pay the penalty. The younger Von Siebold has figured some of these images in his "Notes on Japanese Archæology," Yokohama, 1879.

classical sources alone, but from the traditions which mediæval writers have rescued from the past. Cæsar has made us acquainted with the barbarous orgies which, among the Britons of his day, accompanied the sacrifice,—the burning of captives and felons. Irish tradition has similarly pointed out to us a district lying round Ballymagauran, in the County of Cavan, called Mag Slecht, that is, "Plain of Prostrations," where infant sacrifice was practised.†

I will here quote from Dr. Whitley Stokes's recent translation of the Dindshenchas, the passage which relates to this: "Tis there was the King-idol of Erin, namely, the Crom Cróich, and around him twelve idols made of stones; but he was of gold. Until Patrick's advent, he was the god of every folk that colonized Ireland. To him they used to offer the firstlings of every issue and the chief scions of every clan. 'Tis to him that Erin's King, Tigernmas, son of Follach, repaired on Hallontide, together with the men and women of Ireland, in order to adore him. And they are prostrated before him, so that the tops of their foreheads, and the gristle of their noses, and the caps of their knees, and the ends of their elbows broke, and three-fourths of the men of Erin perished at those

[†] The deity was called Crom Cróich, or Cromm Crúaich, or In Cromm Crín, or Cenn Cruaich, which, if Crom means, as I think it does here, a worm or serpent, Cruach, a mound or cairn, a high place, or marked hill, whether natural or artificial, Crín (compare Crineamh = fate, destiny; or Crineamna, another name for the Lia Fail, or Stone of Destiny, at Tara), fate (or perhaps it is the adjective Críona = old), and Cenn, "a head," would signify respectively, "Mound Serpent," "the Serpent of Destiny," or simply "the Old Serpent," and "Mound Head." With this idea of Serpent and Head, comp. Pausanias (Bæotia, bk. ix., cap. 19): "As you go on the high-road from Thebes to Glisas is a place surrounded by unhewn stones, which the Thebans call the Head of the Serpent."

from Thebes to Glisas is a place surrounded by unhewn stones, which the Thebans call the Head of the Serpent."

Crom, as an adjective, means "crooked" or "slahting," as Gallán Crom = "slanting pillarstone;" Cromlacka = shelving-rocks on the sea-coast, etc., but here it seems to be a nounsubstantive. Crom Dubh, that is, "Black Crom" (? Black Serpent), is represented as a Pagan opponent of Patrick, connected with Croagh Patrick, a natural hill in Mayo, from which that saint was supposed to have driven the serpents out of Ireland. Cathair Crofinn (? from Crom and Fionn = White Serpent) was the most ancient name of Tara, or Temair. Crofinna herself was a mythological being of the Tuatha Dé Danann, the mother of a trinity of divinities, Bres (Eochaid), Nar, and Lothar, answering to the Norse divinities Odin, Heenir, and Lote, whose mother was Bestla (comp. Ir. peist = a serpent): compare also Crovdearg (? from Cromh and Dearg = Red Serpent), a half-pagan and half-mythical personage worshipped at a well near the Paps in Kerry; Crom = cruim; Welsh prem; Lat. vermis; Eng. wurm, worm. The Wurm-dyke is a name applied to a rampart traversing the country. A Priste, or snake, in Ireland inhabits the bottoms of venerated lakes. A similar superstition exists in Halland at the magic lake of Helsjö, to which pilgrims flocked, just as was the case in Ireland. In the "Life of St. Barbatus" we find that the Langobardi in Italy worshipped, among other relics of idolatry brought from the North, a golden simulacrum virera, an image of the bestia quae vulgo virera dicitur. Crom, as we have seen, was made of gold. In a German legend in Grimm we find a Black Worm lying coiled round a heap of gold. In Ireland the great Croach, literally, "Mound," a venerated mountain in Mayo, was connected with Crom Dubh, the Black Crom, and, as we have seen, Crom Crúaich means Crom of the Mound. In old German poetry the Devil is called Hellewurm. In Styria was the Silberberg, a mountain full of fabulous snakes, over which a queen—the Great White Serpent

Slecht, the object of the worshippers is set forth: "Milk and corn they used to ask of him urgently; for a third of their offspring. Great was its horror and its wailing." From other authorities we learn that Tigernmas died in the "great meeting" held in this plain, and three-fourths of the men of Erin along with him, while adoring Crom Cróich; also that he was a special god of Foilge Berraide, that is, of the chief of the Húi Foilge, Failge, or Falgi; and also that the twelve † surrounding idols were covered with bronze. It was reserved for Patrick to destroy this idol. Tigernmais signifies "Lord of Death." The eminent philologist who translated the above passage states that he infers from it that among the Irish, as among other races, "the Earthgods could be propitiated by human sacrifice."

Turning to Germany and the North, we have the statements of Tacitus that "on certain days" the god whom he calls Mercury, and who is probably the Teutates of Lucan, and the Odin or Woden of the North, was propitiated with human victims. The Semnones, too, who occupied a part of the Mark of Brandenburg, and held themselves to be the oldest and noblest tribe of the Suevi, were wont "at a stated time to assemble in a wood consecrated by the auguries of their forefathers and ancient terror, and there, by the public slaughter of a human victim, to celebrate the horrid origin of their barbarous rites."

At Upsala, in Sweden, every ninth year nine persons were sacrificed, chosen from among the ranks of captives if in wartime, or of slaves if they were at peace. Olaus Wormius, after describing the temple of Kialarnes in Iceland, with its altar for sacrifice and its deep well close by, states that although for the most part animals were the victims, which were subsequently eaten by the devotees, yet that human victims also had not only been slaughtered, and their bodies plunged in the well, but had formed a part of the pagan feasts.

With such evidence as this that cannibalism accompanied human sacrifice, and may even have been an essential part of the rite, as Worsaae thought, it is impossible not to compare the following passage from Pliny:—

"Very recently," he says, "on the other side of the Alps, it was the custom to offer human sacrifices, after the manner of

[†] In the Norse pantheon there were twelve principal gods (Anderson, p. 185).

the Cyclopes and Læstrygones who formally existed in Italy and Sicily; and," he significantly adds, "the difference is but small between sacrificing human beings and eating them."

That ancient rite in Italy was connected with the worship of Saturnus, who is to be equated with the Dis of the Gauls, to whom, according to the Druids, the whole of that people traced their origin as to a common father. The distinction drawn between these two names by Macrobius, who states that the Pelasgi built a sacellum to Dis and an ara to Saturnus, and the fact that Gruter gives us an inscription at Rome which mentioned Ateria, a priestess of Dis-Pater, need not interfere with the conclusion that Cæsar's Dis-Pater is Saturnus, or rather his Gaulish equivalent. Cicero, indeed, states that among the people of the West the worship of Saturnus was most widespread and popular, while Dionysius of Halicarnassus assigns his cultus to the Celts.

Pliny,† after mentioning the fact that human sacrifices were not forbidden in Rome, but were actually practised there until the year A.U.C. 657, connects these rites with necromancy. "The Gallic provinces," he says, "were pervaded with the magic art, and that even down to a period within memory. . . . At the present day, Britain, struck with fascination, still cultivates this art. . . . Such being the case, then, we cannot too highly appreciate the obligation that is due to the Roman people for having put an end to these monstrous rites, in accordance with which to murder a man was to do an act of the greatest devotedness, and to eat his flesh was to secure the highest blessings of health."

Diodorus Siculus brings against the inhabitants of Ireland a distinct charge of cannibalism. "Those Gauls," he says, "towards the north, and bordering upon Scythia, are so exceeding fierce that, as report goes, they eat men, like the Britons do who inhabit Iris." It will be observed that the doubt expressed in this sentence is with regard to the Gauls next to Scythia, not with regard to the Britons of Ireland. That they were anthropophagi was evidently as much a matter of general knowledge among the *literati* of the South in the time of Diodorus as is the news which Mr. Stanley and others have brought us that there is a race of dwarfs in the "Dark Continent" to-day.

Lastly, we come to the horrible accusations of Jerome with

[†] Bk. xxx. cap. 4.

regard to the Attacotti, a people which he assigns, however, not to Ireland, but to Britain. Before quoting his words, I may say that a possible explanation of the name of this tribe may be looked for in the Goidelic word Athach, meaning a "giant," and corresponding, therefore, in sense to the Teutonic Iot, Iotun, Iotr, Eoten, etc., which, whether or not it included the idea of great stature, signified a person of a lower race, non-Aryan, perhaps, but, at all events, like Hun, a term denoting an allophylian. That the giants got the name of having been cannibals our folk-lore abundantly shows us, and had Jerome when a boy lived under the shadow of St. Michael's Mount in Cornwall, and heard the tale of Jack and the Giant Blunderbore, we might well imagine that in later years he might have persuaded himself that he actually had seen that which had made so deep an impression upon his youthful mind. That a story of the kind may have reached him with regard to the Attacotti, who were probably regarded, being allophylians, as one of the giant races of the North, and that it may once have had a shadow of truth in it, I do not deny; but that it was true at the time Jerome wrote, even of fierce mercenary bands in Gaul, I hesitate to believe. Here is the statement: "Quid loquar de cæteris nationibus, quum ipse adolescentulus in Gallia viderim Atticottos, gentem Britannicam, humanis vesci carnibus."

Jerome † had reason to dislike the Britons, whose country had given birth to Pelagius and in which heresy flourished, and he was a man for the coarse venom of whose tongue no unscrupulous slander was too vile an ingredient. And yet, in ages which then would not have so long gone by that the tradition would have wholly passed away, there may have been truth in the assertion that Britain, and Ireland too, possessed tribes who, on sacrificial occasions, were actually cannibals.

It is doubtless a long jump backwards from Jerome's time to the Neolithic Age, in the Long Barrows of which Thurman thought that he found evidence of human sacrifices in the broken skulls, and Greenwell and Rolleston of possibly cannibal practices under those of the Yorkshire Wolds. But custom, we must remember, had all this time nothing to check it, until first of all the reflected civilization of Rome, and then Christianity, appeared

[†] Jerome makes Pelagius an Irishman, "Scoticæ gentis de Britannorum vicinia," Pref. lib. iii. in Jerem.

on these shores. Just contemporaneously with the first of these events comes the statement of Diodorus, the general truth of which I am not disposed to question, with regard to Ireland, supplemented by that of Pliny, that necromancy, involving the sacrifice of human life, was prevalent in Britain.

The question arises, "Where would such weird rites have been performed?" and the answer to it is, "At the tombs of ancestors of the race;—at the tumuli into which, as the Norse poets say, their heroes died;—at the dolmen, at the circle,† and at the cairn."

Illustrations of the fact that such monuments were no mere sepulchres of the dead, but places set apart for the sacrificia mortuorum, for pilgrimages, for the periodical assembling of the tribe or tribes for religious or social purposes, for the holding of fairs, for the contracting of marriages, and for unrestricted feasting and revel, will be introduced as we proceed.

At the root of all this lay the cultus of the dead, and there is no need to shun the fact that in the British Islands, in the days when their inhabitants were little different from the other savage peoples of Northern Europe, human sacrifices, almost certainly combined with cannibal practices, prevailed.

Scandinavia, Denmark, Schleswig, and Holstein.

The Malar Lake appears to be the northern limit of the dolmens of the Scandinavian peninsula. North of this—that is, in West Bothnia and Lapponia Pithensis, the countries where legends placed the second, or northern, Iötunheim, İ—the Risaland or Hunaland of the sagas, the kingdom of the Jætte, or Reise or Huns, there were tumuli, it appears, and pillar-stones, but no dolmens. To the primitive inhabitants of these countries, namely, the Samé or Lapps, the natural cavern in the hillside, in imitation of which the artificial stone structures, with their long passage-entrances and expanding interiors, covered over by mounds and forming artificial hills, were probably formed, served as the sepulchres of their race.

[†] That circles were unquestionably places where human victims were slaughtered will appear when we come to speak of the *Dom-rings* of Scandinavia.

‡ The other and southern Iötunheim, Mr. Du Chaillu thinks, was between the Dnieper and the Volga and Don, north of Asgard, which was between the Dnieper and Don on the shores of the Palus Mæotis.

[§] J. D. Stecksenius, "Dissertatio gradualis de Westro-Botnia" (Upsala, 1731), p. 12; "Cippos esse atque tumulos, magnum antiquitatis indicium respondemus."

Scheffer tells us that these Lapps buried in caves, the mouths of which were stopped up with stones, and that with the dead they buried a hatchet, and a flint and steel. They sacrificed a reindeer in honour of the dead, and feasted on it for three days after the burial. The bones of the animal they gathered up, put them in a coffer with the wooden figure of a man upon it, and buried them underground. Their names for the ghosts they worshipped was Sitte. When offering them sacrifices (presumably at the cave's mouth), their first business was to inquire the will of the dead. They said, "O ye Sitte, what will ye have?" Then they beat the drum, on which was a ring, and if the ring fell on any creature pictured on the surface, they understood that that was what the ghost desired. They then took the animal, ran through its ear or tied about its horns a black woollen thread, and sacrificed it.

In every particular of this account we see precisely what archæological research on the one hand, and legend and tradition committed to writing in the Middle Ages, coupled with folk-lore still in oral survival, on the other, lead us to believe occurred in the case of the dolmens and chambered tumuli. recount them in order: (1) The burial in a cave, formed artificially; (2) the hatchet and the flint interred with corpse; (3) the sacrifice of an animal; (4) the subsequent feast; (5) the interment of the animal bones; (6) the interment of the painted figure of a man in place of the original human being sacrificed; (7) the name Sitte,† so closely similar to the name given by the Irish to the spirits of the dead who inhabited the chambers in the tumuli, namely, Sidhe, a word unexplained in Celtic; (8) the veneration of the dead shown in the desire to supply their wants; (9) the practice of necromancy; (10) the woollen thread tied on the horns of the beast, just as threads and rags may be seen to this very day attached to thorns round venerated spots, such as the dolmen of Maulnaholtora in Kerry;—all these point to an identity of custom between the Turanian peoples of Northern Europe and a primitive race in the British Isles.

Whether there were monuments of the dolmen class on the other and eastern side of the Gulf of Bothnia, that is, in Finland, I have not been able to ascertain with certainty. It would certainly appear, from what Ruehs says, that there were. "One

[†] This word has been compared with the name of the Sitones, a people of Scandinavia mentioned by Tacitus. Muellenhoff, "Deutshe Altertums," ii. 9, derives Sitones from the Gothic sitans, a stranger

meets," he tells us, "in Finland with hünengräber, roofed over with enormous stones, in which have frequently been found vessels of gold, silver, and other metals, with quantities of bones of birds, and skulls of small wild animals." † The discovery of golden vessels may be ascribable to the exaggerations of the rustics who gave this writer his information, as is so commonly the case in Ireland, where similar stories are current, the popular belief in the latter country being that, even if the vessel appear to be of clay and its contents bone-dust and ashes, they were gold originally, but have been turned by the ill-natured fairies or some neighbouring witch into valueless rubbish to spite the finder. The existence, however, of the megalithic monuments must surely have been a fact within the knowledge of so careful and generally accurate a writer as Ruchs.

Turning to Sweden, we have dolmens in plenty, and, what is more, we have for our guide one of the greatest of modern antiquaries, M. Oscar Montelius,‡ whose system of classification of these monuments very closely agrees with that which I have made for Ireland. He divides them into—

(1) Dolmens proper (called in Swedish dösar, sing. dös).

(2) Passage-tombs, sépultures à galerie (called in Swedish gånggrifter, sing. gånggrift), or jättestugor, "Giants' Graves."

(3) Cists, or great slab-graves, cercueils en dalles (called in Swedish hällkistor, sing. hällkista), the tops of which are not covered over with earth or stones.

(4) Cists, or slab-graves, *cercucils en dalles*, covered up completely in earthen tumuli, or piles of stones.

A Swedish monument, of which Rudbeck, in his "Atlantis," gives a rough ground-plan, does not readily fall into any of these divisions, but resembles rather some structures, perhaps transitional, such as those of Killachlug and Kilberrihert in the County of Cork. I give it for what it is worth.

All his several divisions M. Montelius refers to the Neolithic Age, and adds that there are other interments, referable to the same period, which are found to have been placed simply in the ground, without any protecting stones.

In Sweden, during the Stone Age, the dead were not

[†] C. F. Ruchs, "Finland und seine Bewohner" (Leipzig, 1809), p. 27: Abo-Tidning, 1782, S. 221.

S. 221. † "Congrès intern. d'Anth. et Archéol.," 1874, p. 153. § pp. 32, 34, supra.

cremated. They were buried, often in a sitting posture, and at their side were placed their arms or implements.

In the case of the first of the above divisions, that of the "dolmens proper," the sides are formed of large slabs of stone,

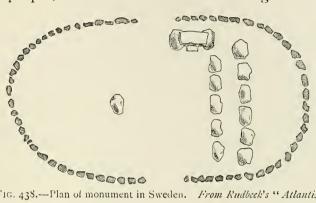


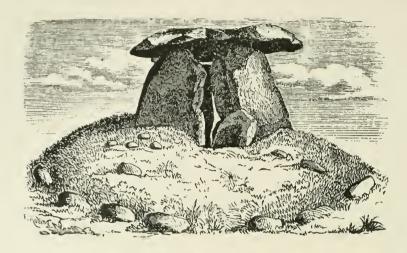
FIG. 438 .- Plan of monument in Sweden. From Rudbeck's "Atlantis."

fixed in the ground, and reaching from floor to roof, the inner face of each slab being flattish, the outer one generally rough and irregular. The floor of the cell within is of sand or gravel. The roof consists of a single large block, the under surface of which is flat, the upper one rough and rugged.

The ground-plan of the vault is either square, oval, pentagonal, or nearly round. Its average measurement is from 2.5 m. to 4.5 m. long; from 1.5 m. to 2 m. broad, and from 0.9 m. to 1.6 m. high. On one side—either that facing the S. or that facing the E.--it is very frequently open. The lower portion of the structure is in general covered by an artificial knoll of circular or oblong shape, formed of earth or stones (cailloux), and environed by large blocks.

Of dolmens of this class I give examples from Bohuslän, Scania, Zeeland, and Denmark; and, for comparison with the encircled examples, I add Fergusson's sketch of the Leaba na bh-Fian, at Carrowmore. I may add that I hold the same opinion with regard to these as I do with regard to the Irish examples, namely, that each had a passage-way to the edge of the mound, a portion of which the Herrestrup example retains. A rough drawing from Liljegren shows a low prolongation, as at Brenanstown in the county of Dublin (Figs. 440-446).

It is added that on the surface of the block which forms the roof of the cell, little basins, or round scooped-out pittings are often found, measuring 5 to 10 centimétres in diameter, intended



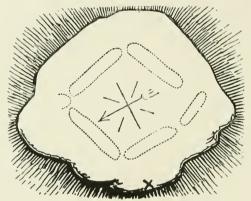


Fig. 439.—Sketch and plan of the dolmen at Stala, Island of Oroust, Bohuslän. From Montelius, "Congrès Internat.," 1874, p. 155.

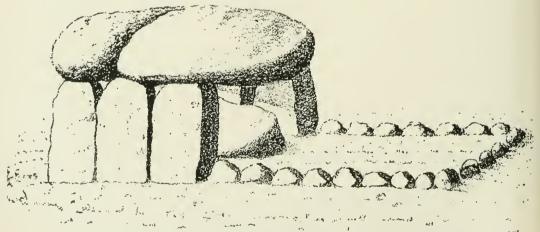


Fig. 440.—A Swedish dolmen. From Liljegren and Brunius, "Nordiska Fornlemningar," 1823, vol. ii. pl. lxxv.

(so M. Montelius thought) to be the depositories of offerings in honour of the dead. Stones which have such little cups (pierres

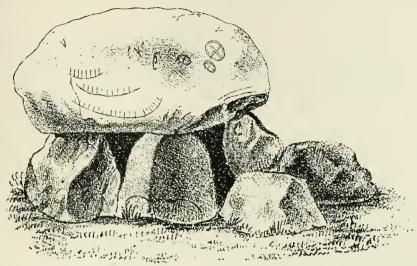


Fig. 441.—Herrestrup, in Zeeland. From Holmberg, "Skandinaviens Hällristningar," 1848, Tab. A and B, Fig. 24.

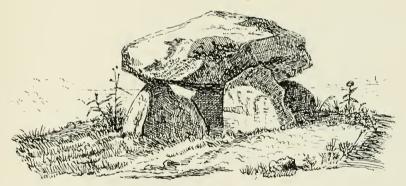


Fig. 442.—Danish dolmen. From Worsaae, "Nordiske Oldsager," 1859, pl. i. Fig. 1.



FIG. 443.—Dolmen at Hafang, Scania. From Hildebrand, "Förhistoriska Folken i Europa," p. 68.

à écuelles) are known to the Swedish peasantry as elfqvarnar, that is, "fairy-mills," and are held in traditional veneration.

M. Montelius gives an example of a dolmen, on the covering-

stone of which is an arrangement of cups. It is at Fasmarup, in Scania (Fig. 449). In the Meneage district in S.W. Cornwall an



Fig. 444.—Cairn at Carrowmore. From Fergusson, R.S.M., p. 183.

example occurs of cup-markings upon the roofing-stone of a structure comprising a natural rock, a block set on edge lengthways beside it,



Fig. 445.—Danish dolmen. From Worsaae, "Prim. Ant.," transl. Thoms, pl. ii.

and a cap-stone laid across the passage thus formed. A larger cup has been sunk into the surface of the natural rock at the N.E. end of

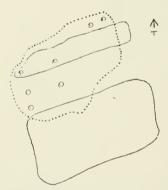


Fig. 446.—Plan of the "Three Brothers of Grugith," Cornwall, showing cups. By W. C. Lukis and W. C. Borlase.

the passage. It seems that some superstition, involving creeping through the passage, was practised here; and that the cups were, like those of Scandinavia, intended to receive offerings, while the larger one may have contained water for some preparatory process of oblation (Figs. 447, 448).

In Halland is a natural rock, on the back of which rests another, forming a creep between them.† Here, too, cup-basins have been sunk into the surface of the stones. In Portugal

several examples occur of such cups on the covering-stones of dolmens, as in the case of the Anta de Paredes, to be noticed presently. In Wales a good example exists at Clynnog Fawr, in Carnarvonshire. In Ireland I have repeatedly found them, in many instances evidently artificial. In other cases, where they are purely natural, I have been led to suppose by their position that

^{† &}quot;Sketch from Hildebrand," p. 129.

the stone had been specially selected because it contained them. I feel sure that wherever found in such situations they were connected with pilgrimages, and with the superstitious practice of creeping



Fig. 447.—Section of the "Three Brothers of Grugith," Cornwall. By W. C. Lukis and W. C. Borlase.

under the rock. Several Scandinavian and Danish dolmens—such, for example, as that, often figured, at Herrestrup in Zeeland (Fig. 442)—have sculptured figures upon their cap-stones. A

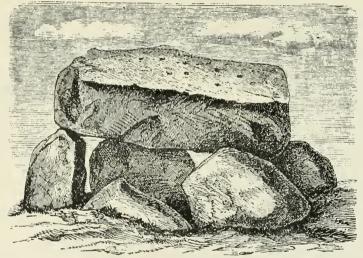


Fig. 448.—Dolmen of Fasmorup. From Montelius, "Congrès Internat.," 1874, p. 157.

rock in Scania presents some fair samples of these, which we may compare with some of those at Loughcrew (Fig. 452).

Another rock in the same province presents figures of ships and carriages (Fig. 453). With these figures of ships we may compare a sculpture at New Grange (Fig. 341); and with those of the carriages, or chariots, those on a stone at Castle Archdale (Fig. 211). A ship of later date and superior design occurs on the stone wall of a church in Langeland (Fig. 451). There is another on one of the carved stones in a chamber at Kivik in Scania.†

The contents of dolmens of this first class may be judged from the following list of objects found in one at Luthra in Vestergöt-

[†] See Fig. 454, and Sjöborg, "Samlingar jör Nordens Fornälskare," 1830, iii. pls. xi. and xii.

lande; namely, five spear-heads, one arrow-head, nineteen axes, all of flint; four pins and eighteen beads, of bone; four beads of amber; eleven perforated teeth of bears, dogs, and pigs; several bones of cows, and a large number of human skeletons.

The second division, that of the passage-tombs, comprises

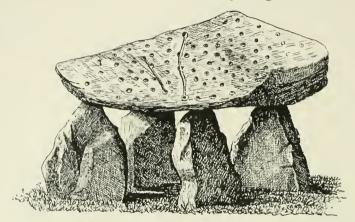
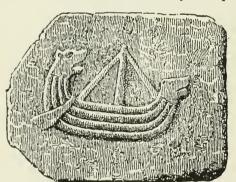


Fig. 449.—Clynnog Fawr, Carnarvonshire. From Simpson's "Archaic Sculpturings."

monuments constructed in the same fashion as the dolmens, but distinguished from them by their elongated form, by a plurality of covering-stones, and by the presence of a covered-passage, of



F16. 450.—Ship on a stone wall of the church of Skröbelef, Langeland, Denmark. From Du Chaillu, "Viking Age," ii. 141.

considerable length, leading into them from the S. or E. side. The entire structure is surrounded by an artificial mound, which does not in Sweden cover the roof, except in rare instances, although in the examples in Denmark the reverse is the case. The average measurement of the vault itself in these structures is from 4 m. to 17 m. long,

from 1.5 m. to 3 m. broad, and from 1.3 m. to 2 m. high.

The passage is narrower and lower than the vault to which it leads, but often quite as long. In the majority of cases it entered the vault at or near the centre of its S. side, approaching it at a right-angle, and thus forming a ground-plan in the shape of a T. In these instances the vault is a long-oblong, its angles being right angles. There are; however, examples in which the

passage is much nearer one end—the S.E. end—than the other, and in these cases the vault is narrower at that end than at the other, approaching in this respect the wedge form. In structures

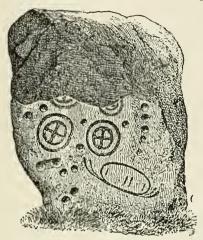


Fig. 451.—Rock-sculpturing in Scania. From Du Chaillu.

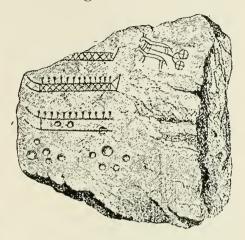
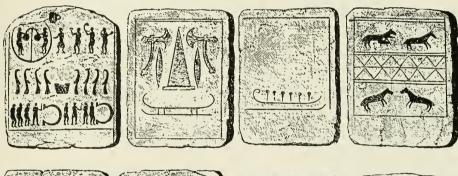


Fig. 452.—Rock-sculpturing in Scania. From Du Chaillu.



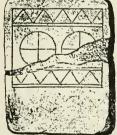








Fig. 453.—Slabs from the cairn of Kivik near Cimbrishavn, Sweden. From Du Chaillu. "Viking Age," p. 88.

of the third and fourth (hällkista) types, the passage is wholly absent, and, where this is the case, in the generality of cases, the two longer sides of the vault were not parallel, so that the ground-plan was actually wedge-shaped, and precisely similar to Irish examples. These latter structures had their longer axis almost

invariably N. and S., the S. end being the narrower, as the E. end is in Ireland, and are almost always open at that extremity. Mr. Du Chaillu regards this latter form as "the outcome of the omission of the passage," and remarks that "several intermediate forms have been found, showing how the passage was gradually lessened, till it could only be traced in the opening which narrows at the S. end." The seemingly analogous structures in Ireland



F16. 454.—Plan of cist at Knyttkärr, Dalslande. From O. Montelius.

do not lead me to this conclusion. It is true that I have sometimes found the narrower end open; but in the case of some of the finest monuments of the class I have found it closed by an

immense stone, evidently an integral part of the structure, never intended to be moved,† nor any entrance effected from that end,

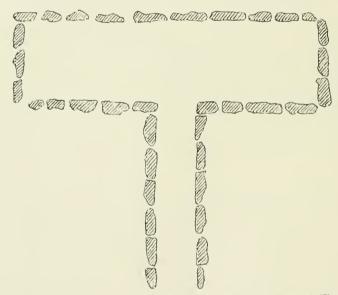


Fig. 455. - Danish passage-dolmen. From Worsaae, "Prim. Ant.," transl. Thoms, pl. iii.

whereas at the broader-and loftier W. end, there was, invariably, I think, a hollow place or passage, either above, under, or at the side of the closing flag, and a porch-like arrangement without. I regard the two types of structure, therefore, as distinct, and from the form of such examples as those at Labbacallee (Co. Cork, p. 9) and Knyttkärr,‡ in Dalslande, I should venture to hint that, if

[†] E.g. Ballyganner South, Co. Clare, p. 67.

‡ "Congrès Internat." (Stockholm), p. 169.

those of the T type are to be looked upon, as they have been, as models of houses, those of the wedge type may be plausibly

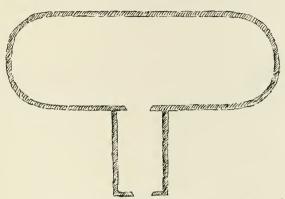


Fig. 456.—House of a Norwegian Lapp. From Sir A. De C. Brooke's "Winter in Lapland," p. 318.

regarded as models of ships. In the Knyttkärr example the peristyle has its counterpart in numberless Irish structures,

besides the Labbacallee, of many of which I have given plans, as, for example, in the Lacht-Niall and Leaba Owen (Eogain); in those at Lackaduv, Keamcorravooly, Coolaclevine, and very many more.† The view that the former were models of houses arose from a comparison of them with the houses of the Lapps, to which in form the typical Danish example in Worsaae, and the Ottagården one given by Montelius, certainly bear a strong resemblance (Figs. 456, 457, 458).

A good example of the Tshaped type, which seems to be in some measure repeated in the case of one of the monuments in the Lough Arrow group (Co. Sligo), is that on Axevalla Heath,‡ near Lake Venern, in

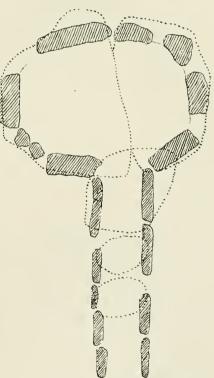


FIG. 457.—Swedish passage-dolmen, at Otta-gården, Vestergötlande. From Montelius, "Congrès Intern.," 1874, p. 164.

Vestergötlande. The passage measures 20 feet long by 21, to 3 feet

broad, and 3 feet high; the vault 32 feet long, 8 or 9 feet broad, and 5 or 6 feet high. Nineteen bodies, all unburnt, were found crushed into small cists, arranged mostly around the walls of the vault. The slabs forming these cists measured 3 feet high.



F16. 458.—"Elsten" in Halland. From Hildebrand, "Die Förhistoriska Folken i Europa," p. 129.

Madsen gives an interior view, and a ground-plan of a vault covered by a tumulus, at Uby, in Zeeland. The mound measured 300 feet in circumference, and 13 feet in height. The entrance passage was 20 feet long, and the vault 13 feet long by 8 feet



Fig. 459.—Dolmen at Axevalla. From A. E. Holmberg, "Nordbon under Hednatiden," p. 15, and Du Chaillu, "Viking Age," i. 73.

wide. The walls were formed by nine huge slabs set on end, the interstices between them being filled up with small stones neatly fitted. The roof consisted of two immense blocks.

Mr. Du Chaillu gives a plan of a passage-tomb near Karleby, in Vestergötlande, which illustrates the type of those entered near

the end. It is described by M. Montelius as the largest in Sweden, covered in with nine great slabs, and measuring 17 m. long by about 2 m. broad, the passage having a length of 2 m.

Two very fine examples of passage-tombs in Denmark were

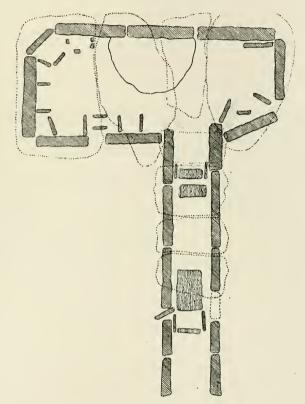


Fig. 460.—Ground-pian of dolmen with passage near Karleby. From Du Chaillu, "Viking Age," i. p. 75.

visited by the members of the *Congrès International* during their stay in Copenhagen, in 1869, in the "Proceedings" for which year they are figured. The first is the *Jætte-Stue* (Giant's Chamber) of Öm. The passage measures 13 m. long, and the walls of the vault itself are formed, like those at Uby, of great upright blocks, with smaller stones forming a dry walling between them. Upon these blocks rest the covering-stones which span the vault, the interior of which is large enough to afford standing-room for twenty persons, and high enough to allow them to stand upright.

The second is the *langdysse*,† of Trollesminde, near Hilleröd. A *langdysse* is defined as "un dolmen-tumulus allongè presentant

[†] For typical specimens of a *langdysse* and a *runddysse*, see Worsaae, "Nordiske Oldsager," 1859, pl. i. figs. 2 and 3.

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des tertres artificiels, entourés de grandes pierres dressées perpendiculairement, et contenant, en dedans du cercle, un, deux, ou trois dolmens, ou tombes, faits avec de grandes blocs." This particular mound, which is covered with turf, is about 30 m. long by 10 m. broad. It lies E. and W., and contains only one vault or dolmen, and that under its eastern end. The roof is formed

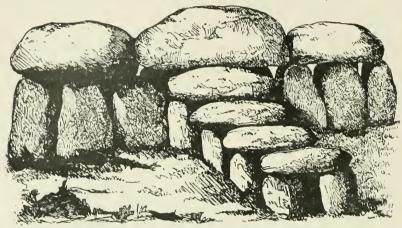


Fig. 461.—Dolmen with gallery, Vestergötlande. From Montelius, "Congrès Intern.," 1874, p. 161.

by a single stone, which rests, at either end, on one of the blocks which form the sides of the vault. The tumulus is surrounded by a free-standing ring of upright stones.

It may be compared with the monument called popularly "Harald Hildetand's Tomb," at Lethra in Zeeland, of which Sjöborg † gives an illustration, which shows it to be a mound of elongated form, with a dolmen upon it at one side, and an arrangement of free-standing blocks around it. With monuments of this type may specially be compared the "Long Barrow" at West Kennet, and the Hünebedden of Mecklenburg, Brandenburg, and Hanover.

Another structure of the same class is that on the island of Möen, which has been described by Sir J. Lubbock.‡

To one of the monuments of the *hällkista* type of M. Montelius, I would call especial attention, since both in construction and arrangement it affords a most convincing proof of the oneness of design and purpose which prompted men in past ages to erect those structures, whether in India or Palestine, on the

^{† &}quot;Saml. för Nordens Fornälskare," vol. ii. fig. 214, and p. 146. † "Prehistoric Times," 5th edit. p. 162.

Vistula or the Elbe, in Scandinavia, in Denmark, in Britain and Ireland, France, Italy, Spain, North Africa, and the islands of the Mediterranean.

Like the vault in a British "Long Barrow," or the dolmens of Brittany and Spain, it was roofed with flags and buried in a mound, and, like the cairn-chambers of Annacloghmullin and Caithness, it was divided into compartments, three in number.

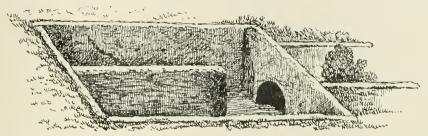


Fig. 462.—Karlsgarden, Vestergötlande. From Montelius, "Congrès Intern.," 1874, p. 166.

Access from one compartment to another was provided, not by means of a narrow space between upright stones, but by semicircular holes cut out of the single flagstone, which, in each case,

forms the partition. Of similar holes in structures at Karlsgården, in Vestergötlande, and at Röd in Bohuslän, Montelius has given examples.

The structure is near that at Karleby, above mentioned. It measures, in its entire length, 7 m. The largest compartment is that at the N.W. end, which measures



Fig. 463.—Entrance to a cist encircled by a ring of stones at Röd, Bohuslän. From Montelius, "Congrès Intern.," 1874, p. 186.

4.3 m. long, 2 m. broad, and 2 m. high. The middle one measures about 1 m. long, and the third, or S.E. one, which has the appearance of an antechamber or porch, rather than a closed compartment, being open at the end, 1.5 m.

When explored by MM. Montelius and Retzius, each of the

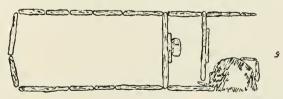
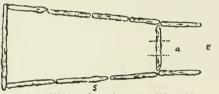


Fig. 464.—Ground-plan of chamber at Karleby, Vestergötlande. From Montelius, loc. cit., p. 173. apertures between the compartments was found to be closed by a flag placed against the S.E. side of the slab. It is not stated

what were the dimensions of the apertures, but from the drawing it would appear that in each case they were large enough to admit the passage of a human body.

In the inner compartment were no fewer than sixty skeletons, and with them had been deposited thirteen daggers, six lanceheads, four arrow-points, one chisel, one saw (semicircular), six scrapers, and ten splinters—all of flint; five little polishers of black schist; two pins and four awls of bone; two beads of amber, and two others of bronze, and the point of a lance of the same metal;—the whole affording evidence that the date of the structure, like that before described, near Hallé, was towards the close of



the Neolithic and the commencement of the Bronze Age. proof that the wedge-shaped type, broad at the W. end and narrowing towards the E., existed FIG. 465.—Wedge-shaped tomb at Vâmb Negre- in Sweden, is afforded by an gården. From Montelius, loc. cit., p. 167.

a = an orifice between the chamber and ante- example given by Montelius at example given by Montelius at Vâmb Negregården, near Sköfde,

The appearance of this form of monument at in Vestergötlande. the beginning of the Bronze Age, to which period, following the lead of M. Cartailhac with regard to Portuguese examples, and of M. Montelius with regard to Swedish examples, I would refer the Irish specimens also, is a fact of very great importance, if we look at it, as we surely must do in the case of that at Labbacalle in Cork, as the model of a ship. For the ship is no Viking's ship—no ship like those of the ancient Sueones, with pointed prow at either end, such as have been dug out of mounds in Sweden and Denmark-no ship like those, the shape of which in stone occurs in the ancient cemeteries of the North; but a ship like the inhabitants of the Greek islands of the Mediterranean used to build, and of which models in pottery enrich our museums.

It was a ship with a lofty and squarish stern, the "castle," or puppis, beneath the deck of which was a small apartment, opening by a low and narrow doorway into the central portion of the vessel.

When we take into consideration the undoubted fact—proved by the influence of the civilization of the Ægean on the earliest metal work and fictilia of the North-that intimate commercial relations were at the period in question taking place between the amber-people on the Baltic coast and the merchants of the South, along routes which Archæology is now able to indicate, the form which these rude temples of the dead now took for the first time, strikes us as not a little remarkable.

Have we in them evidence of a rude attempt to copy the ναός and παραστάδες of the Greek shrine, from which were copied the *cella* and the *antæ* of the Roman temples?

This is a question to which we must return again when we come to speak of the Nau des Tudons, or great stone ship-tomb in Minorca, and to note the re-emergence of the form in Ireland under Christian auspices.

Meanwhile, it will not have been amiss to have indicated the possibilities of the existence of a connection so singular, and, if true, of such surpassing interest.

One hundred and forty structures of the "Passage-Tomb" type are known to exist in Sweden, and of these one hundred and ten are in the Province of Skaraborg. Near Falköping they are clustered thickly. The distribution of the dolmens of Sweden, with special reference to the respective types he indicates, is shown by M. Montelius in a valuable map.† From this it appears that the dolmens proper—those, that is to say, which accord exactly with the dolmen-cairn and dolmen-circle type in Ireland—are only found on the south and west sides of the peninsula—that is, in Scania, Halland, Bohuslän, and (in a single, small group of four) on the west side of the island of Öland. They occur invariably on, or at no great distance from, the sea-coast, as is also the case in Ireland.

On the other hand, the passage-tombs and hällkista types are, as in Ireland, often located far inland, and generally near rivers or on the shore of some large lake. An exception to this latter rule is the great group of passage-tombs near Falköping in the midst of the most fertile plains in the whole country. Passage-tombs occur side by side with dolmens in Scania, where they are numerous, and in Bohuslän, where they are not so plentiful. In the Falköping district no dolmens are found. Two isolated examples, closely resembling those of Sweden, occur—the one in Nerike, the other in Södermanlande. The large uncovered cists are not found in Scania with the dolmens, but they occur plentifully in the southern part of Vestergötlande, in Bohuslän, Dalslande, and the south-west of Vermlande. Lastly, the cists covered by a tumulus or cairn are found in all the

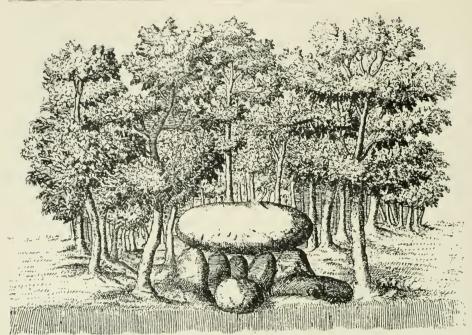


FIG. 466.—Old engraving of the "Brut Camp." From Christian Dethlev Khodes, "Nov. Lit. Baltici Maris," Sept. 1699, pl. ix., and Eccart, "De Orig. Germ.," pl. ix. sec. 44.

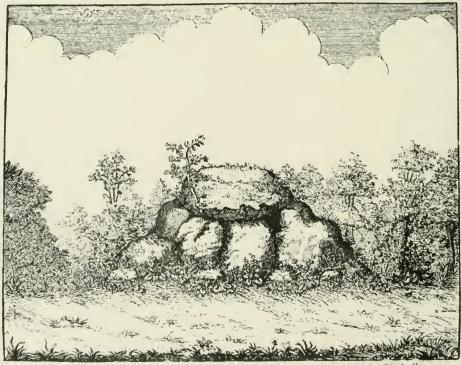


Fig. 467.—Dolmen at Bülcke, or Buelcken in Holstein. From Major, "Bevole. Cimbr," p. 42, and Eccart, "De Orig. Germ.," pl. vii. sec. 43.

provinces of Sweden which were peopled at the close of the Neolithic Age. They appear in districts where none of the other



FIG. 468.—"The Brut Camp," in Schleswig. From "Letters from Mecklenburg and Holstein," by G. Downes, 1822, title-page, and p. 203.

types occur. This set of facts is in some respects similar to what we find in Ireland. Early in the Neolithic Age a seafaring people

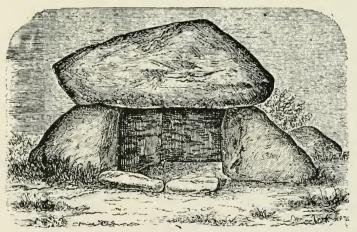


Fig. 469.—Dolmen in Schleswig-Holstein, near Albersdorf. From Mestorf, "Vaterländ, Alterthümer Schleswig-Holsteins," pl. iv.

were erecting their dolmen-cairns upon the coast, whereas a settled population in the late Neolithic Age and in the early

Bronze Age erected a different class of monument in the interior—namely, in the case of Ireland and Sweden alike, the long, wedge-shaped dolmen. The passage-tomb people, who, in the case of Ireland, built New Grange, did not arrive until later, and then confined themselves to only a few rich districts, where the remains of their monuments show that they had attained a higher degree of culture, architecturally speaking, than was the case with apparently the same people in Scandinavia. The larger and open hällkista in Sweden corresponds to the wedge-shaped dolmen of Ireland, and the smaller and covered type to that of the cists with urns and unburnt bodies, referable also to the latest Neolithic and earlier Bronze Age. Of the skulls found in the monuments, indicating the existence of two distinct races, I have to speak later on.

In the Danish peninsula, again, we have the passage-tombs and the dolmen-cairns, well-known examples of which are given by Worsaae. Some of the latter class bear a most striking likeness to those of the Antrim coast and the great Carrowmore group. There appear, also, to be dolmens of the more massive type, such as that at Kernanstown. As an example of one of these, I give one in N.W. Holstein, in the Dithmarschen, near Albersdorf. It is described as standing on a hillock in an oblong field enclosed with hedges, called "De Brut Camp," supposed to mean "The Bride's Plain," in allusion to a tradition that marriages were celebrated there, and sacrifices offered before a person began ploughing, and before he was married. Possibly the name gave rise to the story, and the word Camp may be Kempe, "a Giant," as in the name "Kempe Stone" in the Co. Down. If so, Brut would be the proper name of the mythological being, and might be associated with some early god or hero. The structure is of granite, and consists of an enormous block (Fig. 468), supported, says Mr. Downes, upon "the usual number of five large stones." The vault is circular, as in Spanish examples, and the hillock on which it stands was surrounded with trees, as shown in an older drawing given by Rhode (Fig. 466).†

At a place called Büelcke, on the eastern side of the peninsula, two miles E. of Kiel, was another fine dolmen (Fig. 467), very similar indeed to a Portuguese example on the Douro. The illustration I subjoin is from Major. I append an illustration of another Schleswig-Holstein dolmen from Mestorf (Fig. 469).

[†] Grose has blundered in his description of this dolmen. See his "Antiqq. of Ireland," vol. i. xii.

GERMANY AND THE EASTERN BALTIC COAST.

Riigen.

The prehistoric monuments of the island of Rügen approach more closely, as might be expected, to the German than to the Scandinavian types. Grümbke† describes several which are evidently Hünebedden, like those of Mecklenburg. One, near Nobbin, consists of forty flags set upright contiguously, so as to form a wedge-shaped figure, 44 paces long from N. to S., and 10 paces broad at the N. end, but widening towards the S., at which extremity stand two pillar-stones—a marked feature in the Mecklenburg monuments—each 9 feet high. Within the area some large stones are probably the remains of the ancient dolmen.

Another at Mukrahn, which is called the *Giant's Grave*, is raised in the centre, and encircled by flagstones. At the W. end appear the two tall stones, one fallen, the other standing on end to the height of 12 feet. The monument is 36 paces long, and, at the W. end, 12 paces broad. There is a legend told regarding it that it was the burial-place of two children of a giantess, who, through the negligence of their mother, were drowned at sea.‡

There are, or were, some curious monuments on the island of Huen. Near the centre of it there is marked in Blaeu's map, "forum judiciale rusticorum," indicated by a circle formed of seven stones and a long tabular structure like a dolmen, with a covering-stone supported by four uprights. At four places on the coast accumulations of stones are shown, marked Vestigia quatuor arcium dirutarum. These places are connected with a story of a giantess, Huenella, and her children, Hago and Grunilda, who, says Blaeu, are mentioned in the story of the Champions among the Germans (les Athletes chez les Allemands).

In the Stubnitz, to the N.W. of the Black Lake and the Borgwall—at a place which a clergyman of the district endeavoured to identify with the temple of Hertha, and called the Herthaberg—is a dolmen which consisted of four flags set on edge and a covering-flag, with regard to which a tradition seems to have been prevalent that it was used as a treasure-house for offerings, and an altar for sacrifice. It is so difficult, however, to separate genuine ancient folklore from the Hertha stories invented by the

[†] Neuer Darstellungen von der Insel Rügen (1819), part ii. p. 209, et segq. ‡ Compare the "Children of Mermaid" in Sligo, p. 175.

parson, that we cannot be sure that here, too, as well as at the borgwall, his genius has not been at work. Near the dolmen, which is called the *Pfenningskasten*, is an alignment of pillar-stones.

Another monument of the Hünebedden class is in the Patzig and Borow wood. It lies in a narrow valley, and, from Grümbke's description, would seem to be a long tumulus surrounded with stones on edge, 2 or 3 feet apart. It is over 60 paces long, and from 4 to 5 paces broad, its longer axis lying E. and W., where it comes to a point "on an oblique slope."

There are stone-circles in Rügen, and at Quoltitz a so-called altar-stone, in which is a duct or furrow, and five circular artificial cavities, in which the natives say the priest used to place the blutgrapen—i.e. the offering-bowls or saucers, that is to say, the sacrificial cups.

The writer I have been quoting adds two other types of monument found in this island-namely, the steinkisten wakkenbetten, "sandstone stone-chests," and the hünengraber, or Giant's Graves. Near Silvitz is one of the former type called the "Steinhof." Blocks of stone, placed contiguously, form an oblong vault, upon which are placed two roofing-stones over 4 yards in length, and lying E. and W. There are several near Krakow, many of which have lost their covers. Some must be of considerable height, as a man can stand upright in them. In one of these, in 1793, were found, under strata of sand, pebbles from the shore, and earth, ten human skeletons in contracted positions, with the legs bent under. Some vestiges of hair-cloth were found with them. Beneath this stratum was a hard mass of clay, containing nine urns. Of these three were "of the usual size," the other six only as large as ordinary apples. The exterior of each was ornamented with short incised lines. The interior had been strewn with leaves, which had left their impressions in the clay, and upon them ashes and fragments of bone had been placed. Under each of the three larger urns lay a worked flint axe, one of which was of large size. Near the little vessels were found some flint knives and an implement of harz,† having a hole in the centre, and pointed at either end. A layer of flint splinters lay under the urn-stratum and upon the floor of the vault, which was stamped hard.

Hünengraber, by which Grümbke means tumuli, are very numerous in Rügen.

[†] I do not understand what Grümbke means by this word: Harz = resin.

Mecklenburg.

For the ancient sepulchral monuments of Mecklenburg Lisch proposes the following classification: (i.) *Steinkisten*, constructed of great flags raised on edge, in the form of a square, and covered by another, not, however, enclosed in a tumulus:

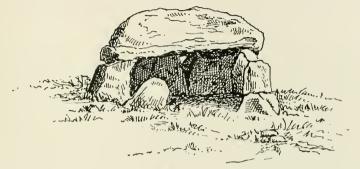


Fig. 470.—Dolmen at Rudenbeck, Mecklenburg. From "Tuisko-Land," p. 64.

(ii.) Earthen tumuli, generally round, but sometimes oval and cone-shaped, sometimes having a circle of small stones round the base; in the centre a rough cist or heap of stones, to protect the

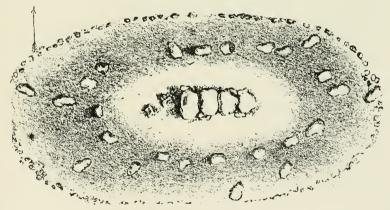


Fig. 471.—The Hünengrab of Katelbogen. From Lisch and Schröter, "Friderico-Francisceum," pl. xxxvi. fig. 3.

remains: (iii.) Stone cairns, of like form with the last, sometimes having a ring round the edge: (iv.) *Hünengraber*, in the form of a long parallelogram, with an environment of great granite blocks. In the area so surrounded a "trough-shaped" mound of earth is raised, not much above the height of the surrounding stones, and at one end, usually the E. end, a structure is erected, covered over,

in the generality of cases, by four roofing-stones: (v.) Tumuli in oval form, having at the E. end, close under the covering of earth, a small cist, sometimes formed of stones set on edge, sometimes without them, and covered over with thinnish slabs, enclosing urns with ashes: (vi.) Stone circles, surrounding little round or oval tumuli of earth: (vii.) Low earthen tumuli without a bordering of stone: (viii.) The so-called "Wendish Churchyards," consisting of wide elevations of earth of irregular form, in which



Fig. 472.—Hünengrab of Katelbogen near Bützow. From Lisch and Schröter, "Friderico-Francisceum," pl. xxxvi. fig. 1.

stand urns in great numbers, near each other, and often packed between stones: (ix.) Roman graves.

The writer observes that, although it is comparatively easy to classify the sepulchral antiquities of Scandinavia, the question is rendered complex in Germany on account of the Sclave burying-places and the Middle-German tombs.

With two only of the types here classified will it be necessary to deal, namely, the *Steinkisten* and the *Hünengraber*, and these really here, as in Rügen, most frequently resolve themselves into one, since the *Steinkister* is the vault contained in the area of the *Hünengrab*; it is the *Hünenbed*, or *Hünebed*, or *Hünegrab* itself.

Close to Katelbogen, about a mile W. of Butzow, is a very fine Hünengrab. It consists of a large mound of oval form and

rounded on the top, having its longer axis E. and W. external circumference of the base measures 175 paces. The foot of this elevation is surrounded by a ring of little stones, which may be no part of the original plan. On this base are erected the great setting of stones which forms the oval ring surrounding the mound itself, many of which have sunk in or fallen away. They seem to have been about twenty-five in number, and were 6 or 7 feet long in some cases, and 3 to 4 feet high. The longer diameter of the oval area which they enclose is 80 feet, and within it the mound has been thrown up. On the top of this mound, in the middle, lie contiguously four huge covering-stones, measuring together 25 feet in length. The longest of them is that at the W. end, which is 10 feet long, 7 feet wide, and 4 feet thick; the next to it is 8 feet long and 5 feet wide; the third, 8 feet 10 ins. long and 6 feet 11 ins. wide; and the fourth, 7 feet long by 5 feet 6 ins. wide. The three last are between 3 and 4 feet thick.

These covering-stones rest upon the upper edges of wide supporting-stones, which, rising from the floor of the vault, form with their flat sides the interior walls. In this manner a regular Steinkister is formed. It is filled with earth. The walls are not parallel, but form a wedge-shaped chamber, the W. end of which is 8 feet, and the E. end 5 feet 2 ins. wide. At the W. end, in front of the covering-stone, lay a stone of conical form broken into two pieces, the breadth and thickness of which would exactly allow of its having filled the aperture under the covering-stone. This Hünengrab differs from the usual form, in the fact that it has an oval stone-setting around it instead of the more usual oblong or wedge-shaped form. The stone structure, too, lies in the middle instead of at one end of the enclosed area. Formerly there was a grove around it.

The exact resemblance which in every particular the *Steinkister* here described bears to the ordinary long wedge-shaped dolmens of Ireland will have been remarked. In common with the latter, the larger and broader end is towards the W. The presence of an outer stone-setting supporting a low tumulus or cairn, in the midst of which the dolmen rises, is not an uncommon feature, as at Kilcloony † (Co. Donegal) and at Scregg‡ (Co. Roscommon), where a large area is enclosed around the monument.

A typical Hünengrab, of the class found in Mecklenburg, lies in a fir wood about a mile E. of Grevismühlen,† between Naschendorff and Barendorff. On a low tumulus, which serves as its base, a setting of fifty coarse granite stones has been set up, averaging 6 feet in height and 4 feet 6 ins. to 5 feet 6 ins. in



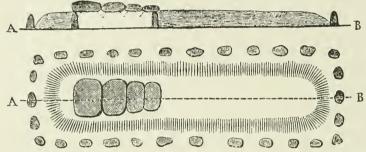


Fig. 473.—Plan and section of the Hünengrab of Naschendorf. From Lisch, "Ffahlbauten in Meklenburg-Schwerin," 1865, p. 12.

width. Inside these stones is a circular bowl-shaped mound of earth. The whole monument forms a regularly extended oblong, 150 feet long, and 36 feet wide. The longer axis is S.E. and N.W. At the S.E. end four large granite covering-stones, placed contiguously and in line, rest upon supports, each one of which measures on an average 9 to 10 feet long by 7 feet broad. The whole length of the structure is 28 feet, and its breadth 10 feet 6 ins.

Circles.

Lisch, to whom we are indebted for the illustration of the last-mentioned structure, gives also a plan and illustration of three very remarkable stone-circles in a wood near the village of Boitin. They are known in the country as the *Steintanz*, *i.e.* Stone-dance, and many legends attach to them, as, for example, that the peasants of a village which had disappeared had, on the occasion of a wedding, danced upon cheeses out of bravado, and had as a punishment been turned into stones. The pillars are of granite,

[†] See "Friderico-Francisceum," Lisch and Schröter, pl. xxxvi. figs. 2, 3.

and there is no trace of a mound either in or near them. Two were still perfect, and the three are so arranged that they form a semicircle open to the E. The middle circle is the largest;



Fig. 474.—Stone-circles of Boitin, Mecklenburg. From Lisch and Schröter, "Friderico-Francis-ceum," pl. xxxvii. fig. 1.



Fig. 475.—Ground-plan of the circles and "altar-stone" at Boitin. From Lisch and Schröter, loc. cit. the one to the S.E. the next in size; and that to the N.W. the smallest. They consisted of nine stones each, but the smallest has lost three. The largest circle is somewhat oval, measuring 60 feet at its greatest diameter, and 48 feet at its least. The second circle is 50 feet, and the third 30 feet in diameter.

One of the nine stones in the S.E. circle is called the *Opferstein* (altar-stone). It is a great flat stone lying on the S. side. It is 10 feet long, and 4 feet 2 ins. wide, and over its centre lengthways a row of thirteen cubic cavities have been cut, each measuring about 3½ ins. cubic content, and about the same distance from each other. The fourth stone towards the W. from this "altarstone" is called the *Kanzelstein* (pulpit-stone). It is a block of



Fig. 476.—Circle at Bearhaven, Co. Cork, showing a "pulpit-stone." From a sketch by the Author.



Fig. 477.-Dom-ring, Blomsholm, Bohuslän. From Du Chaillu, "Viking Age," i. 370.

stone 6 feet 8 ins. high, and on its N. side it has, 2 feet 8 ins. above ground, a hewn step, so that a man standing on it looks towards the stone altar. It appears that each circle had its altarand pulpit-stones.

Similar stone altars, with rows of hewn cubic cavities, are

found in Pomerania; in some cases a single groove is cut across the stone.†

At Harbour View, near Bearhaven (Co. Cork), there is a stone-circle (Fig. 476), one of the pillars in which has a step in it precisely as described in the case of the pulpit-stones. There can, I think, be little doubt that such circles, whether found in the British Isles, or Scandinavia, or Germany, were, many of them, places of human sacrifice.

"Not far from the large ship-grave of Blomsholm, in Bohuslän," says M. Du Chaillu, "in a silent pine forest, stands a magnificent Dom-ring (sacrificial circle) (Fig. 477). The ring is about 100 feet in diameter, and is composed of ten standing-stones. Near by is the eleventh. In the centre is a huge boulder over-

looking the rest. Its uncovered part stands about 5 feet above ground. It measures 9 feet long by 7 feet wide."

In several Norse sagas distinct mention is made of these Dom-rings. The central stone was called Thor's Stone, upon which the backs of the victimsstrangers or prisoners of war-were broken. There was one at Thorsness, which was regarded as a very holy place.‡

In Sweden the enclosure is sometimes oval, as is also the case in Ireland. We may take from Hildebrand an example in Vestergötlande (Fig. 479), and from Du Noyer, for comparison with it one from Carrabeha in Cork (Fig. 478), upon one stone in which are markings similar to those on the dolmen at Scrahanard (Fig. 20).

Fig. 478.-Stone circle at Carrabeha, Co. Cork. From a plan original by G. Du Noyer. The central stone is white quartz, and the stone marked X is inscribed.

These customs, we may feel sure, survived far into the Iron Age; but similar circles may be traced back to the Neolithic period. Dr. Lissauer has supplied

[†] Pomm. Gesellschaft, "Jahresbericht," iii., p. 83; and iv. p. 75.

‡ In Ireland the practice of going a circuit around a venerated object was called making a turas, or, vulgarly, turrish. This word has been referred to the same origin as that which gives us "tour," détour. Circles were, however, connected in Scandinavia with the worship of the war-god Thor. Among the Finns, too, the war-gods were called Turri, Turras, and Turrisas. Thyr was a warrior—their Mars. May not the turas of the Irish have a similar origin? (Grimm., "Teut. Myth.," p. 940.) May not the name have been applied to the dance round the central stone, on which the sacrifice to the god was made?

a most interesting description of a group of monuments of this class.† In the Royal Forest of Odry, not far from the Schwarz-



Fig. 479.—Stone oval in Vestergötlande. From Hildebrand, Förhistoriska Folken i Europa, p. 124.

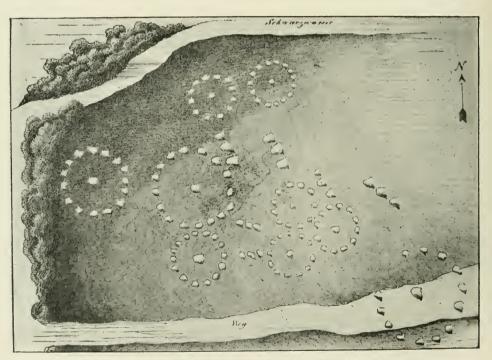


Fig. 480.—Rough bird's-eye view of circles near Odry. From Lissauer.

wasser, and almost covered by the growth of the forest, he counted nine stone-circles. The stones composing them ranged

[†] Natur-Forschende Gesellschaft in Dantzig, vol. iii. (Neue Folge, 1871-1874), pp. 16, 17. 1874.

from 2 to 5 feet high, and were sunk from 1 to 2 feet under the surface. They were placed at regularly arranged intervals of from 4 to 6 feet apart, while in the centre of each circle stood one larger stone by itself. The radius of each circle averaged from

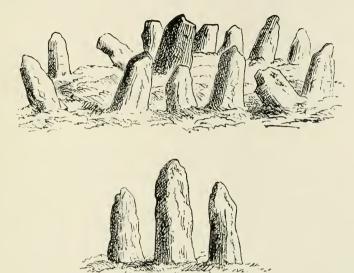


Fig. 481.—Circle and trilithon near Odry. From Lissauer.

11 to 22 paces. The single central stones were frequently pyramidally shaped at the top, as if hewn, and were from 2 to 3 feet thick. It would have taken eight men to move one.

Dr. Lissauer explored these circles, stone by stone. In each

case, close to the central stone, towards the E., about I or 2 feet under the level of the earth, was an incinerated deposit, consisting of charcoal and burnt human bone, placed in a plain hole without cist or urn. Close to the rear of the outermost circle was found a beautifully polished stone-hammer of serpentine, with a hole

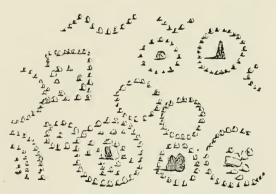


Fig. 482.—Group of Danish circles. From "Baer, Vorgeschichtliche Mensch," p. 276.

for the handle smoothly pierced through it. The group of circles lay at a distance of about 250 paces from the Schwarzwasser.

In conjunction with the circles were six other monuments

described as trilithons, and consisting each of a large block of granite between two smaller ones. On digging in the middle on the E. side of them, Dr. Lissauer found, at a depth of 1 to 2 feet under the surface in three cases, urns with burnt bones, in two cases nothing, and in one case bone fragments placed in a hole without cist or urn. Near one of the urns lay a flint "strike-alight." The vessels were of good shape, but poorly baked. One, which was of a brown colour (another was black), was ornamented with a single zigzag pattern, roughly formed, around the neck. These circles are very similar to those in Denmark, a group of which I here insert from Baer (Fig. 482).

Vistula and Dniester, Galizia, Bulgaria.

The Odry monuments are of especial interest, since remains which must be referred to the Stone Age are so rarely to be met with in West Prussia or E. of the Oder, and I shall permit the consideration of them to lead me into a digression which, while it will carry us southward to Galizia, will bring us back to the S.E. corner of the Baltic, namely, the country of the Esthonians, and thence into East Prussia.† Megalithic tombs, however, to which MM. Kohn and Mehlis give the name of dolmens, do occur at rare intervals on the Vistula and the Dniester. These, it seems, are referable rather to the type of that at Hallé, than to the massive megalithgräber type of the Hünebedden. MM. Kohn and Mehlis show examples in their map at the following places: (1) S. of Dantzig, near Stargardt, W. of the Vistula, in Pomerania; (2) near Bogdonawo, N. of Posen, in the Province of Posen, W. of the Warthe; (3, 4) E.N.E. of Plock, one on either bank of the Vistula; (5) at Trzebez, N.W. of Thorn, just E. of the Vistula; (6) at Kociubinsce, E.S.E. of Lemborg, in Galizia.

The last of these we may take as typical. In the course of removing the earth from a spot in the centre of the *dorf*, known from old times as "the old burying-ground," and surrounded by a bank of earth, four stone slabs were found placed together in the form shown in the plan (Fig. 483). Fragments of two urns were found in the grave, two Neolithic stone axes, and, on the N. side, two sitting skeletons. There were also two small tusks of the wild boar, a piece of amber—very likely an amulet—and a small bead of clay.

^{† &}quot; Vorgeschichte des Menschen," Jena (1879), Archäologische Karte.

The direction of the grave was N. and S. The N. end measured 85 cm., the S. end 97 cm., or 12 cm. broader. The S. slab measured 79 cm. high, and the N. slab 68 cm. The grave was 1.70 m. long. It is added, with regard to one of the skulls,

which was well preserved, that Dr. Kopernicki had examined it, and proved its undoubtedly prehistoric origin, a vague description, which we wish was amplified. Near the tomb stood a menhir. This Megalithgräb is, as we see, of small dimensions compared to the dolmens of the West. Its contents, too, more closely resemble those of the large cists enclosed entirely in tumuli found in Germany and the British Isles, especially in Ireland, where the body is placed in a sitting position, with an urn beside it, and where the skull is of a markedly brachycephalic type.

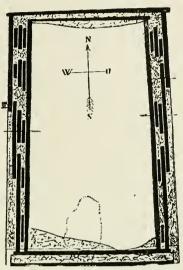


FIG. 483.—Megalithic grave at Kociubinsce. From Kohn and Mehlis, "Vorgeschichte des Menschen," p. 100.

From another work of MM. Kohn and Mehlis, I will adduce one other example of a megalithic tomb in Eastern Europe. It was discovered at the village of Beremijany, near the junction of the river Strypa with the Dniester, and appears to have been buried in a cairn, from which a hundred cartloads of stones were taken away. The stein-grab was formed of six great slabs, and in it (it is stated on the authority of MM. Kraszewski, Zegota Pauli, and Glowacki) was a stone cist, in which were five men's skulls, thoroughly hardened. Near them lay a stone hatchet, which is preserved in the Institute at Lemborg.

In Galizia there are some very remarkable monuments of the Stone Age. Dr. E. F. Von Sacken† mentions one, which he describes as a "kind of cromleac," consisting of an avenue 300 paces long, formed of blocks of stone 4 to 6 feet in height, and leading to a stone-circle, in the centre of which is a monstrous rocking-stone.

In the Sakar Planina, in the district of Gerdeme, in Bulgaria,

^{† &}quot;Leitfaden zur Kunde des Heidnischen Alterthums auf die Österreichischen Lander Wien" (1865), p. 76. See also Wogel.

N. of Adrianople, are the remains of no less than sixty dolmens, together with a stone-circle and a curiously formed rock called

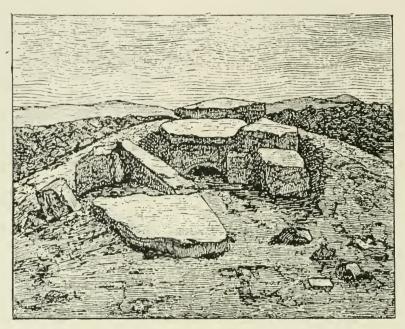


Fig. 484.—Dolmen in the Sakar Planina in Bulgaria. From Radimsky.

the "Opferstein." To these M. V. Radimsky† adds the Wackelstein at Kopfing, which he also terms an altar-stone. It is

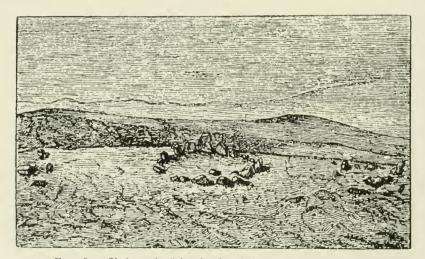


Fig. 485.—Circle on the Sakar Planina, Bulgaria. From Radimsky.

apparently a rocking-stone on a raised platform, and was an

^{† &}quot;Die prähistorischen Fundstätten . . . auf Bosnien und die Hercegovina" (1891), pp. 130, 131, 145. Unfortunately, the illustrations are very unsatisfactory.

object of local veneration. From the illustration which he gives of one of the dolmens on the Sakar Planina (Fig. 484), it appears to be a structure of the same type as the Hünebedden. Three covering-stones are shown, one fallen; and there seems

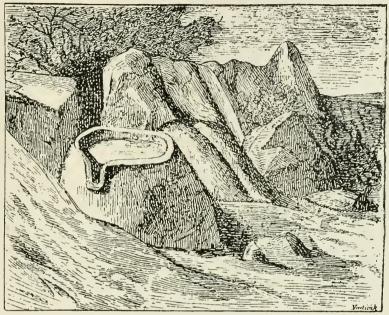


Fig. 486.—Altar-stone, so called, on the Sakar Planina, Bulgaria. From Radimsky.

to be a semicircular hole leading from one part to another, as in the monuments at Karleby in Vestergötlande, and elsewhere. The resemblance of the ancient camps, both in point of construction and in peculiarity of design found in Bosnia and the Herzegovina to Irish examples, is a specially noteworthy fact, as, also, is the likeness observable between certain bronze implements, ornaments, and fictilia in Ireland and those countries.

Livonia, Esthonia.

Turning from these southern parts to the coasts of the Baltic, it is very doubtful whether any dolmens exist in Livonia and Esthonia. Kruse, however, speaks of two stone-settings, the one called the Klauensteine on the Duna, opposite Selburg, and the other the Donner, or Perkuhn's Steine, at Capsehten, which he seems to regard as the remains of megalithic monuments. They consist, he says, of "two stones set together on edge, like the Danish ones, with several great flat stones lying round about, which probably formed their tops." He adds that in

the case of the Klauensteine the folk-lore stories connect it with the Devil, while they connect that at Capsehten with a Giant. At Selburg, he says, are also found the so-called Jette-fiat, *i.e.* Giant's Footsteps, which are so general in Sweden. Near this latter place are tumuli having stone-circles around them, and containing burnt bodies, with balls and shapeless pieces of molten metal. In Livonia, however, it must be remembered that the dead were burnt, even after the time when the Germans entered the land. Henry the Lett, speaking of Corpo, who fell in the battle fought with the insurgent Esthonians in 1216, says, "Combustum est corpus ejus et ossa delata in Livoniam et sepulta in Kubbeçele."

But whether there are dolmens or not on the east coast of the Baltic, there are other monuments and traditions which intimately concern us, from the close comparisons which we may draw between them and those found in Ireland. There are old altarstones, venerated caves, stone-circles, and holy trees. Kruse was shown pieces of money which in his own time had been placed on the stone altars in the holy groves. A pastor, too, had then recently caused an old altar-place, near which was a circle, to be destroyed, and "the holy tree" to be cut down.

There was a famous cave, called the Livenhöhle of Kuikul, or Kukulin, rear Salis. Internally it was vaulted in the form of a "cone-shaped dome." Kruse describes it as perfect in his time, with the exception of the entrance, which had fallen in. He found in it offerings which had been made by the natives only a few days previously, and which consisted of coloured wool and fowls' feathers. This was the district in which the native saga of the Esthonian Finns placed the giant Kallewe Poeg. Between Kukulin and the Lake of Ecks they still show the great rock called Kallewe Poeg Tool, that is, Kallewe Poeg's Seat, upon which he is said to have rested, in consequence of which it received the form of an armchair. It is about 9 feet high, and has a back and two arms. Another legend makes the giant cast the rock over from Russia in order to mark the limit of the lands he was going to occupy. Then he dug out the lake of Peipus, and with the sand which he threw out of his apron made the hills near Alatskiwwi.

[†] See this form of the name of this place in "Ur-Geschichte des Esthnischen Volkstammes" von F. Kruse, p. 183; the Saga of Kallewe Poeg. See account of the cave in Kruse, "Necrolivonica," p. 7, and pl. 67, 3.

Kruse says that this legend appears to him remarkable on account of the likeness it bears to a story told by Saxo of a Danish giant, Starkather, who, in like manner, left impressions of his body on a rock on which he rested: "cujus cava adhuc

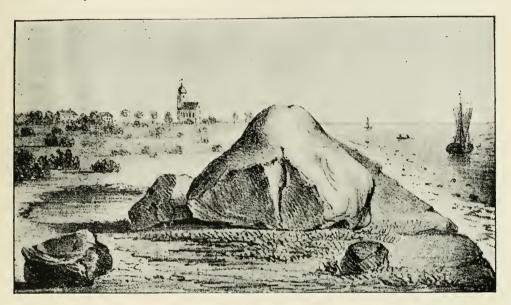


FIG. 487.—Stone on the Sadejerw Lake, thrown by Kallewe Poeg, and impressed with his finger-marks. From F. Kruse, "Ur-Geschichte des Esthnischen Volkstammes," p. 183.

superficies cernitur (it is not said where), ac si illam decubantis moles conspicua impressionem signasset." It was this hero Starkather who was said to have recovered Esthland for Denmark in about A.D. 450.

Rocks thrown by Kallewe Poeg, *i.e.* Káallew's son, were shown on the Sedejerw Lake, and near Åbo, in Finland. In the latter case the giant threw it at the church, but it fell short. In the former case the marks of his finger and thumb are shown upon it, just as those of Finn Mac Cumail are shown upon I know not how many rocks in Ireland. Upon the stones sacred to Kallewe Poeg it was usual to place a piece of money, or other offering, "as a memorial"—an illustration, probably, of the purpose for which the little cup-shaped hollows found in the surfaces of venerated rocks in Scandinavia, Ireland, Cornwall, Spain, and elsewhere were made.

Several of the tales of Finn Mac Cumail—such an one, for example, as "Finn and the Phantoms"—closely agree with *sagas* relating to Kallewe Poeg. The resemblances, in short, between

the Esthonian Finns and the ancient Irish in points of folk-lore and customs are not a little remarkable, and are not, I feel sure, without their value as ethnological indicators, pointing out to us a connection which belongs to very remote antiquity.

I cannot do more in this place than enumerate a few of them.

The ancient Finns craved advice and assistance from the dead. "One went," we read, "to the grave of the ancient wisdom bard, and found the lost words of the Master." Those who remember the story of the disciples of Seanchan Torpeist being sent to the East to bring back the forgotten tale of the Tain-bo-Cuailgnè, but learning it on the way at the tomb of an ancient bard, whose ghost recited it to them, will be struck with the similarity of the superstition.

In Ireland wells and lakes, when insulted, or when evil words are spoken beside them, migrate to some other place. In Esthonia there is a rivulet, Vöhanda, held in such reverence that none dared fell a tree or cut a shrub in its immediate vicinity, lest death should overtake the offender within a year. We read of a lake, too, which departs into the air, taking all its fishes with it, and leaving only snakes, lizards, and toads, in consequence of evil men living on its banks.

The ancient Irish indulged in vapour-baths in little circular houses built for the purpose. So did the Esthonian Finns, who held in high esteem "the cleansing and healing virtues of the heated bath-room."

The Finns were famous for necromancy; so were the Cruithnè and the legendary Tuatha De Danann among the Irish.

In Esthonia the smith was almost a divine personage, and the hero of many a tale; so he was in Irish sagas.

The Esthonians burned their dead after the body had lain in the house for sometimes half a year, if the deceased were wealthy, during the whole of which time drinking and sports were kept up. The Irish also at one time burned their dead; while in the extraordinary practice of feasting around the dead body, we cannot fail to note a resemblance to the "wake."

The veneratio lapidum, against which Christian Councils issued their anathemas, was as strong among the Finns as it was in Ireland. It is among the Turanians of the North that we must seek for the origin of the practice of creeping under sacred rocks, which in Ireland was kept up until recently by the pilgrims

who visited the shrine of St. Declan at Ardmore in Waterford. Leems, in his account of the Laplanders, speaks of a sacred rock on the summit of the mountain of Neiden, which was called the Niackken-Karg, or Mountain of Creeping. The ancestral hero of the race was said to have "been made upon a rock." Many an Irish saint and legendary hero was similarly "born upon a rock."

I might, from material I have collected, add to this list of comparisons very considerably, but it is time that I passed to the Southern Baltic, and the evidence of dolmens there.



FIG. 488.—Carn with dolmen-cist at Varzeit in Samlande. From Voight, Geschichte Preusens, Bd. I., frontispiece.

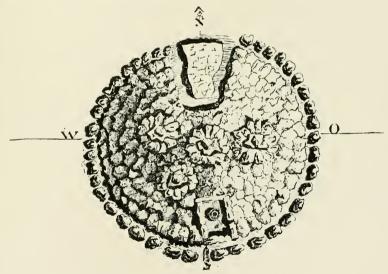


Fig. 489.—Ground-plan of cairn with dolmen-cist at Varzeit in Samlande. From Voight, loc. cit.

East and West Prussia, Pomerania.

Cairns containing large flag tombs exist in the island of Samlande. An illustration given by Voight of a structure which may be compared to a Swedish *hällkista*, makes this fact clear.

It is not, however, until we reach the west bank of the Vistula that dolmen districts, properly speaking, are found.†

[†] For much of what follows on the subject of West Prussia, I am indebted to the works of Dr. Lissauer, and especially to his "Prahistorischen Denkmaler."

In Cujavia a peculiar form of grave of the Neolithic Age exists. Examples of it bear a great likeness to those which occur in Mecklenburg, already noticed, and to those, also, which I have yet to notice in Brandenburg and Hanover. They consist usually of large mounds of sand in the form, not of ovals or oblongs, but of long-extended isosceles triangles, surrounded by great blocks of stone (Fig. 490). At the base of the triangle the



FIG. 490.—Elongated monument in Cujavia. From Lissauer.

grave-chamber—a sort of stone cist, about $1\frac{1}{2}$ m. long, and 1 m. broad—is formed. The sides are composed of rough, flat stones, while the roof consists of well-hewn (*behauenen*) thin slabs, almost sharp at the edges. In this vault, so formed, lies the skeleton, with several urns at head and foot, and with accompaniments of stone, bone, and amber. Inhumation was the general rule, and a definite *cultus* of the dead evidently prevailed.

There is a second kind of these monuments which has more the form of a narrow quadrangle, 6 paces long and 3 wide, the stones in which are carefully worked. Like the former, the examples of it are surrounded each by a stone-setting running to a point. The remains of pigs in the graves renders it probable, Dr. Lissauer thinks, that feasts took place at the interment.

The Neolithic Age lasted long in West Prussia, and during it the customs of the people were undergoing changes, consequent, perhaps, on the approach of higher civilization. Thus, even in graves having all the characteristics of those just described in Cujavia, the stone vaults contain evidences of the practice of incineration. Stone-circles again occur, with all the characteristics of the Stone Age structures, and yet containing evidences of urn-burial. The stone-circles and trilithons of the Forest of Odry contained, as has just been noticed, Neolithic objects and incinerated remains. The same is true of urn-graves on the Varter. On the other hand, stone-cist graves (Steinkisten-graber), which, as a rule, are attributable to the Bronze Age, have been found to contain, together with burnt remains, objects of the Stone

Age. A stone axe, for example, and a bronze sword have been found together.

Inhumation, however, undoubtedly preceded incineration, and lasted throughout the first two-thirds of the Neolithic Age.

Only a few skulls and fragments of skeletons have been recovered from Neolithic graves in this country, and among these are examples of dolicho-, meso-, and brachy-cephaly. One well-preserved skeleton was found at Janishschewek. The average capacity of the skull, according to Virchow, is about 1650 c.cm.; the countenance usually powerful and high; the nose high and narrow; the eye-sockets low and depressed; the whole skull bearing in its formation more resemblance to skulls of civilized people than to those of savages; the size and massiveness of the bones admitting no effeminacy; the extremities of the bones of the body large and strong; the lower part of the leg extremely platycnemic, as flat as the sheath of a scimitar.

Having thus classified the megalithic tombs of the Neolithic Age under two heads—the triangular, which answers to the Hünebedden of Mecklenburg, Brandenburg, and Hanover, and the Long Barrows of Britain, and the oblong, which appears to represent the survival of the structural portion of the Hünebed in a phase of development which had bereft the latter of its outer enclosure—Dr. Lissauer proceeds to classify the tombs of the Bronze Age under three heads, namely, (1) the Urn-fields (*Urnenfelder*), (2) the Tumuli (*Hügelgraber*), and the Stone Cists (*Steinkistengraber*).

In Ireland, we have, as I believe, examples of all three of these classes. The first is represented by the Hill of Rath, Ballon Hill, and other places where cinerary urns have been discovered in cemeteries, which would be truly described as "urn-fields," without any indication of their presence in the form of a cairn or monument raised upon the surface. The second is represented by cairns or earthen mounds which cover cists containing incinerated remains. The third has its affinities, as will be seen when we proceed to describe individual examples, in the chambers of the chambered-cairns, but with this difference, that whereas the Prussian structures are all under the surface, the Irish and Scottish ones are, like the cists in the Hügelgraber, built on, or only partially under, the ground-level, and covered with a cairn or earthen mound.

Further remark upon the urn-fields and tumuli of Ireland I leave for a future occasion. The Steinkistengraber, however, since I class them with the chambered-cairns, must be noticed in this place.

They are built at a depth which brings their roofs to within 30 to 45 cm. of the surface. They are usually constructed of slabs of split red-sandstone. In form they are "tolerably rectangular stone cists," by which Dr. Lissauer means that they are generally wedge-shaped, some even approaching the shape of an isosceles triangle. They vary in size according to the number of urns they are intended to contain,-from one to thirty, and more. Almost all the urns contain ashes, and they are provided with well-fitting covers, a characteristic of some few of the best examples of Irish sepulchral pottery. Little vessels with handles sometimes, though rarely, accompany them, and these are empty. The remains in the cinerary urns consist of small fragments of human bone burnt white. The side slabs of the cist are often supported by cobble-stones placed against their outer sides, but sometimes entire slabs are used for this purpose, which form a second course around the cist, like the peristyle of many Irish and Swedish dolmens. The roof is sometimes formed by several slabs placed one on another. The depth of each cist is from 30 to 45 cm., the length 0.3 to 1.5 m., the breadth 0.3 to 0.6 m.; but many much larger ones have been found, such as those which MM. Koln and Mehlis call dolmens, and which extend up the Vistula, the largest known example being in the grave-field of Steinthal, near the Semmlerischen Gate, in Pomerania. In rare cases a cairn or earthen tumulus of slight elevation has been raised over them.

These cists lie generally scattered, mostly on a hillside and near water. Sometimes one is constructed close to another, so as only to be separated by a partition wall—a feature common to several Irish examples. In ground-plan and construction the oblong form is most common, but there are many divergencies from it. In Linken, Dr. Marschal discovered one in the form of a cross. Another of the same form is figured by Beckmann. In Oschen there is one in shape like a Danish gång-grab, or passagetomb. At Liebenthal there are several of octagonal form, and at Wroblewo there were five built like beehives, but of peculiar construction, since there was a double row of split slabs surrounded

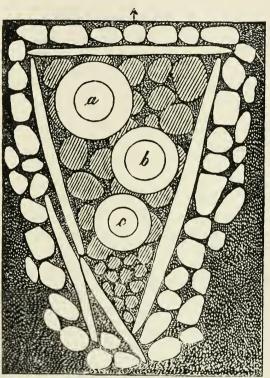
externally by round stones. In them were urns, saucers, cups of clay, a piece of a bronze pin, etc.

In the case of the one in the grave-field of Steinthal, in Pomerania, the covering-stone did not rest immediately upon the upper edges of the perpendicular side stones, but a walling of little flat stones, which gave greater height to the roof, and

on which it rested, inter-This, therefore, vened. belonged to the same class of chambers as those in the cairns of Scotland and Ireland.

Cists of this class are very numerous indeed in Pomerania, diminishing in number as we trace them up the left bank of the Vistula to the Province of Posen, where they die out. On the right bank of the Vistula they are frequently found also, though not so plentifully as on the left, and in East Prussia they are absent.

The people who formed them must have occupied Fig. 491.—Megalithic grave in the Gräberfeld of Steinthal (Pomerania). From Weissenfels and Lesau. a, b, c = positions of urns. period, since, while, judg-



ing from their contained remains, they far overlap the Iron Age on the one hand, they extend also, more especially the larger ones, into the latter portion of the Neolithic Age on the other, covering the entire epoch of Bronze, including, of course, what is known as the Hallstadt period, and proving by evidence not to be gainsaid that commerce, moving along several routes, connected the shores of the Southern Baltic with those of the Black Sea and the Adriatic.

The ancient routes by which, from the Neolithic Age, computed by Montelius to have been succeeded by the introduction of bronze in the fifteenth century B.C., the Mediterranean peoples

were brought into contact with the inhabitants of the North Sea and the German Ocean, have been traced by the presence of amber, a substance held in high esteem for ornamental purposes by the civilized populations whose remains are found in the ancient graves of Greece and Italy. That the barbarians of the North valued it also among themselves is proved by the fact that it is found in the great triangular "Long-Barrows" of Cujavia, together with the skeleton, with urns at head and foot, and implements of stone and bone,—all tending to show that, even at that remote period, a belief in a future state, and the requirement by the dead of articles treasured by the living, had already marked the first step in culture from the mere savage to the comparatively civilized man.

To the same early period belong in West Prussia narrow quadrangular structures, averaging six paces long by three paces wide, each surrounded by a stone-setting, or peristyle, running to a point at one end, seemingly precisely similar to the Hünebeds of the more western districts. In these the presence of the remains of pigs make it probable that death-feasts took place.

During the Neolithic period the practice of incineration was introduced into these countries, triangular monuments having been found, in the chambers of which all the characteristics of the Stone Age are present, together with one single urn, the receptacle for the burnt remains.

The custom of incineration, however, came from the South, where bronze must have been in use through a great portion of the long epoch during which the Northern peoples were in their Neolithic Age. Can it be that the bringers of the bronze brought also the design of those shrines for the worship of the dead, which, although carried out with unhewn and megalithic material, remind us so much of the most primitive form of temple known to the Greeks? (See pp. 637, 638.)

To return, however, to the amber trade, we find that during the Neolithic epoch the custom of manufacturing ornaments and figures of this material extended all round the Baltic basin. Far away to the south, through Austria, in Italy, in Greece, numbers of amber ornaments have been discovered, proving that in the early ages of culture this fossil gum was in request.

The Greek graves which Schliemann found at Mycenæ, which,

according to Helbig,† date from about 1500 B.C., contained hundreds of beads and balls of amber.

It has been pointed out that other countries besides the Baltic produced amber-the coasts of the North Sea, and the British Islands, Spain, Italy, Roumania, Austria. But, on the other hand, the investigations of Helbig have shown that, by certain chemical characteristics, the amber of the Baltic and the North Sea can be distinguished from that of other districts, and that the material of that found at Mycenæ on the one hand, and in the Necropolises of the district of Bologna on the other, is identical with that from the Prussian and Frisian coasts.

We come, then, to the routes along which this commerce was carried on. Müllenhof has placed the fact beyond question that the Phænicians never came beyond the North Sea, I and that the stories of their having entered the Baltic are fabulous. According to the same authority, however, a trade route by land existed from the North Sea through Gaul to the Rhone, and thence to the Mediterranean. From this a branch road made for the Po, and hence communication was opened with North Italy and Greece.

Helbig, on the other hand, is of opinion that there was an ancient road from Prussia direct through North Italy to the Po, by which amber was carried from district to district through Middle Europe to the Phænicians, who sold it to the Greeks and other southern peoples. Granted, then, that in these primitive times commercial relations had commenced between the population of the Lower Vistula and the merchants of the Mediterranean, was it conducted through their western neighbours as Müllenhof supposes, or by their southern ones according to Helbig? Lissauer adopts both views. He points to the discovery in West Prussia, Posen, Silesia, and the Mark, of bronze articles, as, for example, a sword with elegant spiral decorations on the handle, and fibulæ of characteristic form which may be referred to the Hungarian Bronze Age, the period of which has been computed to reach back certainly beyond 1000 B.C. At the same time he indicates the presence of certain other bronzes which must be referred to relations with Italy. In West Prussia itself evidences of pure Etruscan influence have not been found which can be ascribed to so remote a period, but in Silesia and Posen, as Virchow has

[†] Osservazioni sopra il commercio dell'ambra in Atti d. R. Acad. d. Lincei, Anno 274. 1876-77, 3rd Ser., vol. i.

; "Deutsche Altertumskunde I.," Berlin, 1870, p. 215, seqq.

pointed out, certain so-called "skeleton chests" (gerippten Cisten) have been found which are of ancient Etruscan origin. To Etruscan importation in the sixth century B.C., is to be ascribed also a fibula from Gorszewice, near Kazmierz.†

In any case, the results of accurate study have made it clearer and clearer that from the earliest period the bronzes found in the North were importations from the South. That the bronze industry may have taken its rise in Central Asia, in the Hindu Koosh and the Altai, as Virchow thinks, is not irreconcileable with this view; but that its spread into Europe went northwards from the Black Sea is proved by the absence of our old friend the bronze celt from Greece, from Asia Minor, and from the The doctrine of an old Bronze People, and a Caucasus. northern Bronze Kingdom in Europe, during which the bronze industry was developed among otherwise uncivilized races, has been completely overthrown. In fact, the contrary hypothesis has taken its place. Instead of a development from ruder types and unskilled manufacture to elegant forms and skilled workmanship, the truth is that the more finished the article the older it is, since it was either derived directly from the cultured artisans of the Mediterranean, or was copied by those who had been brought into direct contact with them and their work. The bronzes made in the North were mostly recast by foreign dealers and wandering bronze-merchants, says Lissauer, from old bronzes. Thus, as time went on, and the industry passed into native hands, the forms became more rugged, and the workmanship less skilled.

The trade with the South lasted on from the Neolithic Age in the North until, in the sixth century B.C., the routes by which it went were indicated by coins of Greek origin, and by the products of the more distant South, such as the cowries of the Red Sea and Indian Ocean, which were worn as ear-rings.

As regards the coin-finds, Genthe‡ has followed them up from the coasts of the Baltic to the South, and been thus enabled to indicate trade routes passing directly to the Ægean Sea from West Prussia, through Posen, Silesia, Hungary, Transylvania, Servia, and Macedonia, to the island of Thasos, between the peninsula of Chacidice and the Thracian Chersonese, from which point a great portion of these coins come. They were first brought into the barbaric North viâ Thrace, Mæsia, and Dacia.

[†] Lissauer, "Prähist. Denkmaler," p. 55. Die Hallstaetter Epoche. "Ueber die etruskischen Tauschhandel nach dern Norden, Frankfürt," 1874, p. 68.

This route is, as we notice, quite independent of the two previously referred to, namely, those viâ the Rhone and the Po. The fact that it is indicated in the sixth century by the coins by no means proves that it commenced at that period; and as the Phænicians, as Lissauer points out, were previously settled on this island of Thasos on the Thracian coast, this commercial route may with probability be attributed to the period of Phœnician trade. The absolute identity of several forms of flat bronze celts found in India, in Hungary, in Germany, in Ireland and Britain -not to speak of examples which may have travelled by a route along the coasts of the Levant and Mediterranean to Spain, where we find them also—could thus be accounted for. "money-cowrie" found by me in a barrow near the Land's End in Cornwall was accompanied by Neolithic axes.† Such flat celts, some of which are of pure copper, and seem to be imitations of stone celts and axes, are placed by Montelius in his first period of the Older Bronze Age in the North. To this same period (B.C. 1450-1250) he also assigns riveted dagger-blades, which partly came from the North of Italy, in which case the handles were detached, and partly native copies, in which case the handle and blade were cast together. Certain triangular daggers, belonging to the pure Bronze Age in Italy, which in about 1000 B.C. was passing into that of Iron, he also assigns to this period. so-called halbert-heads were also characteristic of this period. The ornaments consisted of simple smooth neck-rings, broad-fluted arm-bands, or spiral finger-rings, the decoration consisting only of straight lines. Inhumation was practised, the bodies being placed in great stone cists. This, of course, applies especially to Scandinavia. In North Germany the period is represented by finds in Saxony, Neunheilingen, near Langen-Salza and Leubingen in Mersebourg. It is exemplified also in Mecklenburg, and Pomerania, in Denmark, and Schönen, but more rarely in the North of Sweden and Norway. In the Iberian Peninsula, in the British Isles, but in Ireland especially, it is well represented, in flat celts, some of copper, dagger-blades, and halbert-heads.‡

The second period of Montelius (B.C. 1250–1050) is the best period of the Older Bronze Age. The celt is the *paalstab*, which had originated in the previous period. Its edges are, however,

[†] See "An Indian Money-cowrie in a British Barrow," *The Antiquary*, vol. i. (1880), pp. 30, 31 ‡ See examples, pp. 673–5, 679, 680, *infra*.

higher, and a cross-bar or stop-ridge is introduced. The hollow or socket-celt now appears. The principal weapon is the sword, with a bronze handle, surmounted by an oval hilt-knob, and ornamented with spirals or concentric circles. Knives, with pointless blades and hilts like horse-heads, belong also to this period. The ornaments were twisted neck-rings ending in spirals, diadem-like neck ornaments, with low flutings, fluted arm-bands, and fibulæ, in the form of violin bows. The decoration consists Inhumation was customary, but incineration had of spirals. commenced.

This period is represented in Mecklenbourg-Schwerin, Jutland, Fünen, Seeland, and Schönen, but it is also exemplified elsewhere in the North. An example of a paalstab, decorated with spirals from Finland,† must also be assigned to it. In France, on the west coast of the Iberian Peninsula, and in Britain it is present.

In Ireland it is represented with exceptions, and with the addition of several types not mentioned in the Scandinavian list, but some of which belong also to Portugal.‡ Of paalstabs, with high edges, there are, of course, plenty, and the feature of the stop-ridge is found not only on celts but on spatula-shaped instruments, of long and distinctive type. Swords and dagger-blades, with oval hilt-knobs, are not wholly wanting, but are certainly rare. The socketed-celt has, as a rule, a round or oval mouth, in which feature it resembles some Batavian examples.§

With an Irish fibula, figured by Wilde, | an Etruscan example, figured by Lindensmidt, ¶ as well as two from Holstein, one from Oppenheim, †† and an example from Bosnia, given by Radimsky, ‡‡ may be exactly compared. The long spatula-like instrument found in Ireland has been found also near Maintz, and another in an urn on the Feuerberg in Rheinbayern, and a peculiar celt of the same type, but with a cross-piece forming a stop in the centre, has its counterpart also in one found near Frankenthal.§§

To me it appears that at this period a Scandinavian, South Baltic, and South-eastern influence, which had previously dominated the bronze culture in the British Isles, was, to some extent, supplanted by the establishment of a connection with the Rhenish and Danubian districts, and thence with Italy. In Ireland, the

^{† &}quot;Bijdrag. til. Finland," 1863.

§ Nijhoff, "Bijdragen," 1837, etc.

¶ "Cat. Mus. R.I.A.," p. 567.

† Id., heft ix., figs. 1, 3, 4.

‡‡ "Die prähist. Fundstatten," p. 37.

§§ Lindensmidt, "Mus. of Maintz," heft i. pl. iii., figs. 7, 8, and 15.

absence of the spiral in bronze decoration is noticeable. For ornamental purposes, the chevron, the straight lines, and the herring-bone seem to have been retained. Concentric circles are, however, found on certain gold objects,† such as the so-called Irish Crown‡ and on a few socketed celts. This curious head-dress may be compared, both in point of its use and its ornament, to three objects found respectively at Corinth, Speyer, and Poitiers, and figured by Lindensmidt§ and by Thoms. The spiral, it may be observed, although absent in Irish metal work at this period, is amply represented in stone as at New Grange, Dowth, Loughcrew, and Cloverhill. The same observation holds good with regard to Brittany. To this period, in the case of Ireland, are to be assigned the leaf-shaped bronze spear-heads, which belong alike to Scandinavia, to Hanover, to Bosnia, to Hungary, to the Lake Dwellings, and to France.

To this period, in short, it is that, with great deference to the opinion of those who may differ from me, I would attribute the spread of a civilization which, passing westward into Gaul and portions of Spain, and northwards down the Rhine, carried with it new developments of the bronze industry, the practice of incineration, and last, but not least, the germs from which spread forth the Celtic language. In support of this view, three facts are noticeable: (1) that Archæology demonstrates to us that much of the bronze culture of the North, and North-West especially, was derived from contact with North Italy; (2) that the custom of incineration came from the South; and (3) that Philology requires us to find a centre somewhere to the north of the Alps, where those who spoke the Latin language on the one hand, and those who spoke the Celtic language on the other, were once dwelling side by side. If Montelius is approximately right in his date, B.C. 1250-1050, for this most important of all the periods of the Bronze Age, it is to that epoch that I would assign the movement in question. The extent to which the influence would have been felt west of the Rhine and Elbe might have been the bank of the Oder (Müllenhof has traced the presence of the Celtic language east of the Weser), | and there is no reason why, passing

[†] See figs. 537, 539, 540, 541, 542, 543, 544; pp. 616-618, infra.

† See Harris's "Ware," vol. ii. pl. 1, and the Preface to O'Connor's "Keating."

§ Op. cit., heft x. pl. iv. || Note to his trans. of "Worsaae," p. 36.

¶ ("Du Chaillu," vol. i. p. 110. || "Estorff," p. 7.

†† "Estorff," p. 7.

†† "Estorff," p. 7.

|||| See map, tab. i., in vol. ii., "Deutsche Altertumskunde."

northwards into the Cimbric peninsula, it should not have reached Jutland, and even Scandinavia, where the presence of Celtic has been more than suspected, though never as a lasting influence.

It is not necessary that I should follow Montelius with the same fulness through the four other divisions he marks off in the Bronze Age. Many types occur which are unknown in Ireland, and as to those which are known there, they occur also in France or on the Danube and the Rhine. In his third period (B.C. 1050–900) he places those swords—common to the whole of Western Europe, the hilts of which were covered with plates of bronze, horn, or wood. Of these Ireland has in her museums some splendid specimens. Among knives, too, are those, the handles of which are perforated, also common in Ireland. Inhumation becomes rarer, and the district of Germany and the Baltic, over which the cultus is found to have extended, is the same as in the last period.

In the fourth period (B.C. 900-750), the socket-celts, which were of large size in the preceding one, becomes smaller, but are still provided with a handle for attachment. The so-called razor-knives appear, which are also found in Ireland, as are also the spectacle-shaped fibulæ. Incineration is now practised, and the ashes buried in small cists, in contradistinction to the larger cists of the two last periods. This period is represented in North Germany, Denmark, and Schönen.

The fifth period (B.C. 750-550) is described as the best period of the later Bronze Age in Scandinavia. It is represented in Germany from Hanover to the further side of the Oder. Incineration had become general, and the ashes were placed in urns. In Ireland this would be represented by the small, plain, socketcelts, by the open arm-rings, which end in bowl-shaped hollows, and by pins of various forms, some with bowl-shaped heads.

Period the sixth (B.C. 550–400) marks the termination of the Bronze Age in Scandinavia. During this epoch, inhumation comes back again, and the corpse is buried whole. It is represented throughout the whole of the North, and in North Germany, especially from Hanover to Pomerania. In Ireland, the little handleless socket-celt would belong to it; also the gold-twisted torques, and certain pins, with peculiar heads like swan-necks. Weapons are absent, the bronze having presumably given place to iron.

As might be supposed from the fact that those who constructed the tombs of this period burnt their dead, little or no certain evidence is obtainable as to their physical characteristics. Two skulls, obtained from a cist at Konopath, are the only ones assignable to it which Dr. Lissauer is able to cite. One of these was mesocephalic, the other brachycephalic.

In Ireland, where unburnt bodies buried in a contracted position, generally with an urn, are found in very similarly constructed cists, the head-form is brachycephalic, and the index high. They seem to belong, however, to the *commencement* of the Bronze Age in that country, and are comparable to that at Hallé, before noticed, and being often double, to that of which Kleman gives a section in his "Handbuch" (plate 9).

Brandenburg.

We now pass to examples of structures which resemble very closely indeed the larger dolmens of Ireland. In Pomerania

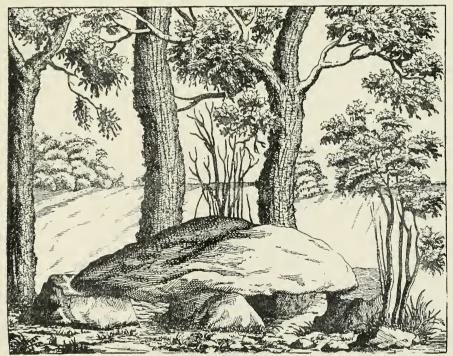


Fig. 492.—Dolmen at Richtenberg, Pomerania Citerior. From "Nova Lit. Maris Baltici," 1700, p. 257.

Citerior, opposite the island of Rügen, examples are not unknown. From an old and valuable periodical I introduce in facsimile an engraving of one at Richtenberg.

Bekmann, in the grand old folio† in which he so exhaustively describes the antiquities and relates the history of Brandenburg, tells us that in the Altmark in his day there were numerous "Hünenbetten," and that there were also some few in the neighbourhood of Prignitz and Ukermark. The longest of them consisted of an external range of some forty or fifty large stones, measuring from 3 to 4 feet, and sometimes more, in height. Also, he adds, "towards the east" there sometimes stand two rude pillar-stones, one on either side. To these he applies the name *Custodes*, or "Guardians." They recall the two pillar-

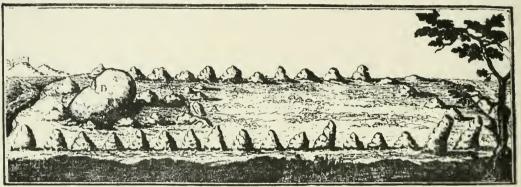


Fig. 493.—Hünebed at Besewege, near Frankfort University. From Bekmann. A = depressed end of the vault; B = roofing-stone.

stones on either side the entrance of the Annacloghmullin monument in Armagh (Fig. 276, supra).

Within this outer range, and "in the upper portion of the area" there was usually a structure reaching to one-third, or rather more, of the entire length. It seems by his description that these vaults were generally formed of five stones on either side, and one at either end, supporting on their tops one or more very large roofing-stones.

There was such a monument in the village of Besewege, near Frankfort University, situated on a hill. The top stone was smooth underneath, and measured 11 feet 4 ins. long, 9 feet wide, and 4 feet 4 ins. thick. The longer axis was N. and S., which appears to have been usually the case. On the way to Garliep was another, the roofing-stone of the cist in which measured 9 feet long, 7 feet broad, and 2 feet 6 ins. thick. The surrounding stones were very large, and were thirty-four in number, and at the "top"—

^{† &}quot;Historische Beschreibung der Chur und Mark Brandenburg" (Berlin, 1751), by J. C. Bekmann.

that is, the highest part of the enclosed mound, and where the cist, or crypt, was—there was, as usual, an opening. Towards the S. there appeared to have been the remains of another similar monument. Some of the stones here measured 2½ German ells in height.

At Kloden, on the way to Steinfield, there were three Hünebeds,

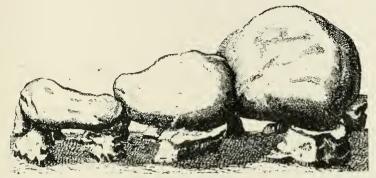


Fig. 494.—Hünebed in the Altmark between Steinfeld and Klöden. From Bekmann, op. cit., tab. i., fig. 3.

near together. One of them had double rows of stone enclosing it, the roofing-stone of the cist within the area measuring 7 feet 3 ins. long, 7 feet wide, and 3 feet 4 ins. thick. Bekmann compares this monument, and also one near Steinfield exhibiting the same characteristic, with a "Heidenbette" in Wormius,† and other monuments described by Arnkiel.‡

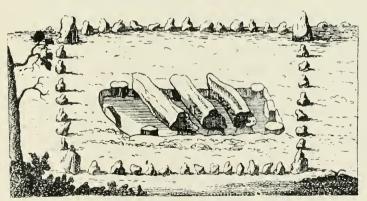


Fig. 495.—Hünebed at Höbisch. From Bekmann, tab. iii., fig. 3.

The village of Steinfield derived its name from the number of these monuments which existed there. Some of these were

^{† &}quot;Mon. Dan.," lib. i. cap. vi. p. 35. ‡ "Cimbrische Heyden-Religion," Hamburg, 1690, p. 231, segq.

of considerable proportions, one having twenty stones on either side, and five across each end, and another thirty-three stones on one side, twenty-nine on the other, two at the lower end, and four at the upper.

Near the village of Ballerstätt are three monuments of this class, one on the Hundesrukken (Dog's Back), one on the Hasenäkkern (Hare Field), and the third and finest on the Krummenschlag (? Bent Blow). The latter, says Bekmann, is quite a "Hero-Bed," formed by huge stones set lengthways, "the altar" (as he calls the dolmen or crypt) "standing within twelve large stones." Near Bellingen was another, also described as having double ranges of stones.

The historian Entzelt,† following a local tradition, considered these monuments as memorials of the battles of Margrave Albrecht of Anhalt, and Margrave Huder, and regarded two other monuments, the Steinbette and Heldenbette, at Stafel, as the burial-places of the Lords of Zera. Bekmann, however, combats this view. "They are neither," he says, "Christian nor Wendish. The Wends never took the trouble to bring together such big stones, from far off too, and they are never found where the

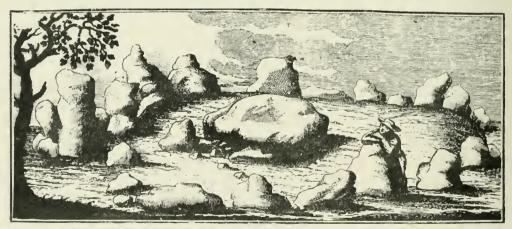


Fig. 496.-Circular Hünebed, near Ballerstätt. From Bekmann, tab. iii., fig. 2.

Wends were settled. . . . They must have been the burial-places of our old German heathen ancestors, and consequently much older than any Wendish and Christian monuments in the Mark."

Near the village of Bretschen were five Hünebeds, but of smaller size than those at Kloden and Steinfield. In one example

[†] These monoliths occupy the position of the columns of the portico, or rather perhaps of the $\pi \alpha \rho \alpha \sigma \tau d\delta \epsilon s$ of a Greek shrine, or, to go further back, of the pair of monoliths before an Egyptian temple.

five long stones occupy the part of the area not filled up by the crypt. There is another, and larger one, at Primarsch, consisting of eighteen or twenty stones on either side, with an "altar" within, formed of twenty stones, and a fairly large roofing-stone. Like most of the others, it has its two pillar-stones, or *Custodes.*† Near Diestorf were seven of these monuments.

About one near Salentin a local legend existed. The inhabitants called the whole monument "The Lying-in Woman," or "the Six-Weeks' Bed," and the dolmen inside "the Cradle." Others existed in the heath near Mesenthin, at Winterfield, and at Ahlun, the latter a very large one.

One on the Dolchow Mountain was circular in form, the environment measuring 30 to 40 feet in diameter. In the centre some larger stones were set in quadrangular form, and on the top of these rested several stones of huge size, one of which measured 7 Berlin ells long, 4½ wide, and 2 thick.

Another was near Arnberg, and Bekmann thought that there

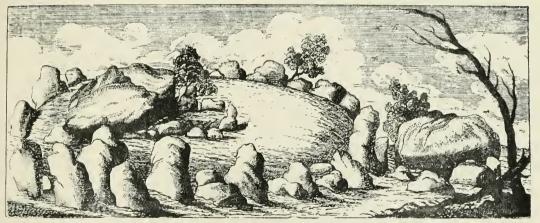


Fig. 497.—Hünebed near Ballerstätt. From Bekmann, tab. iii., fig. 1.

might have been many more, which had been removed. In Prignitz he knew only of one of any importance, under the "grave altar-stone" of which a man could crawl. Near it were twenty-eight tumuli, and there had been others which had been ploughed over.

In the Ukermark, near Wilmersdorf, were remains of similar megalithic structures, and at Dedelow was a curious monument with two pillar-stones standing in the enclosure. In the Neumark Hünebeds do not exist, but only stone-circles.

Besides the dolmens, each environed by a peristyle, like those

^{† &}quot;Chur-Brandenburgische," Halberstatt, 1682, p. 63.

just noticed, there were some which stood alone, without any stone setting. Sometimes they were similar to those in the enclosed areas, sometimes they consisted of three great flat slabs set up on edge, on the upper edges of which rested a fourth flat stone. Under these one or two urns full of bones were usually found. Of this class there were three close together between Steinfield and Kloden. The largest of the cap-stones measured 7 feet long, and 3 feet 5 ins. thick. Bekmann compared these with the monuments at Drenthe, to be presently noticed.

Near the village of Kohrberg was one with a roofing-stone 12 feet long, and 9 feet wide, resting on three others not much smaller, set up edgeways. A man could sit easily beneath them. With this the dolmen before mentioned at Ahlun may be compared, but the latter was surrounded with a range of stones, a fact which gives reason to think that there may once have been such an arrangement round the free-standing ones, the stones of which have been removed.

Under one at Mürow two persons could sit conveniently. On a high hill near Schapow in Prenzlow, four enormous flat stones had been set up edgeways, forming a longish quadrangle, and having a large, levelled stone on top. About 50 paces from this another flat stone was found, resting on four others, forming the sides of a cist in which were many small bones, and a portion

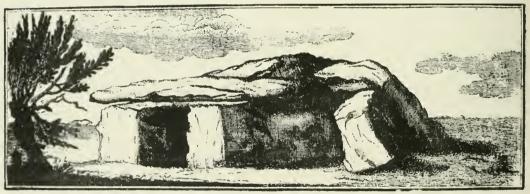


Fig. 498.—Hünebed, near Ahlum. From Bekmann, tab. i., fig. 7.

of an urn with a sort of slate cover. About 2 paces from this, again, under another flat stone not covering a cist were found burnt bones of horses, and by the side of them a small urn of red clay, containing about a pint of ashes and small bones.

Between Seehausen and Bertikow were the remains of a

monument of this kind, the largest side-stone measuring 6 feet long and 3 feet high, and in which a rather large urn with bones was found. Near Pinnow were several of them, described as "like entrances to cellars." One near Grüneberg, in the Neumark, bore the name of the "Stone Cellar." This structure stood on high ground, and consisted of five large slabs, two of which formed the side walls, each 8 feet 6 ins. long. The end towards the N. (the monument stands N. and S.) was closed by a stone 3 feet 6 ins. wide, and the same in height. The S. end was open. The breadth and height of the crypt are 3 feet 6 ins. The roof was formed by two large flat stones, the larger of which (24 feet in circumference) covered the S. end, and the smaller (17 feet 6 ins. in circumference) rested on the back wall. The space underneath was high enough and wide enough for two people to sit together and stretch out their feet. The stones were fairly smooth inside, but not hewn. They were fitted, however, closely together, so that they kept out wind and rain. Similar structures were common in this vicinity, as Ettester observed in 1746. In most cases the covering-stone was absent.

Besides the oblong or wedge-shaped or circular area enclosing the dolmen, Bekmann has given numerous examples of independent stone-circles in Brandenburg. Their presence, he says, seems to mark a distinction of race, his reason for this conclusion being that they begin to be found where the other megalithic structures leave off. None of the latter are to be found beyond Möllen, in the Prignitz, while this is the district—that is, east of Möllen—where stone-circles and ovals are first met with. They were formed of medium-sized stones, and were about 20 feet in diameter.

Among the peasants such circles are called, in general, Hünen- or Heiden-Gräber, while some near Writzig, close to the University of Frankfort, are called Hünen- or Heiden-Thoren (Hunnish, or Heathen, Graves or Gates).

Circles occurred also in the Ukermark, in one of which an urn and burnt bones were found, with an iron pin and a brass ring. In the Neumark, in the Wulfsbrüchern, was one which bore the name of "Adam's Dance," or the "Stone Dance," from a story that once at Easter some men held a dance there naked, and were turned into stone as a punishment. The stones, fourteen in number, are in pairs. One stone in the middle measures 2 ells

(4 feet) high, and is hooped round like a cask. Two somewhat taller stones outside the ring, are said to have been the musicians.

In some places several stone-circles are found together, sometimes measuring 18 to 20 feet in diameter. A monument of this kind lay near Maschdorf, about one mile and a half from Frankfort, on the other side of the Oder. There were twenty of them when Bekmann was there in 1683. Near Zehden, in the Neumark, a still larger number might be seen. They were often formed of

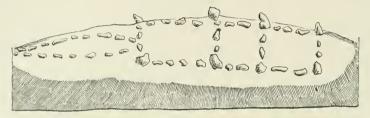


FIG. 499.—Tumulus in Sweden, with stone setting divided into compartments.

From Rudbeck's "Atlantis."

very large stones, which were sometimes square, and in several examples a huge stone was placed in the centre, which Bekmann regarded as the "grave-altar."

They were also to be found in groups near Teschendorf, Steinhöfel, and Janikow; also at Grossin and Pribslaf, where they

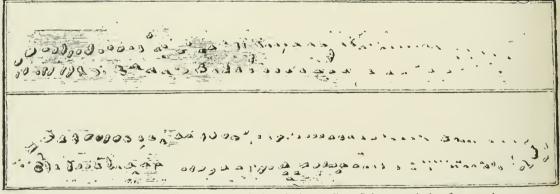


Fig. 500.—Long, avenue-like monuments in Brandenburg. From Bekmann, tab. iv., figs. 1 and 2.

were called "Hills of the Dead," "Giant Hills," "Giant Graves," "Hünenbrükhen" (Hüne-Bridges), and "Hünenbetten." Some of them consisted of from fifteen to twenty stones. Near Schönermark and at Stendelchen were several of nine stones. In most cases the number of stones was seven.

Not far from Oderberg, near the Krummensee, was a stone-

circle 18 to 20 feet across, with a very large stone in the middle. Close to it, and forming a triangle, were three small circles.

There were also monuments in the form of stone avenues, or rather exceedingly long oblongs (Fig. 500). They were to be met with in the neighbourhood of Schievelbein. They were rounded at the ends, and consisted of flat or raised stones. One near Schlönnewitz measured 100 feet long; and one at Pribislas was 180 feet long, 32 feet wide at one end, and 20 at the other, so that it was wedge-shaped. There was another at Buzenhagen, on the road to Pomerania, and a fourth on the river Malsto. Similar arrangements of stones occur in Sweden, as may be judged by the annexed rude drawing from Rüdbeck (Fig. 499). Very long Hünebeds occur also in Hanover.

Just as double ranges of stones sometimes surrounded the Hünebeds, so was it also with the stone-circles. Sometimes there were more than two concentric ranges, but these were divided into several parts, and were very unusual. One circle near Arendorf had a single stone in the middle, and around it six concentric rings. Another had a cross of stones in the centre, and around it four concentric oval ranges. The long diameter of the oval was 21 feet, the breadth 14 feet. There were four of these eccentric monuments in the same field, called by the natives Jekkendanz (i.e. "Dance of the Geeks," or "Silly Folk"), or the Wunderberg ("Marvellous Mountain"). The cruciform centre reminds us of another example mentioned above,† and also of the cruciform arrangement in the chambered cairns in Ireland.

It is quite clear that stone-settings, in lines close together, and other arrangements, were at one time as common on the hills and plains near Pinnow as they were and are in parts of Ireland. On a lofty hill at Mürow, Bekmann describes five stones of great size set close together. Such stones were to be seen in larger numbers near Oderberg, on an elevation, with a very large pillar-stone in the centre. Such also occurred on the Schlossberg, and near the village of Melsow. Underneath one of these stones near Pinnow three flint "wedges" (celts) and three stone axes were found.

That the *veneratio lapidum* which prevailed so largely in Northern and Western Europe was largely in vogue in this district, does not admit of a doubt. Near Frankfort were the so-called Näpfchensteine. In the largest of these stones there

were seventeen holes, mostly round, of different sizes, twelve of them deeply sunk. Near Bossen were two more, one having a double row of holes, and the other ten longish holes. Another at Schwarzbrack had been, it was thought, connected with a circle. Several others are mentioned, and one is also noticed as existing on a hill near Stargard, in Pomerania. Footprints of a child ten years old are said to be recognizable in a great stone at Reidenitz. At Zehden, in a wood, lies the Kuhtrafpe, or Cow's Foot, used as an official boundary, the name of which is derived from a wellhewn mark of a cow's hoof, close to which is a dog's footmark, and opposite them another but unrecognizable footprint. A mile from Stendal, in the Altmark, is a stone in which is the rather deep imprint of an unshod horse's hoof. There was a legend regarding it, that the devil carried off a woman who kept an inn near by; and also another that a general said that he was as sure of winning a battle as he was that his horse's hoof would sink into the stone, which accordingly took place. So-called footprints are frequently pointed out in venerated rocks in Ireland, and identical legends told about them.

At Mohrin was a stone which, as seen above ground, looked like two stones wide enough apart for a horse and his rider to pass through the gap, though underground it was all one stone—this form having been produced, so Bekmann states, artificially.

At Ostherrn, near Darmstät, was a stone with a child's shoe imprinted on one side, and a woman's on the other. Between Reez and Rietzig was a large stone around which lay some smaller ones, and on which occurred all kinds of figures of hands and claws, among which was a footprint of either a child or a woman, while a hand and a horseshoe were very distinct. Beside the Wandel Lake at Müllenbek was an enormous block, which bore on its surface the imprint of a very large human hand, with its five fingers perfectly clear and distinct. Legend averred that a giant took it up and cast it from the opposite side of the lake, and left the impression of his hand on it. Bekmann compares this legend to that told of stones on the Petersberg and at Weltin, in which were likewise marks ascribed to a similar origin, as also two hands in a stone near Sonnenwitz. We can add to these the stories of the stones thrown by Kallewe Poeg in Finland, and by Finn Mac Cumail and other giants in Ireland, on each of which they left the imprint of their fingers and thumb (see p. 513, supra).

It was said of stones standing against each other near Saltzwedal, that Drusus cut the original block in two with his sword at one stroke. Near Arnswalde was a stone which the people called the Wend-Stone, and which they said was used as an altar. About other stones the tradition exists that they were altars. Near Freienwalde is a great stone, resting on three others, which Bekmann compares to one figured by Arnkiel.† He says it was evidently a "grave-altar"—a name which he applies to dolmens. He thinks that the so-called "Hünenstein" near Trebnow may be of the same kind. Of two large stones at Königstät, one was called the "Bride's Bed," and the other had an opening in it, as though it had been cut through with a saw.

The conclusion at which Bekmann arrives with regard to the ethnological question as indicated by the distribution of the great Hünebeds, is that, since they are to be found westwards as far as the North Sea (that is, as far as Drenthe), and further northwards through Holstein, Schleswig, Jutland, Sweden, and Schonen, they must have been first erected by the old German peoples, the Suevi, Vandali, and Langobardi, when, "as they journeyed towards the North, they made a halt here and there, and established for a time fixed settlements, for such monuments," he adds, "could not have been the work of a nomadic race." He mentions that they are found to reach as far south as Magdeburg, and that two still existed near the village of Hohenziass, one in the village of Behrden near Zerbst, and one near Dornbourg, but that from thence in the Anhalt-Zerbst district, and in Prignitz, Middlemark, Ukermark, and Neumark they become scarcer, and die out.

NORTH-WEST GERMANY.

The principal authority for the dolmens of Hanover, at which we now arrive, is G. O. C. von Estorff, who, in 1846, published his "Heidnische Alterthümer" of that district.

To the S.W. of Edendorf, to the E. of the Ilmenau river, lay a group of five megalithic monuments and several tumuli. One of the former, which he calls an oblong Hünengrab, was a particularly fine one. It lay E. and W., and stood upon a low artificial mound. Thirteen blocks of granite, from 3 to 4 feet high and of

the same breadth, served as pillars to support the stone cover, which consisted of three blocks of the same material, which overlapped the pillars. The E. covering-stone, measuring 11 feet long, 6 feet broad, and 3 feet 6 ins. thick, rested on four of the pillars, and, towards the E., on a broad closing-stone. The middle cover-stone measured 10 feet long by about 6 feet broad and 3 feet thick, and rested originally upon four stones. The W. cover-stone, if there ever was one, was not in place.

One of the dolmens of this group has a wedge-shaped environment or peristyle, as will be seen from the accompanying groundplan.

There was a very remarkable group of stone monuments and tumuli which extended in a serpentine form up to the source of

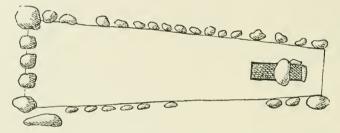


Fig. 501.—Dolmen with wedge-shaped environment at Edendorf. From Estorff.

the Wahlbeck, and close to the village of Alt-Medingen, described as one of the most ancient places of the Bardingow. The group consisted in all of thirty-six stone monuments and seventy-three



Fig. 502.—Dolmen at Dörmte, Amt Oldenstadt, Hanover. From Estorff.

tumuli. Eight stone monuments and thirteen tumuli lay close together. The first described was an oblong Hünengrab, measuring 24 feet from N. to S., and 7 feet wide, formed of fourteen stones, six on either side and one at either end, which supported four granite coveringstones measuring from 6 to 7 feet long. There was originally a fifth, which has been taken away.

The second in the group was an oblong "Hünenbed"†—(Estorff calls a dolmen without its environment,

"Hünengrab," and with it, "Hünenbed"—close to the border of Secklendorf. It measured 44 paces long by 16 paces wide, and

[†] I adopt here the form of the name used by Estorff.

consisted of fifty-one stones, averaging from 5 to 6 feet long and high. No "bed" or grave was visible on the exterior, but there might have been one within the enclosed mound.

The third example of the group was an oblong Hünenbed, with the longer axis S.W. and N.E. This is the longest of them, since it measured 400 feet long, while it was only from 12 to 14 feet broad. It was formed by 166 stones, from 3 to 5 feet high, and the same in width. No grave, i.e. dolmen, was visible. The fourth was an oblong Hünengrab, 24 feet long from S.W. to N.E., 5 feet wide, and formed by twelve setting-stones, five on either side and one at either end. There is only one covering-stone left, which measured 8 feet long, 5 feet wide, and 4 feet thick. The fifth was an oblong Hünengrab, 16 feet long from S.W. to N.E., and 6 feet wide, formed by eleven pillar-stones, five on one side, four on the other, and one at either end, averaging 4 to 5 feet high. Two coveringstones remained, each 8 feet long, 8 to 5 feet wide, and 1 foot 4 ins. thick. On the S.E. there was an entrance like a flight of stairs, but it seemed that the structure had been tampered with. The sixth was an oblong Hünengrab, 30 paces N. of the preceding. It measured 18 feet long from S.W. to N.E., and 6 feet wide. The two long sides were formed by three stones, each measuring 5 feet high, and the ends by one stone each. The covering-stone was 6 feet long, 3 feet wide, and 2 feet thick. Three hundred paces from the last was the seventh, which was also an oblong Hünengrab, lying somewhat raised, and measuring 32 feet long from S.W. to N.E., and 6 feet wide. It was formed by fourteen setting-stones, six on either side, and one at either end, from 3 to 4 feet above ground. These supported five covering-stones from 6 to 7 feet long, from 4 to 5 feet wide, and from 2 to 4 feet thick. On the S.E. side was a staircase entrance. Another Hünengrab lay at a distance of 40 paces from the fourth, above noticed. The coverstone, which was 2 feet above the surface, and rested on comparatively small stones, was of considerable dimensions, measuring 14 feet long, 7 feet wide in the centre, and 5 feet wide at either end.

A fine Hünengrab lay on the W. side of the village of Havekost. It was an oblong structure on a round hillock, planted by peasants—an interesting instance of the veneration of the people in regard to these places—with two birch trees and two aspens. The monument measured 32 feet long from N. to S., was 5 feet

wide, and consisted of seven covering-stones, each 7 to 8 feet long, which rested on fourteen stones, which were about 2 feet above the surface, but in such manner that they (the covering-stones), by overlapping the side-stones, also touched with their edges the surface of the ground. There were two tumuli near the structure on the E. and S.E.

The next dolmen or Hünengrab to be noticed occupied a position which deserves particular attention, since the ruins, which

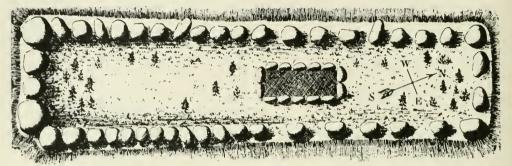


FIG. 503.—Hünenbed at Gansan, Amt Oldenstadt, Hanover. From Estorff.

"were high enough to sit upon," were upon a height in the Schooten Wood, near the old road from Celle to Uelzen, a spot where formerly the rural assemblies of Lüneburgh were, according to the old German custom, held in the open air. The place is described as a romantic one, and was in the forest land which formed the girdle of the Bardengow. The presence of the ruined Hünengrab leads Estorff to remark that it was probably a place for feasting and judgment, and that here was the original place of assembly of the Landtag.

Another place of assembly, where the Ampt-Bodenteich Court of Justice was held, lay at the distance of a few hundred paces S. of the Guts-Thore, a gate of the ancient town of Uelzen, upon a sand hillock which here forms the right bank of the Ilmenau river. Here the people assembled, under the open sky, for the transaction of their business, under the shadow of a few trees which surrounded the barriers. Estorff thinks that, since such places for the administration of justice (landgereicht) were consecrated by popular belief, this, too, was an ancient place of feasting in connection with the rites of the dead. No Hünenbed is extant still, but from times past a great number of urns with ashes and burnt human bones have been found here, proving the spot to have been a cemetery in prehistoric times.

We are at once reminded of the *Oenachs* or Assembly-Fairs of the ancient Irish, all of which were held at places of burial, as, for example, at Temair, at Tailten, and at Carman.

Near Haassel were two important Hünenbeds, the one lying N. and S., the other E. and W. In the former fourteen stones 3 feet high formed a peristyle 26 feet long and 9 feet wide,

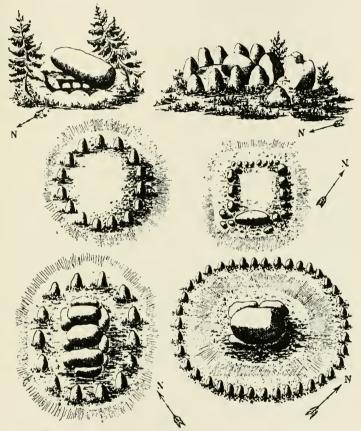


FIG. 504.—Megalithic monuments at Riestedt, Gross Prezier, Heitbrak,† Lehmke, and Gansau (2), all in Hanover. From Estorff.

enclosing a dolmen (Hünengrab), also formed of fourteen stones, 16 feet long and 3 feet wide. Two of the covering-stones were left, measuring respectively 6 to 7 feet long and 2 feet thick. The latter of the two monuments consisted of eighty stones, 3 feet high, forming a "bed" 70 paces long and 12 feet wide. Within this area were the remains of several dolmens.

Eighteen monuments of this class were to be met with near Uelzen. One at Retzlingen consisted of eighty-four stones,

[†] Note the word brak applied here, as in Ireland, to dolmen sites.

forming the setting or peristyle, arranged in rows of thirty-nine on either side. Two colossal "Gate-Stones" stand at the S.E. end—answering to the *Custodes* of Bekmann—and four blocks form the N.W. end. The whole measured 90 paces long by

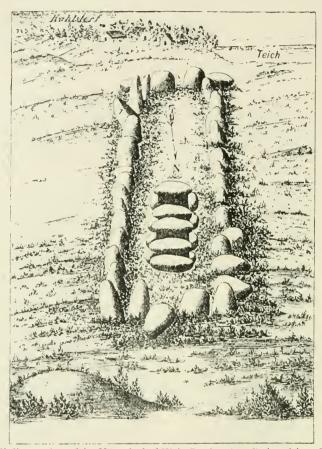


Fig. 505.—Bird's-eye view of the Hünenbed of Klein Prezier, Amt Bodenteich. From Estorff.

24 feet wide, and lay on a slight artificial elevation. The dolmen had been nearly destroyed. It lay 50 paces from a pond.

Another Hünenbed at Klein Prezier was also near a pond, and on a slight artificial elevation. It lay N. and S., and measured 35 paces long and 9 broad. The dolmen, which was in the N. half of the area, measured 12 paces long, and was covered by four stones resting on little pillars. Estorff noticed a human leg-bone in the interior, and, upon making inquiries, found that a shepherd had found an iron (?) pot 1 foot high and 9 to 10 feet wide in the grave, and that subsequently a "great human skeleton, fairly well preserved," had been discovered, about a foot under the earth,

resting on a bed of stones. According to the account given him, the body had a leathern girdle with buckle and bands around it. Near the breast were beads upon a wire and a buckle, all of bronze. A few feet S. of this skeleton lay a second, also with girdle,

buckles, and beads of clear green glass. There was also a bronze earring. A third skeleton lay near the second, and (like the others) in a direction E. and W. With this were bronze earrings and two hollow bronze plates with enamel in the centre, and fastened with two rivets to another bronze plate. To the S. of the last were two more skeletons without metal accompaniments, and at the S. end of the Hünenbed was a sixth and last. It lay close to the surface, and was 6 feet in length. A quantity of stones and broken pieces of pottery were found in other parts of the area, including fragments of a very large and thick vessel, and a few pieces of charcoal. There can be, I think, no doubt that these discoveries indicate late secondary interments the remains of which were commingled with those of the more ancient ones, in a place which traditionally was a tomb.

Near Emmendorf, on the bank of Fig. the Ilmenau river, on the side of a hill called the Hatzberg, stood the

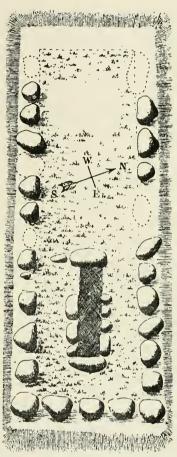


Fig. 506.—Hünenbed at Emmendorf in the Amt Medingen. From Estorff.

first of a group of ten stone monuments which were on the borders of Mendingen and Oldenstadt. It pointed E. and W., and was 33 paces long, the length of the enclosed dolmen being 8 paces. In this Hünenbed, and particularly round the enclosing wall, Estorff found many urns filled with ashes, human bones, and ornaments. Bronze and iron fibulæ, iron hooks, flint knives, and "little knife-like flint chips" were found outside the area of the "bed." The presence of these objects indicates that this monument was used as a place of interment at various periods.

Besides the ten structures of this class there were three tumuli, of which that to the W. was the largest. It was called the

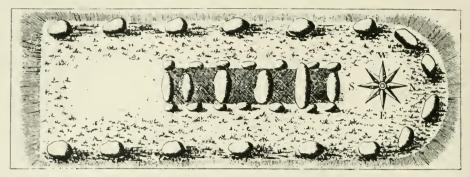


FIG. 507.—Hünenbed at Gohlan, Amt Liichow. From Estorff.

"Weinburg," which, among the natives of the district, is the

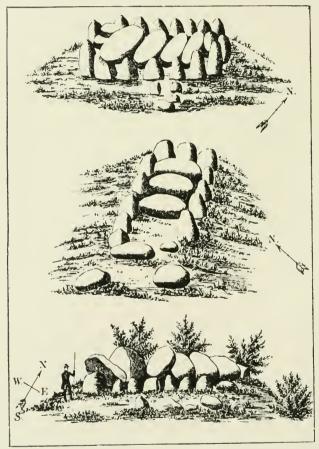


Fig. 508.—Hünenbeds of Riestadt, Amt Oldenstadt; Gross Prezier, Amt Bodenteich; and Jastorf, Amt Medingen;—all in Hanover. From Estorff.

 $[\]dagger$ Wand F being interchangeable, compare Walenbostel and Fallingbostel, etc., this would be Feinburg, with which comp. Feinne.

general name for a sepulchral tumulus, but for which they can offer no explanation.

Descriptions are given of some fifteen or twenty other Hünenbeds and Hünengrabs in the same district as those just noticed. They varied in shape and size—one, an otherwise oblong example, having one end circular, and another being altogether circular. Some, too, are described as very small. One group lay close to the source of a brook, and several were near a spring or a pond, or on a river-bank. The circular Hünenbed, which was near Gansau, is said to have contained in its chamber a human skeleton. pieces of wood, and many objects of bronze. On opening another near the same place, several urns ornamented with cleats, and with lines around the upper part, of red or brownish-grey colour, were found; also large pieces of charcoal. One Hünengrab, at Riestedt, near Oldenstadt, described as in very good condition, had an entrance formed by some smaller stones on the S.E. side (the structure lay S.W. and N.E.), a feature which characterizes some of the Swedish and Drenthe dolmens.

It may be observed that where Estorff speaks of a "round Hünenbed with the chamber not visible," he seems to refer to a dolmen-cairn or tumulus piled up inside its enclosing ring, and undisturbed. He speaks of one such at Heitbrack, near Medingen, on the summit of an elevation on the great *Todtenkampe* (Deathfield), near the *Todtenteich* (Death-pool). The word "Hünengrab" is used to express a sepulchral tumulus as well as a stone monument by the people of the country.

The following names are also applied to stone monuments: Hünenkeller (cellar), Bülzenbett, Brautstein (bride-stone), Leuchenstein (? linked stone), Speckseite (flitch of bacon), Backofen (baking-oven), Sönnenstein (sun-stone), Trutenstein (? trout-stone), Ehrengang (passage of honour), etc.

A tumulus is sometimes called Branhugel (hill of burning), or Venden-Kirchoff (Wends' churchyard).

Estorff regards the Hanover series as the prototypes of all the others in Germany. Of the Hünengraber he says there are two classes: (1) that in which the roof-stones rest on the side-stones, and (2) that in which the side-stones surround the roofing-stones without supporting them, that is, where the roofing-stones rest on independent pillars. The Hünenbed he defines as a Hünengrab with a setting of stones around and outside it. In Hanover,

only a single range of stones encloses the area. There are three shapes, oblong (most common), oval, and round. The stone-setting contracts towards that end where the chamber (i.e. the Hünengrab) is. In some of the stone settings only one end is closed, the other being left open. In some cases the lines of the outer setting are not parallel to those of the chamber.

As to the situation chosen for the monuments, the rule seems to have been to place them on elevated ground, in "a holy grove," as close as possible to water, near "holy" lakes or ponds, rivers, brooks, or springs; "for they always lie upon the heights, where the land allows it, or on a declivity in places where there is water still to be found, or where it is evident that it existed."

In almost all cases the stone monument is surrounded by tumuli. In the same district, also, are Lager-platze, Bourgplatze

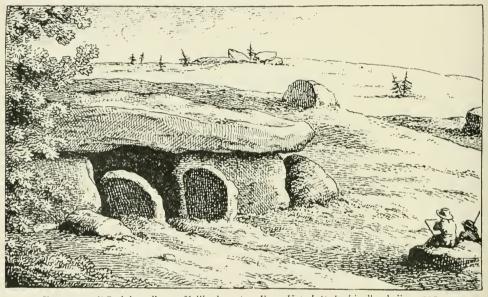


Fig. 509.—"Steinhaus" near Fallingbostel. From Vaterl. "Archiv.," vol. ii. p. 305.

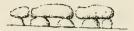
[? the Castra ac Spatia of Tacitus] forts, ancient roads, boundary stones, judgment and assembly places, holy groves, lakes, etc.

The Christians, so Estorff thinks, used the older heathen tombs as burial-places for themselves.

Dolmens between the Weser and the Elbe have been noticed by Dr. Edward Brown, Wormius, and Pococke.† Kelpius says

[†] Brown, "Reize Van Weenen, naar Hamburg," 1682; O. Wormins, "Mon. Danica"; Ric. Pococke, "Voyages en Orient" (Paris, 1772), vol. vii. p. 463.

there were many in Buxtehude, Haarburg, Staken, Bederkesa, and in particular in the Ottenburg district. One in Steenfelder-Holtz has three stones on either side, and one at each end, and is covered over by three very uneven flags. Another, called "Willenstein," consisted of a block, 8 feet long, 3 feet broad, and 3 feet thick, raised on others to a height of about



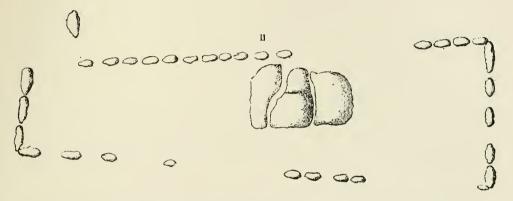


Fig. 510.—The Bülzenbette, near Sievern in the Amte Bederkesa ("Neues Vaterl. Archiv.," vol. ii. p. 154).

3 feet from the ground. Another, at Obsterholte, had four stones on either side, and one at each end. The largest covering-stone measured 3 paces long, and 3 paces broad, and was of extraordinary thickness.

There is an interesting monument in the Ampt-Bederkesa, called the *Bülzenbette*, of which I subjoin a plan and elevation.† It was near the ancient strongholds of Pipinsberg and Heidenstatt.

Kelpius mentions seven similar structures near Godenhuizen, lying each of them E. and W., and measuring about 14 or 15 feet long, and 5 or 6 feet broad.

Near Fallingbostel in Lüneburgh, between the Elb and Aller, were the monuments mentioned in the Vaterland archives as the "Seven Stone-houses" (Steinhausen), of one of which, with others in the distance, I subjoin an illustration (Fig. 509). They seem to have borne also the name Gudehausen.

[†] See Spangenberg, "Neues Vaterl. Archiv." (Zelle, 1819), vol. ii. p. 195. ‡ Kelpius' "Memoria Stadiana."

In 1812, M. J. Regnoul† visited some monuments called, he says, Hünen-Steine, in Westphalia, on the right bank of the Ems, at Baccum, near Lingen, for the purpose of comparing them with some he had examined the previous year near Nogent-sur-Seine, in the Department of the Aube. He found the two series of structures, the one in France, the other on the Ems, to be "absolutely identical," not even differing in the number of the supporters, nor in the feature of the double ring of stones by which they were surrounded.

The dolmens in question stood on a slight elevation (*monticule*) S. of Baccum. They occupied the summit of the little hill, and were three in number, placed near each other, and in a line E. and W. The two ranges of stones which surrounded them formed an elongated ellipse.

The stones of the monuments which these ranges enclose were called the "Hünen-Steine." A stone 10 or 11 feet long by 6 or 7 feet broad, and 4 feet thick in the middle, had been set up on three other great stones of the same kind, two facing the S.W., and one the N.E. The three structures, which were similar to each other, were 2 to 3 paces apart, and stood on a mound, which seemed to be artificial, raised on the surface of the hill.

The first or inner range of stones which surrounded them was 5 or 6 paces distant from the dolmens; the second further off. On digging into the monuments, M. Regnoul discovered, in the first, ashes, heaps of calcined bones, and the fragments of an urn, which had probably stood on a stone I foot square and 3 ins. thick. In the second he made a similar discovery, and in this case the urn had been decorated with an infinity of designs on its upper part. He particularly remarks that the material of the pottery was absolutely identical with that which he had found in the similar dolmens at Nogent-sur-Seine. The structures were of fine granite, and about 400 paces to the N. was a mound surrounded by a single ring of stones.

Westendorp,‡ speaking of Hünebedden between the Ems and the Weser, says that he visited one at Brunevoorde in Westphalia. On either side there were thirteen stones, at each end one, and the covering-stones numbered eight. One of the latter measured 9 feet

^{† &}quot;Annales des Ant. de France," i. 449. ‡ "Verhandeling over de Hünebedden," Groningen (1822), p. 24. I here adopt his spelling of the word.

7 ins. long, and the same wide, and was 7 feet 11 ins. thick. The side stones were not close together. The length was fully 73 feet. At the E. end the interior width was 5 feet 10 ins.; at the W. end, something over 7 feet. There were two others in ruins. There was, he says, a "Hünebed" at Vries, about 24 feet long, with four stones on each side, one at each end, and three covering-stones. It was somewhat smaller at one end than at the other, "as," says Westendorp, "is usually the case." This writer visited a celebrated example at Bischopsbrug. It was surrounded by an oval formed of numerous stones, measuring 124 feet in longer diameter. Within this lay the dolmen covered by three stones and a portion of a fourth. These stones measured 9 feet by 7 feet. The breadth at the E. end was 7 feet 6 ins., and at the W. rather over 5 feet 6 ins.

Van Langen, who had a collection of stone celts, etc., found in dolmens and tumuli, stated to Westendorp that he had never found any metal implements in the Hünebedden, and that the urn, where he had discovered one in any of them, was always smaller than those taken from tumuli. He also said that the structures always lay E. and W.

There was a very remarkable monument at Kloppenburg, lying on rough ground on the slope of a hill. It was an oblong formed of stones, open at the E. end, measuring 316 feet in length. On one side thirty-three stones remained, and on the other twenty-eight, but many were wanting. The lines were 5 paces apart. The stones at the W. end were of great size, measuring 10 feet 6 ins. above ground. Within this oblong, at a distance of less than 15 paces from the W. end, was the "cellar," as it is termed, measuring 16 feet long, 3 feet 6 ins. broad at the W. end, and lying N.E. and S.W. Westendorp considers it a middle form between the open and the covered Hünebedden of Drenthe. There was a legend about it which assigned to it the name of the "Visbeck Bride," a lady newly married, or rather about to be married, who had wished that she and her bridal party might be turned to stone on the way to the wedding.

Dr. Osthoff, of Oldenburg, informed Westendorp that there were many examples of Hünebedden at Bassum, all pointing E. and W. He mentioned, in a printed account of one which was explored between Reksheim and Wildhuizen, that urns ornamented with devices, but nothing else, were found in it.

The Pastor Trenkamp explored one at Emsteck, the direction of which was also E. and W. One at Wallenhorst, in the district of Iburg called Hoin, was found to contain urns, bones, and pebbles. The cap-stones appear to have measured together 32 feet long, 10 to 16 feet broad, and 2 feet 6 ins. thick.

For dolmens in these districts we may also consult the works of Smids, Keysler, and Rump. Nunningh † mentions a dolmen called Saarbold's huis in the Hummelingwoud. There was a verse about this dolmen, which will be quoted subsequently.

Westendorp was not aware of the existence of any dolmens in East Friesland. Searches for runes, he adds, upon any of the above structures have been fruitless.

At Helmstadt, in Brunswick-Wolfenbüttel, is another fine Hünenbed, an illustration of which is given by Keysler.‡

Tollius noticed two monuments of the same class on his way from Halberstad to Magdeburg.§

On the Feldberg, in Hesse, was a dolmen popularly called the "Brunehild Stone." Lectulus Brunehilde, or "Brunhild's little bed." The country-people believed that at night flames were seen about this stone, and they say that it is Brunhild's place of Whoever this Brunhild was, she clearly takes the place of Grainné in the Irish dolmen-legends. Von der Hagen considered the tradition referred to the Brynhild of the Niebelungen Lied, and Suhm thought he had found a passage in which it was actually mentioned.¶

Keysler describes and figures a dolmen with a single coveringstone at Wildbaden in the district of Wurtemberg.

Nicholas Schaterius, in his "History of Westphalia," gives the accompanying rude plan of a dolmen between Osnaburgh and Wallenhorst, consisting of a single block, supported on either side by four stones, about which a tradition existed that the coveringstone had been broken by Charlemagne, after he had fought with Widekund at that spot. The plan shows that it was wedge-shaped.

^{† &}quot;Sepulcretum Westfalico-Minigardico-Gentili, Francos," 1814; Bussching, "Erdbeschr.," iii. 1, 543, 662; Möser, "Osnabruckische Geschicte," i. th. pp. 269, 297 (Berlin, 1819); Meijer, "Darstellungen," Dorar., 1819; Lodtman, "In monum. ad aram Honensem, p. 120. For Sorbold's House or Grave, which lies in the Börgerwald in the N. part of the Hümlings, see "Alterthümer im Kreise Meppen," in Archiv. für Geschichte und Alterthumskunde Westphalens, ed. Dr. Paul Wigand, vol. ii., 1827, p. 166, etc.

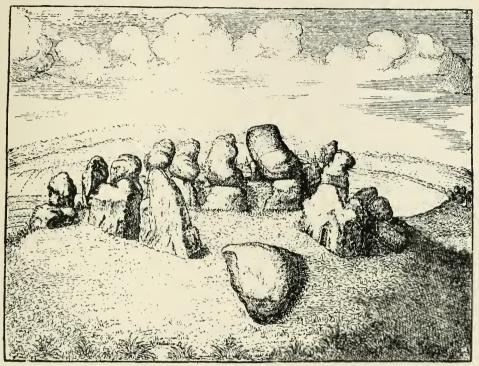
; "Antiquitates Selectæ Septentrionales et Celticæ," 1720. See also Conringh, "De Antiquissima Statu Helmstadii, Conr. Opera," vol. v. p. 358, Brunswick, 1730.

§ Jac. Tollius, "Epist. Itiner.," vol. i. p. 19.

|| Neuhof's "Buchlein," Homburg, 1870.

¶ See "Die Edda Lieder von den Niebelungen," Breslau, 1814.

Brunswick-Lüneburgh, Keysler mentions that dolmens In



-"Saxum Lubbonis," the Lübbenstein, a Hünebed at Helmstadt in Eastphalia. From Conringh ("De Ant. Helmstad. Statu.," p. 25, and Eccart. pl. viii., sec. 43).

are to be found in many places. One group bears the name of the Seven Steenhensen. It is near Walenbostel, and has been previously mentioned at p. 547, and Fig. 509. Others are found in the Duchy of Bremen; one on the top of a mountain at Helmstadt called the Lübbenstein: and others, again, on some of the heights of the Hercynian, that is, the Hartz

With respect to the size of some of the roofing-

Mountains.†

FIG. 512.—Very rude plan of wedge-shaped dolmen in Westphalia. From Schaterius.

stones, this writer states that under that in the Hummelingwoud

a hundred sheep might shelter from the storm, while, according to Picardt, when a detachment of a hundred and fifty soldiers, passing through the Munster country, tried to dislodge one at Amasen, they completely failed in the attempt.

HOLLAND.

The Province of Drenthe, in Holland, contains one of the most important groups of dolmens in Europe. In a list of the names of places in the Netherlands, Belgium, the Duchy of Luxembourg, and the neighbouring districts, at which prehistoric antiquities of the megalithic class occur,† forty-two dolmens are recorded, as being in Drenthe, and since in this list the plural "dolmens" occurs in the case of several of the localities,



Fig. 513.—Etched from a curious old engaving in Picardt's work, representing the giants and dwarfs who, it was believed, built the dolmens of Drenthe. Another of Picardt's illustrations has been given at p. 425 supra.

it is clear that there were many more. On the subject of these monuments a very curious little work is extant by John Picardt, published at Amsterdam in 1660.‡ His view with regard to their constructors followed the current legends and traditions handed

[†] It was drawn up by Reuvens in 1845. See A. P. Schaye's "La Belgique et Les Pays Bas." ‡ "Korte beschryvinge van eenige Vergetene en Verborgene Antiquitaten der Provintien en Landen gelegen tuschen de Noord-Zee, de Yssel, Emse en Lippe," etc., Amsterdam, 1660. A second edition was printed at Groningen in 1731, but it does not contain the plates.

down from Saxo, namely, that they were the work of the two races of men who inhabited the country, the Giants and the Dwarfs—the former being cannibals, and eating the smaller and impish people, when they had dispensed with their services as dolmen-builders. The imagination of the writer illustrates the scenes which took place at the building of a dolmen in two plates, which are so quaint and curious that, considering that one of them (Fig. 512) contains a view of an immense monument since destroyed, I may be pardoned for inserting.

Besides the uncovered Hünenbedden there were also dolmenmounds, the hollow vaults in the centres of which were, he tells us, "according to the general belief, inhabited by White Women, and the memory of some of their deeds was," he adds, "still fresh in the minds of many old people." The natives all agreed



Fig. 514.—A "White Woman" prophesying from a dolmen-mound in Drenthe; Picardt's representation of the popular tradition.

in saying that round about these mounds a great deal of witchery had of old been practised, and that mournful cries have been heard in them. Also, that these witches used to be fetched by night and day by women in childbirth, and that they could afford them help when all else had failed. They told fortunes, too, and could indicate the whereabouts of stolen property. The States recognized something divine in them. Some of the inhabitants said that

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they had themselves been inside these mounds, and seen and heard incredible things, but that they had promised not to tell them. They (the witches) were swifter than any creature. They always dressed in white, by reason of which they were called Witte Wyven, or simply De Witter. "A large number of mounds," it is added, "were called Witten for this same reason, although their colour might be black."

It is singular to notice here, in every detail, the exact counterpart of Irish tradition in relation to so many cairns and tumuli. We are reminded also of the account which Tacitus gives of Veleda and other prophetic women.

The Hünenbedden described in this work are said to measure. for the most part, from 16 to 20 yards in length, and from 4 to 6 yards in breadth. They lay in a direction E. and W., and consisted of smaller pillars fixed in the ground, supporting larger blocks, measuring from 20 to 40 feet in circumference.

Ubbo Emmius, the historian of the Frisians, Tregarded these Drenthe structures as the monuments of the ancient Frisians. "I think it worth noticing," he writes, "as others have done, that in this district numerous rocks are found, piled up in such fashion that, on account of their massive proportions, it seems past belief that any carrying power—that any force of man—could remove them. The opinion prevails that they are altars, for while some of the stones lie on the ground, others are laid upon them horizontally, and underneath the latter a hole (foramen) is left, through which a man might creep. The tale goes that the pagans, accustomed in former times to practise human sacrifices, compelled those men that were to be slaughtered to pass through these holes, and having defiled the bodies of the intended victims as they passed through, with dung and other filth thrown on them by the crowd, put them up on the altar-stones, and offered them in sacrifice. The custom prevailed, it is said, down to the time of Boniface, Bishop of Utrecht. For this reason it is that even to the present day the natives call these holes by a foul name." The name here alluded to is the Duyvel's Kutte.§

Schonhovius adds to the above account that strangers (and

[†] Veleda herself, however, resided in the summit of a lofty tower, whence she issued her prophecies. Irish legend connects the Round Towers with women, and, in the case of Clonmacnoise, with vohite women, who, on particular days, occupied its top.

† "Rerum Frisicarum Historia" (Lug. Bat., 1616), p. 21, and end of lib. i.

See Slittenhorst, Arend van., vol. xiv.; "Bocken van de Geldersee Geschiede Missen,"

Arnham (1654), vol. i. p. 78.

we may presume, if there is truth in the tradition, prisoners of war) were the victims.†

Down to the sixteenth century traces of this practice are said to have survived. Luckless strangers, especially if from Brabant, were subjected to the same ignominious treatment above referred to, but stopping short of the sacrificial portion of the process, at these places.

Keysler‡ mentions the Drenthe monuments, and compares them to Stonehenge, to which, however, they bear little or no resemblance, except in the size of the stones.

In 1789 Prince Dimitri de Gallitzin visited Drenthe, and sent an account of the dolmens and tumuli there to Professor Camper, which was published with six illustrations. He quotes a work on the subject by M. Van Lier. He states, among other things, that the stones of which they are composed are not found in the natural geological formation of Drenthe. The reason of this is that they are erratics with which the surface is covered. His illustrations include: (1) A dolmen, or "Hunnen-bed," situated in a field to the W. of Nordlaren. The coveringstone, which measures 33 feet 5 ins. in circumference, is supported upon five others, and there is a small additional coveringstone. (2) A monument between Anlo and Sudlaren, having an entrance on the S. side. There are four roofing-stones, which diminish in size towards the east. It appears that there were four stones at either side, and one at each end, with two thin ones on edge forming the sides of the little entrance. The roofing-stone measured 28 feet 3 ins. in circumference. (3) A monument near Aunen, the "table-stone" of which measured

[†] The work of Antonius Schonhovius, Batavus, "De origine et sedibus Francorum," etc., will be found in the "Veteris ævi analecta of Ant. Matthæus, Hagæ-Com.," 2 edit., 1738, tom. i. p. 37. At p. 41 is his notice of the Drenthe monuments, which I prefer to leave untranslated: "Præcipua eorum (i.e. Teventeri, afterwards called Tencteri) regio adhuc Trenta sive Drenta dicitur, ex quo mediæ etatis scriptores Trentones fecere. Sane non possum hic præterire Columnas illas Herculis quas Tacitus ('De Mor. Germ.,' c. 34) in Frisiis fuisse magnâ celebritate commemorat, quarum reliquiæ hac tracta Trenterorum, hoc est in Drenta, adhuc visuntur, vico Roelden, haud procul a Coevordia, non sine spectantium admiratione. Sunt enim singuli lapides (quorum non parvus acervus est) tantæ magnitudinis, ut nullos currus, nullasque naves admittere posse videantur: neque ibi fodinæ lapidum sunt, ut loco paludoso; quare suspicio est eos illuc a dæmonibus, qui Herculis nomine ibi colebantur, adductos fuisse. Stabant enim super columnas aræ ('Saxa vocant Itali,' ut quidam inquit Poeta, Virg., 'Æn.' i. 109), quas ad aras incolæ vivos immolabant, maximèque advenas, quos prius quam mactarent, cogebant transire augustam foramen, quod sub aris erat, transeuntemque stercoribus infectabantur, ac petebant. Quod et hodie faciunt presertim si Brabantum nacti fuerint, unde sæpe cædes oriuntur. Foramen ipsum ob ignominiam Duvels Kut, hoc est, Dæmonis cunnus, appellatur. [Kut Hollandicè = pudendum feminæ]. Sed immolationem sustulit D. Bonifacius. Hujus monumenti videndi causâ Drusus Germanicus famâ excitus, auspiciis Augusti, primus Romanorum Septentrionalem Oceanum navigavit, teste Plinio, lib. i. v."

1 "Antiq. Select.," p. 6, 1720.

28 feet 3 ins. in circumference, extremely like one in the Co. Down, Ireland. (4) A dolmen near the mill of Eext, unroofed, and in a tumulus. The vault measures 12 feet long, and there appear to be three large stones on either side, and one at either end. The terminal stones measure respectively 5 feet 10 ins. by 4 feet 6 ins., and 5 feet 5 ins. by 4 feet 6 ins. The greater axis is E. and W., and the entrance is to the S.† (5) A "Hunnenbed" near Eext, the stones composing which extended to a length of 59 feet. There seem to have been four stones on either side, supporting four on the top. Some of the stones had been displaced, and others were covered over by sand. This great mass of stones appeared to have formed several Hunnenbedden. (6) Another "Hunnenbed" near Eext, completely ruined. This structure is very similar indeed to the Labbacallee, near Fermoy. Three stones are in place on the top. One of these measured 26 feet in circumference, 10 feet in length, and 6 feet in thickness; another was 29 feet in circumference.

In 1822, Nicolas Westendorf! published at Groningen his treatise on the Hunebedden, with special reference to those of Drenthe, of which latter he gives examples in twenty localities, including some forty or fifty monuments. He adds illustrations of two of them; first, the uncovered monument at Tinaarloo, and second, a covered structure at Emmen. After treating the question of the ethnological identity of the dolmen-builders by an exhaustive process—considering the claims of each nation known to history in turn-he comes to the conclusion that they were the work of the Celts.

From Mr. Alfred Sadler's paper § on the "Hunebeds of Drenthe" we derive the information that the material of these structures is coarse granite, and that the rocks are erratic boulders. The average height of the interior vault or chamber is 3 feet; its breadth 3 feet to 4 feet 6 ins. There are spaces between the side-stones. One of the roofing-stones of the example at Midlaren was estimated to weigh 52,000 lbs. The porticoes, which run at right angles to one side, are formed of from two to six stones. Some "Hunebeds" are surrounded

[†] See Van Lier, "Oudheidkundige Brieven," 1760. † "Verhandeling over de Hunchedden" (Groningen, 1822), pp. 40–90. § "Journ. Roy. Archaeol. Assoc.," 1870, pp. 53–60.

by enclosures, square or oval, formed of smaller stones. In one case the structure had been erected in a pit (as is the case with some of the Caucasian dolmens), so that the roofing-stones were level with the ground. Mr. Sadler thought they had all been covered with earth.

The fullest and best account of the dolmens of Drenthe which has appeared in any English publication is that of Dr. D. Lubach.†

The megalithic monuments called Hunebedden consist, he says, of large cap-stones, commonly of granite, supported by smaller uprights, the latter forming two rows with a space of one or two mètres between them. The two longer sides of a Hunebed are never parallel. They expand to the west, or towards that part which is most westerly, the consequence being that they are widest at that end. Generally, also, the uprights and the capstones increase in bulk towards the west end, and thus the whole Hunebed is not only broader, but also higher. I have given this passage in italics because it shows an exact correspondence in points of detail with so large a proportion of the dolmens of Ireland.

The average height between the under surface of the roofingstones and the floor is one *mètre*. The crevices between the sidestones and the roofing-stones were undoubtedly filled with small pieces of stone. In the best-preserved examples each end is closed by a single stone. It does not seem probable that the entrance was at either end. In many instances, indeed, a socalled "portal" is found, consisting of two rows, each formed by two or three stones, placed at right angles to one of the longer sides of the Hunebed, and rather towards the S. enda point in which these monuments agree with some of those of Sweden, but differ from Irish examples. These "portals" are never covered over by cap-stones, a point in which they differ from those in Sweden, and also, says Dr. Lubach, from those in Germany. The outer surfaces both of the stones which form the sides and roof are rough, angular, and somewhat rounded, while the inner surfaces are flat-a characteristic of dolmenbuilding which is universal.

In some of the stones forming the structure small holes are found, evidently artificial, and bored to the depth of one *centimetre*.

^{† &}quot;Journ. of the Anthrop. Institute," vol. vi. (1876), p. 158.

"Many of the monuments, originally perhaps all, are surrounded by a row of stones, placed at a distance of about three steps from the Hunebed. The position of the monument is invariably E. and W." Dr. Lubach takes sixty instances, in which fifteen are E. and W., two N. and S., twenty-four N.W. and S.E., sixteen N.E. and S.W., two N.W. by W. and S.E. by E., and one N.E. by E. and S.W. by W.

Two-fifths, at least, of them stood in a hollow on the top of a low tumulus—the hollow not being deep enough to hide the structure from view. Dr. Lubach agrees with Mr. Sadler in thinking that they were all originally covered with mounds of earth, and the entrance to the "portal" was probably closed with a large stone.

Although, as he states, only fifty-five examples now exist in Drenthe, their number was probably once much greater, and the eastern half of the Province once covered with them. They are not found in other parts of the Netherlands, however, with the exception of a doubtful monument near the village of De Vuursche, in the Province of Utrecht. Those that are still

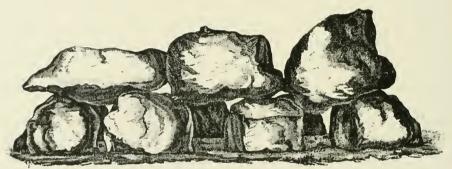


FIG. 515.—Hunebed of Tinaarloo, Drenthe. From old engraving by Westendorp.

extant in Drenthe owe their preservation to the backwardness of that district, as is evinced by the prevalence of old customs there. Christianity reached it, however, in the eighth century, and the people would then have destroyed their ancient monuments, more especially had they been, as almost certainly they were, the sites of pagan superstitious rites, even, possibly, as we have seen, including human sacrifices.

Many churches, Dr. Lubach thinks, may have been built with the stones that formed them. He instances the tower of the church at Emmen, which consists of irregular blocks of stone like those which were used in Hunebedden.

The Hunebed of Tinaarloo, mentioned by every writer who describes the series, may be taken as typical of the rest. For comparison with Irish dolmens I will here give its description and dimensions in Dr. Lubach's words: "It consists of two rows of upright stones, each row containing three stones, with two end-stones and three cap-stones. No trace of a 'portal' or outer circle exists. The entire length (S.E. and N.W.) is 5.70 m., the greatest breadth 3 m., and the greatest height 1.57 m. The end-stones measure respectively—

The side-stone	Height. a = 0.75 mètre b = 0.72 ,,	Breadth. 1.00 mètre 1.13 ,,	Thickness. 0'45 mètre 0'32 ,,
	Height, a = 0.70 mètre b = 0.75 ,, c = 0.66 ,, d = 0.71 ,, e = 0.72 ,, f = 0.64 ,,	Breadth. 1'00 mètre 1'25 ,, 1'00 ,, 1'00 ,, 0'92 ,, 1'00 ,,	Thickness. 0.56 metre 0.53 ,, 0.75 ,, 0.75 ,, 0.35 ,, 0.58 ,,
The roofing-stones—			
	Height, $a = 2.00$ mètre $b = 1.00$,, $c = 1.26$,,	Breadth. 2.00 mètre 2.00 ,, 2.45 ,,	Thickness. o'66 mètre o'81 ,, o'88 ,,

"One near the village of Borger measures 22 m. long (N.W. and S.E.), 3.8 m. broad, and 2.8 m. in greatest height. The breadth of the vault inside is, at the W. end 2.5 m., and at the E. end 1.7 m. The space between the upright stones is 0.85 m. The length of the largest roofing-stone is over 9 m., its breadth 2 m., and its thickness 1 m. There are twelve upright side-stones on the N.E. side, and thirteen at the S.W. side. There is one terminal stone at the S.E. end, and three are roofing-stones in all. There is no terminal stone at the N.W. end. At the S.W. side are the remains of a 'portal' formed of six stones, three on either side.

"The largest of the Hunebedden near Emmen is 26 m. long (E. and W.), and 13 m. broad. There are eleven upright stones on either side of the vault, two terminal stones, and seven roofing-stones. The length of the largest roofing-stone is 3.75 m., its breadth 2.5 m., and its thickness 0.5 m. The vault is about 3 m. broad in the middle. At the S. side are traces of a 'portal.' The structure is surrounded by an oval range of stones.

"In the Province of Groningen, near the frontier of Drenthe, is the Hunebed of Noordlaren. Two roofing-stones are laid on four upright side-stones, and there is one terminal stone at the N.E. end. The structure seems to have been much larger, but the S.W. portion has been probably removed. The largest roofing-stone measures 3.5 m. long, 2.25 m. broad, and 1.5 m. thick. There are traces of a surrounding circle.

"There is another on the road from Emmen to Odoorn, consisting of three uprights at the N. side, and four at the S., with a terminal stone at each end, and four cap-stones. The length is 5.5 m., the breadth 2.2 m., and the height 1.5 m."

Dr. Lubach mentions other Hunebedden at Rolde, and on the way from Borgar to Rumen, the roofing-stones of which latter are very flat on the upper side. There was also a triple Hunebed near Emmen.

"Near Eext is a monument of a class to which the Dutch give the name of 'Grafkelders,' i.e. Grave-cellars, but which seems to be only differentiated from the Hunebed in the fact that the proportions are somewhat smaller, and that the structure is buried in a tumulus. The northern and southern walls of the example in question consist each of three flat stones tightly joined together, and in the S. side a space of 0.6 m. has been left for ingress by means of steps. The length of the side walls is about 3.7 m. The E. and W. ends are each formed of a single stone, that at the E. end being 1.7 m. broad, and that at the W. 2.05 m. The roofing-stones are three in number.

"Two similar monuments buried in tumuli have been found near Emmen. They were close together, and the space in which they were was surrounded by an oval range of stones, measuring about 1.5 m. high, and 0.9 m. broad. The one of which I annex two sections bears a striking resemblance to monuments in the West of France, and in the Basque Provinces of Spain, as, for example, that at Equilaz, in the latter country, to be noticed as we proceed.

"Explorations in the Hunebeds have disclosed, below the sand which filled the upper part of the vaults, a floor of pebbles, between which, and sometimes resting on a lower floor, were found, imbedded in sand and mixed with charcoal and ashes, urns containing burnt bones, fragments of rude pottery, implements and weapons—always of stone, never of metal—celts, knives,

arrow-heads, hammer or axe-heads, etc., sometimes of flint, sometimes of granite, syenite, serpentine, jaspar, agate, etc., of various degrees of finish and workmanship."

Dr. Lubach, from whom I have quoted, states that between the two floors of the structure at Eext were found urns, celts, a hammer or axe with a hole in it, a flint arrow-head, and a globular piece of *yzer-oer*, or iron ore (oxyde of iron), a mineral formation frequently found in the diluvium of the Netherlands.

Mr. Sadler adds some particulars of finds which slightly differ

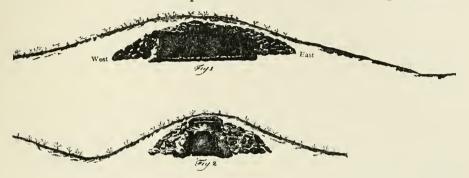


Fig. 516.—Sections (Fig. 1, E. and W.; Fig. 2, N. and S.) of a dolmen in its tumulus at Drenthe.

From an old engraving in Westendorp.

from the above. In addition to burnt human bones and ashes, flint and stone implements and coarse pottery, he says that bone implements are found in Hunebeds. With regard to the urns found in them, he makes the remark that they are generally smaller than those found in the tumuli, and of better workmanship—a fact which is absolutely true in the case of Irish pottery. They are of a brown or ash colour, occasionally adorned with straight or wavy lines. Their appearance gave him the idea that they had been cast in a mould, rather than hand-made. None were glazed, but some seemed to have been polished. He contrasts the discovery of, generally speaking, more than one urn in the Drenthe structures, with that of a single one placed under the central cap-stone in Hunebeds in Westphalia, and elsewhere in Germany.

Among the objects of stone found in the Drenthe examples were axes and hammers of grey granite, or of basalt. A great number, also, were of jade corresponding to that found in the mountains of Switzerland and Savoy. The implements were of superior workmanship, and equal to the best manufacture of the South Sea Islanders. Among the objects mentioned by Mr.

Sadler are celts of flint, of German agate and of claystone porphyry, some rough, some polished; one piece of a whetstone; one bone arrow-head; and discs of stone or baked clay, 5 or 6 inches in diameter, and 2 inches thick, having a round hole in the centre, and marked with one or more crosses. These discs, he considers, may have been used in a game, such as is played on the island of Gothland, where a stone, flat on both sides, and as nearly circular as possible, is used. One of these stones is in the Museum at Kiel, and is similar to those from the Hunebeds. Precisely similar stones were used until recently in West Cornwall. I have seen many specimens of them picked up on the moors, and measuring, like those of Gothland, from 3 to 5 ins. in diameter, and about 1 in. thick. They were thrown at a mark at distances of some 16 to 24 paces.

I have mentioned some of the traditions relative to the Hunebeds. I may add from Mr. Sadler's paper a few more. On the stones of one at Oosterwoede marks were pointed out to him as the finger-marks of the giants who had piled the rocks one on the other. Of the stones at Borger it was said that they were cast by giants a distance of a mile at a time. About one near Sleen a local legend said that it was built by a spirit which still haunts it. This monument bears a curious name among the people, namely, the "Parsonless Church." Some old traditions include the Hunebeds, as well as the tumuli, in the class of structures which were held to be the favourite haunt of the kind of witches known as the White Women. Lastly, in times past, but still not unremembered, few of the peasantry were bold enough to approach these weird piles in the dark hours of night.

In addition to the megalithic monuments just described, Drenthe possesses a large number of tumuli, a considerable group of which lay around the plain of Ballerkoele, probably once a place of assembly and worship. Here was the Baller-houdt, or Baller-wood, and the Baller-kuile, which Picardt described as a great curiosity, being apparently an enclosure surrounded by a bank, around which were seats made of earth, where not only, so he thought, were "the great assemblies of the States held, but where strange solemnities were performed, for which both the kuyl, i.e. the hollow place within the bank, and the seats surrounding it were used." †

^{† &}quot;Korte beschryvinge" (1731), p. 214.

The tumuli are usually round, sometimes oval, and rarely square, from 3 to 5 mm. in diameter. There are oblong ones also, from 3 to 5 mm. broad, and from 10 to 30 mm. long. Many of these are surrounded by ranges of stones.

Dr. Lubach describes the contents of these tumuli as "(1) urns of rude pottery, containing burnt human bones; (2) small heaps of human bones; (3) objects of earthenware, such as drinking-cups and other vessels, discs, etc.; (4) implements of bronze, rarely of iron, but (with one exception) never," as far as he knew, "of stone; metal spear-heads, arrow-heads, knives, daggers, the fragments of a sword, celts—in form very like those found in England—hairpins, fragments of armlets, etc. The urns were often adorned with rows of lines or punctures. If there were more urns than one in the same tumulus, they were often placed one above the other, and sometimes were inverted. In some tumuli no urns were found, but only heaps of burnt bones; in others were similar heaps and urns as well."

"Urns have been found," he proceeds, "which contain small urns filled with bones of little children"—which latter statement, perhaps, requires verification.

Sometimes the tumulus covers the urns placed simply in the earth of which it consists; sometimes they are placed on a little pile of pebbles in the interior; sometimes they stand on a floor of pebbles; sometimes they are between two such floors; sometimes they are surrounded with an enclosure of larger stones; and, lastly, they are sometimes placed in a cist in the shape of a trough.

In some cases, where a flooring of pebbles is found, it extends far beyond the area covered by the mound, and as much as a hundred cartloads of pebbles have been removed from one single floor. The earthen material of the mound is frequently found to be mingled with charcoal and ashes in considerable quantity.†

Dr. Lubach remarks that, while it is the opinion of Dutch archæologists that tumuli of this latter description are attributable

[†] Other notices of dolmens in Drenthe will be found in "Antiquiteiten," edit. by N. Westendorp and C. J. C. Reuvens; in "Alphabetisch naamlüst van de in Nederland, Belgie en een gedeelte der aangreuzende landen gefonden romeinsche, germaansche of gallische oudheden" (Leyden, 1845), by Reuvens; in the "Kronik van het Utrechtsgenoots" (1846), pp. 23 and 128; in the "Drenthe wolks Almanack," 1837, p. 127; "Vrye Fries," v. p. 338; "Sim. de Vries Wanderen de Zeen," p. 521; "Johan. Mensinga in Saxa Agri Trentini," 1687; Slichtenhorst, "Gelders Geschichte," I. i. p. 78; Blancard, "Holl. Jaaregister," cent. viii. n. 96; Janssen, quoted in Fergusson's R.S.M., and Fergusson, R.S.M., himself.

to Germanic peoples, it is also their opinion that the Hunebeds belong to pre-Germanic inhabitants.

The same problem presents itself in the British Isles, and in Ireland especially, where we have the dolmens, which are the Hunebeds, on the one hand, and the tumuli with urns and cists on the other. Whatever be the true ethnic explanation in the one case should hold good in the other also.

On the shore of the island of Urck, which in old times, says Keysler, was washed by the Rhine, but is now surrounded by the Zuyderzee, stones of great size are to be seen, for the most part overthrown by the waves, which the elder school of Dutch German antiquaries seem to have regarded as the remains of megalithic monuments.†

Belgium.

The dearth of megalithic remains in Belgium has often been a matter of surprise to archæologists. Before, however, any final conclusion is arrived at on this subject, it is necessary to refer to the local authorities, from which it will appear that, although rare, and scattered widely apart, they were by no means absent from the country. Many, also, are known to have been destroyed.

In the Grand Duchy of Luxembourg is the Gruenstein, 1 upon the top of the Manternach Mountain, described by Schayes and others as a "dolmen druidique," an immense block of stone which "had evidently been dragged up the mountain by human hands," but which had been overthrown by pleasure-seekers in about 1820. A legend regarding it existed, namely, that the Evil Spirit dropped it here on account of its weight, when carrying it to build the "Devil's Church" (Simeonsthor) at Trier, and that he danced with rage in consequence. Another so-called "pierre druidique" was at Diekirch.§ It was called the Deiwel's altar, but, like the Gruenstein, it had been reduced to "shapeless fragments." Only six or seven stones of this monument remained, upon which people in old times used to think they could trace

[†] Kommelyn, "In de Byvægselen by de Beschryving van Amsteldam," v. p. 878; Dirk Bergar, "De Scolerer Medemblick," p. 368; and Slichtenhorst, "Gelders Geschichte."

† "Publications de la Soc. pour le recherche et la conservation des monuments historiques dans la Grand-Duché de Luxembourg," vol. vi. (1851), p. 88; id. vol. x. (1854), p. 69.

§ Id., vol. x. p. 69, and vol. vi. p. 88; and "Lévéque de la Basse-Monturie," Itin., p. 391.

the imprints of wolves' feet (wolfsklauen). In the map it is seen that the whole district takes its name, "Diefelselter," from this monument.

The existence of a "cromlech" (by which a stone-circle, according to the French application of the term, is meant) on the Waldbillig is also recorded, and also that of the Hartches-lev at Altlinster, described as a "monument druidique." These four monuments comprise the entire list of "Celtic Antiquities" which the Statistique Monumentale of the Duchy could supply.1 At Ferriéres-Saint-Martin, however, also in Luxembourg, are six dolmens bearing the name of "Pierres, ou Cunelées du Diable."2 With the latter name we may compare that of the "Duyvel's Kutte," at Drenthe. Between Hallaux and Stavelot, and at Malemprè et Fraiture, some "pierres gigantesques" have also been noticed,3 and at La Roche á Fresne were some "pierres druidiques dits du Diable." At Mousny were menhirs and "tombes gauloises." 5 At Salm-Chateau was a great wall of unhewn stones, in the centre of which was a "pierre druidique." 6 There were also tumuli. Lastly, at Waha was a "sort of menhir" overthrown, and also "tombes gauloises."

In the province of Hainault, in the Commune of Hollain, near Tournai, was the "pierre celtique," called Brunehault,8 the name of which we may compare with that of the dolmen called Brunefort or Brunevoord,9 mentioned by Wigand, Klemm, and Westendorp, in Westphalia, and that of the Brynhild Stone, in Hesse. This is a menhir 13 feet in height, standing on an elevation formerly covered by forest. The stone is a very hard grit. M. Grangagnage, 10 in his notes on "Druidical Monuments in the Province of Liége," 11 expressed his opinion that a "pierre druidique" destroyed at Binche (Hainault) was a dolmen. At Brav in the same Province was a monolith, and at Erbant and Ghlin 12 "pierres celtiques," which here, however, mean simply menhirs. It is stated that from the débris of monuments of this class Christians constructed their own.

^{1 &}quot;Soc. de Luxemb.," ut supra, loc. cit.
2 "Annales de la Soc. d'Arlon" (1847-49), p. 88.
3 Id., p. 92.
4 Id., p. 93.
5 Id., p. 89.
6 Id., pp. 90, 91.
7 "Soc. de Luxemb.," ut supra, vol. vi. p. 88.
8 Lambiez, "Hist. Mon. du Nord des Gaules," p. 450; De Bast, "Ant.," pp. 197, 547; Nelis,
"Anc. Mem. de l'Acad. de Brux.," i.; "Bull. de la Soc. de Tournai," i. p. 81.
9 Wigand, Dr. Paul, "Alterthümer im Kreise Meppen, in Archiv für Geschichte und Alterthümskunde Westphalens," vol. ii. (1827), p. 179.
10 "Messager des Sciences hist. de Belgique" (1849), p. 336; Lambiez, "Hist. Mon. du Nord des Gaules" p. 154

des Gaules," p. 154.

11 "Bull. de l'Acad. de Brux.," vol. xviii., pt. ii. p. 113. 12 Jd.

In the Province of Liége, there was a dolmen at Romsee, † and also a menhir at Louveigné.‡ In the province of Flandre-Occidentale was a "pierre celtique" at Kerkhem, \$ and at Assche. in Brabant, was a "pierre druidique."

On the right bank of the Meuse, in the "Plaine de Jambes," there stood, in the beginning of the present century, a dolmen called La Pierre du Diable. It consisted of a table-stone, 8 feet 7 ins. long, 6 feet 6 ins. broad, and 9 ins. thick, supported upon two others fixed vertically on edge in the ground, and measuring 8 feet long, 5 feet 5 ins. high, and 3 feet 4 ins. thick. More anciently there were four stones, the two forming the other sides or ends having been broken up. The longer axis of the roofing-stone was E. and W., and it inclined to the N.E. In the last century there were other stones lying at a distance of 20 feet from the structure, supposed to be the remains of an outer range, or of a passage-way. They were nearly as large as those of which the monument was composed.

FRANCE.

If I do not speak of the dolmens of France as fully as I have of those of North Germany and the Western Baltic, it is firstly, because the German series have hitherto been almost overlooked as an essential factor—as I believe them to be—in the question of the immediate origin of the West-British and Irish dolmens, and secondly, because the general types and area of dispersion of the French series are already so well known to English archæologists in the excellent and richly illustrated works of Messrs. Bertrand, Cazalis de Fondouce, Mortillet, Cartaillac, and others.

The areas of dispersion of the dolmens in France was shown in a map drawn up in 1867 by M. Bertrand. Judging from this, and from more recent sources of information, it may be said that they are not found east of the middle course of the Rhone, and are but sparsely scattered through the extreme south-west corner of the Republic, where, indeed, in the flat country of Les Landes,

^{† &}quot;Bull. de l'Acad. de Belg.," vol. xviii., pt. ii. p. 118. § Westendorp and Reuvens, "Antiquiteit," iii. p. 47. || Communication from M. Galesloot to Schayes; "La Beligique et Les Pays-Bas," in list of monuments s.v. Assche.

^{¶ &}quot;Ann. de la Soc. Archéol. de Namur," vol. iii. p. 151 ; Vangeois, "Memoires de l'Academie Celtique," vol. iii. p. 329.

they could scarcely be expected. Rarely, again, are they to be met with north of the Valley of the Seine, so that, with the exception of the Herault † group on the south, and those near Toulouse and the eastern Pyrenees, it is to the western half of France that they specially belong. Here they occur all along the Atlantic sea-front, with the exception of that portion of it south of the Garonne, and between it and the foot-hills of the Pyrenees, to which I have alluded. Especially rich in dolmens are the valleys of the Loire, and those of its tributaries, and thence they stretch away inland, up the courses of the southern streams, until they reach the series which belongs to the western bank of the Rhone, and which occupies the district between that river and the northern bank of the Garonne. To the southward and westward of this group, from the Mediterranean to the Atlantic, they are dotted, though sparsely, along the slopes of the Pyrenees. It is in Brittany, however, that they attain their maximum number, and here, too, each of the several types into which French archæologists have divided them seem to be represented.

M. Mortillet's classification involves a threefold division, namely, (i.) allées couvertes, approached by short entrance-chambers (vestibules); (ii.) caveaux (vaults or cells), having long entrance passages (couloirs d'accès); (iii.) caisses, i.e. rectangular cists of large proportions. The long, large dolmens of the first of these classes are well represented in central France, at no great distance from Paris. The tumuli containing those of the second class belong to Brittany, while the large cists of the third class distinguish the type of those in the Lozère,‡ Aveyron, Gard, and Ardèche.§ Speaking roughly, we may compare the allées couvertes to the Gang-grifter of Sweden, to the Hünebedden of Drenthe and North Germany, to the structures in the Long Barrows of Britain, and to the dolmens of Ireland, as exemplified by the Labbacallee in Cork. The French examples, in

^{† &}quot;Mem. de la Soc. Archéol. de Montpellier," vol. vii. (1881), p. 73, et seqq.; "Carte Archeol. de Dep. de l'Hérault," par M. P. Cazalis de Fondouce. There are sixty-three dolmens tabulated, divided into two principal groups, one in the extreme S.W. of the Province, in the mountains of the ancient Pagus Narbonensis; the other in the north-central district, in the Pagus Lutevensis. There are small groups of two and three E. of these. There is one isolated example in the Pagus Agathensis, showing that the builders of these structures were known on the littoral as well as in the mountains.

[†] For the dolmens of the Lozère, see paper by M. L. de Malafossa (Mat. (1869), p. 321). The local name for them is Tombe de Géant, or Pierre des Géants. The entrances of some are at the side of one end. In the covering-slab of one is a basin-shaped pit, or bullán, as the Irish would call it. Human bones and bones of pigs have been found in these dolmens.

§ For dolmens in Ardèche, see Mat. (1873), p. 345.

many cases, however, display a decided superiority in the symmetry of their construction.† With the caveaux and long couloirs d'accès of the second class we may compare the structures in the tumuli of Denmark, the dolmen of Yr Ogof in Wales, the galerías of Spain, the structures in the cairns of Caithness and Argyllshire, in the Maes-Howe in Orkney, and in the great tumulus at New Grange, in which latter monuments—namely, those in the British Isles—we observe an architectural amplification in regard to the construction of the roof which is not found in Brittany. The caisses of the third class are comparable with the dolmens of Clare. They occur principally in the Lozére, in Gard, and in Ardéche, in Tarn-et-Garonne, and the Pyrenées-Orientales.

I may add to the classification proposed by M. Mortillet that in Brittany and the Channel Islands are to be found along the coast examples of the type of structure to which I have given the name of dolmen-circles or dolmen-cairns, such as those on the opposite coast of Cornwall, at Carrowmore and elsewhere in Ireland, in southern Sweden, and in Denmark.

For the student of the early developments of dolmen-building and the accompanying cultus of the dead, there is no country so rich in interest as France. As we shall see when we arrive at the anthropological portion of this work, there is some reason for supposing that sepulchral rites were practised at the mouth of the Caverne de l'Homme Mort, a natural cavern in the Lozère, containing the remains of men whose cranial type and certain other osseous peculiarities were identical with those of the Long-Barrow men of Britain, and the Atlantic, or Iberian, type in general. From this starting-point we proceed to the evidence adduced by M. Mortillet, that no fewer than twenty-four natural caves have been discovered in France which had served the purpose of sepulchral vaults to a population living in the Neolithic Age. He adds that the accompaniments of the dead, as well as certain indications bearing upon the nature of the rites performed at the sepulchre, were identical with what was found in connection with the dolmens, so that the latter may be supposed to have taken the place of the natural caves.

France, indeed, furnishes us with a stepping-stone, as it were, between the natural cave and the dolmen in certain artificial caves

[†] See plan of the dolmen called "La Pierre Turquaise," infra.

which offer comparison both with the former and the latter. These, again (some of which I will presently describe), may be compared with the artificial caves of Majorca, Minorca, Sicily, the Ile Pianosa in the Mediterranean, and that of Palmella in Portugal. Of the French examples those in the Department of the Marne are the most important, while others more or less similar exist in the Departments of Aveyron, Finistère, Oise, and Seine-et-Marne. In these, also, evidence is afforded of the presence of the same articles, and of the performance of the same rites as in the natural caves on the one hand, and in the dolmens on the other. The natural cave was scooped out into a large chamber or chambers within by the swirling of water pent up in the limestone or other yielding rock, and finding its way out through some narrow crevice. The ground-plan and section, therefore, is that of an allée couverte with a vestibule,—the salle, or caveau mortuaire being only accessible through a narrow opening, leaving only just room enough to creep through on hands and knees. The artificial cave is modelled on the natural one, and vet bears, as M. Mortillet points out, a close resemblance to the dolmen.

From the Department of Gard some characteristic examples have been cited of the transition from the natural cave direct to the dolmen. M. Aurès explored a natural one at Aubussagues, which had been adapted for sepulchral purposes, and closed up like a dolmen.

The following conclusions, at which M. Émile Rivière † arrived after exploring some natural caves and dolmens in the Maritime Alps, may here be cited. He found evidence of the existence of two prehistoric peoples absolutely distinct—the one living in the Quaternary epoch, the other in the Bronze Age (Époque actuelle). The Quaternary race were cave-dwellers, whose remains are found in the Grottes de Menton, the caves near Nice, and the Station du cap Roux de Beaulieu. These caves are all natural. The Bronze-Age race belong, on the other hand, to the megaliths, tumuli, dolmens, and caves in the districts of Grasse, Sant Cesaine, etc. The Quaternary race was tall and dolichocephalic. The race of the dolmens was short and brachycephalic. The former made use of chipped stone, bone, and antlers of deer, shaped to

serve their purpose. The latter were possessed of polished stone, pottery, plain or ornamented, and objects of bronze.

The cephalic index of a skull from a Menton cave was 73'9. The skeletons of two children found in another were covered over their middles with quantities of perforated shells, which had formed their dress.

Again, we have examples of monuments which are in part natural caves and in part dolmens. One of these, at Des Mauduits near Mantes, will be subsequently noticed. In that case a dolmen had been built out from the face of the rock as an elongation of the cave, which at the opposite end possessed a most remarkable portico and artificial hole for ingress.† M. Cazalis de Fondouce has described and figured monuments at Cordes and Castellet in the Commune of Fontvielle, which are in part natural and in part artificial, where advantage has been taken of hollow places in the natural rock for the sides of the structure, and great flagstones have been laid overhead.

In the Department of the Aisne, on the lands of Cierge near Tère-en-Tardenois, on a small triangular plateau at the confluence of two streams, at a spot called Caranda, is a very remarkable cemetery, which has been explored and described with excellent illustrations of the objects discovered by M. Frederic Moreau.‡ It contained 2600 interments—300 Gaulish, 100 Gallo-Roman, 2200 Merovingian, and, what is most singular, a dolmen in close proximity. The latter is placed on the top of a little eminence. Its shape was oblong, and it was regularly built. It measured 5 m. long, 2 m. broad, and 2 m. high, and pointed E. and W. The entrance, closed by a slab, was between two slabs at the E. end. Four large slabs formed the roof (Fig. 517). It contained an unburnt human skeleton, a fine Neolithic spear-held, and other implements of flint, among which were arrow-heads, and a pointed instrument of stag's horn. The structure was built on the surface of the knoll.

In the case of the caves explored by M. le Baron de Baye in the Department of the Marne, they were of wholly artificial origin. Certain details to be pointed out in them connect them closely with the dolmens.

^{† &}quot;Nouveaux Documents Archéologiques," par M. L. De Maule-Pl, Paris, 1872, p. 15, et seqq.

L. Collection Caranda" (1877), pl. i. ii. iii.

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The district in which they occur is the southern portion of the Canton of Montmort, on the slopes of the Toulon mountain, which rises above the valley of Petit Morin. They are clustered together in groups, one at Coizard, between the Toulon mountain

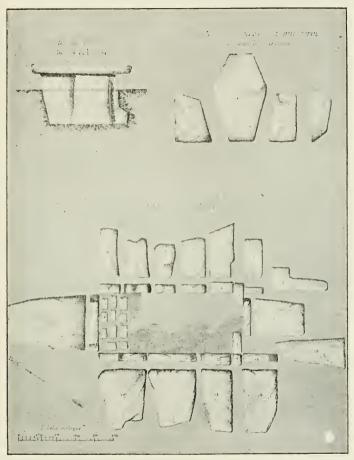


Fig. 517.—Dolmen at Caranda, Department of the Aisne. Section of end, covering-stones, and ground-plan. From M. Moreau: the letters refer to his description.

and Mount Aout, in the centre of a semicircle of foothills; a second at Razet, on the southern slope of the mountain; and a third further to the south, at Courjeonnet.

The caves have their entrances in the sides of monticules, *i.e.* natural hillocks, which form a second and diminutive series of foothills, and which serve as natural barrows or tumuli covering the artificial vault within. The great number in which they occur indicates the presence in ancient times of a considerable population. The geological formation in which they have been excavated is cretaceous.

One group at Courjeonnet consists of three little caves in addition to a circular excavation open at the top. Near these was a hearth, or burning-place, in which were found burnt stones, charcoal, and traces of other carbonized matter. Two of the three caves were divided each into two compartments; the third was not so. A second group at the same place consisted of six caves, differing from those in the former group in size and shape, but identical with them in respect to the modes of sepulture, three in number, which had been employed. Each possessed an "antigrotte," as M. de Baye calls it, consisting of a little chamber or porch, through which it was necessary to pass in order to enter the tomb. On the wall of this ante-chamber or portico is represented in bas-relief, cut out of the natural chalk rock, a hafted axe, accompanied by another rude attempt at sculpture, intended to represent a female human figure.

The Coizard group consists of thirty-five caves, all grouped together on the same slope. These vary in shape and dimensions. Some have only one compartment, others two. In no case are any two exactly alike. The smallest of them measures 1.90 m. by 2 m., the largest 3.92 m. by 3.60 m. The smallest of those having two compartments measures 2.40 m. square. The height from floor to roof in the lowest is 1'10 m., in the highest 1'70 m. Some were more commodious, larger, and more easy of access than others. The doorways were provided with grooves to make their closure more perfect, and in some caves natural protuberances, like pegs, had been left standing out in the chalk. Sometimes partitions had been left in the course of excavation. The walls and entrances showed a polish, denoting that they had been frequently rubbed against by passing bodies. In some cases two sloping steps were placed to facilitate ingress and egress. In several caves a blackish coating adhered to the walls, such as smoke and dust would produce. Sometimes shelves had been cut in the walls, and there were also attempts at sculpture, and shapeless characters such as children make. M. de Baye considered that the larger caves, which were those in which these features were present, might have been habitations before they were sepulchres.

The smaller ones lacked these characteristics. The entrances to them were firmly closed up with stones laid with care. They did not contain, as the others did, utensils necessary for daily life. Frequently, near the entrance of the larger ones, a

large block of stone was found, which appeared to have served the double purpose of closing the vault, and indicating the spot where it was.

Not only had the inner chamber or cell, in the case of the double ones, been made the receptable for human remains, but the "anti-grott" also. One of these porches contained the remains of six bodies placed there subsequently to the interment of those within. The remains found in the "anti-grottes" were not accompanied by the primitive implements and ornaments which were found deposited with the remains in the vault within. The interments were of six kinds—(1) extended inhumation, the heads all in one direction and the bodies carefully laid; (2) extended inhumation, but the bodies not placed in one direction, and laid carelessly; (3) contracted inhumation in a sedentary posture; (4) disjecta membra, without anatomical connection, but unburnt; (5) fragments of calcined bones in heaps; (6) bodies, unburnt, laid in pulverized earth, with stones to support them.

Of the bodies laid carefully at full length there were comparatively few examples; they occurred in the larger caves, and were laid along the two lateral walls, the head being towards the entrance, and the arms stretched at full length. Between the two rows of them on either side a clear space was left along the centre of the vault. The bodies were of both sexes and all ages, but those of the young were scarce. It was observed that the conformation of the skulls in a single vault thus arranged were strikingly uniform. The position of the bodies and the articles deposited with them evinced care. This, however, was not the case with respect to the remains found in the porches of these caves.

The second mode of burial, also by inhumation, but in promiscuous fashion, occurred in caves in which a great number of bodies—as many as twenty-five to forty—had been interred apparently at one time, necessitating a peculiar arrangement. The larger bodies had been carried in first, then the shorter ones, and the heads were not placed in any one direction. Warlike implements, including arrow-points, were found with such interments in considerable quantity. The bodies had been covered with ashes, different layers of which seemed in some cases to indicate successive interments. The whole interior of the cave was utilized for their reception.

The third mode employed was that of placing the body in a squatting posture, the result being that the sides of the skeleton were found to have sunk down on themselves, the bones thus arranging themselves in concentric circles, surmounted by the skull. This, I may say, is the explorer's own theory for accounting for the phenomena presented. For my own part, I am more inclined to think that where such an arrangement of the bones is met with, both in these caves and in many other Neolithic sepulchres, the bones may have been denuded of flesh either by time or customary process, and purposely placed in the symmetrical order in which they are found. From Othere † we learn, as has been before remarked, that it was a custom among the Esthonians to leave the bodies of the dead for months in their houses before the funeral rites were consummated on the pyre. In China at the present day bodies are stored in open mortuaria, as I have myself seen, for years, awaiting interment in the ancestral line.

The fourth method employed seems to have been that of dissevering the various parts of the body, perhaps by hacking, as we have pointed out was the practice among the Iberians of the Balearic Isles.

The fifth mode was by incineration, and in these instances the fragments of bone were found together in heaps, as if they had been brought in baskets, and the contents emptied with care.

The sixth and last mode was that in which the bodies had been covered with pulverized earth, carefully selected and prepared, and where this was the case, stones had been set in such positions as to hold the body in its place, which was inhumated in an extended posture, like those in the ashes.

In these details we discover the fact that here we have a common meeting-ground of many customs in regard to sepulture, among which those of inhumation and cremation are the most markedly divergent. Intermediate between them is the practice of interment by contraction of the body, placed on the left side, such as is found in the Round Barrows of Britain, but which seems to be absent here. The skulls were numerous and in a fine state of preservation. The cephalic indices were as various as the modes of interment, and ranged from 71.65, to 85.71, the former being that of the Iberian, or Long-Barrow dolichocephali, the latter

[†] Bosworth's "King Alfred's Orosius" (1859), p. 255.

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that of the inhabitants, ancient and modern, of south-central France, and of the Lapps.

Some of the methods of interment employed, and in especial the presence of the bodies carelessly thrown into the porticoes,

may be referable to human sacrifice.

The objects found in the caves were disposed in a general way without order. In some cases stone axes were found between the side-walls and the bodies. Flint knives and arrowpoints were plentiful, and in the right hand of one skeleton was the handle of a bone instrument. Beads for necklaces, and small shells for the same purpose, lay near the necks of some, while large perforated shells were dispersed over the entire body. Broken pieces of pottery occurred in the ashes and earth, but only one whole vase was found, and that, curious to say, covered one of the skulls. More than 700 arrow-points were found, and in two instances they were imbedded in human vertebræ. Axes with stag-horn hafts, more than 200 knives, blunted arrow-heads formed both to feather and to wing the game, lance-heads, crushers, and a scraper like those found on the surface, to comprised the objects of flint. Bone sockets and hafts, awls and polishers, a hoe, a club with a short cylindrical handle, representing the kind of industries of the people, a tibia-bone armed at either end with the canines of a pig, pigs' teeth, more than 150 shells of various kinds, all perforated and a great many cut, 250 necklace-beads made of chalk and of scallop shells, numerous pendants in schist and marble, perforated teeth, and perforated and polished belemnites, a large quantity of fragments of pottery, rudely decorated, and the one perfect vase above mentioned,—such is the sum total of discoveries, from which we can, more readily than from any other collection of data known to me, depict for ourselves man as he dwelt by the banks of the Marne in the Neolithic Age, in a district where and at period when, as the remains clearly prove, two races met, as plainly distinguished from each other in physical type as they were in the customs which attended the disposal of their dead. to the long-headed type that, in these primitive times, inhumation is to be ascribed there can be little doubt, while to the short-heads belongs the practice of incineration, following on that of contracted inhumation.

We now arrive at a very important point in regard to these

[†] It is of the Grand-Pressigny type.

caves, which in the most direct manner connects them with the dolmens. Three of them contain sculptures in demi-relief. In the first of these, one of the Courjeonnet group, an axe is rudely represented, and over it a figure, in which M. de Baye recognizes the rude image of a female divinity. In one of the "antigrottes" in the Coizart group another bas-relief portrays the same form. This latter figure measures 44 cm. high, and 32 cm. broad. The region of the neck is ornamented with a necklace made of oblong beads, on which is shown a medallion suspended, which retains traces of a yellow colouring substance, seemingly ochre. The features are only rudely indicated. The nose is very prominent, and is flanked by two black spots. The breasts also are prominent. In the same chamber on the walls to the right

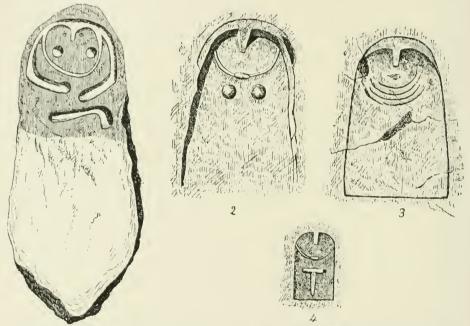


Fig. 518.—1. Sculptured stone in the dolmen of Collorgues. From "Mat. pour l'Hist. de l'Homme." 2, 3, 4. Sculptures in the caves on the Marne. From M. le Baron de Baye.

and left of the entrance two hafted axes are represented. The haft of that on the right measures 32 cm. long, the socket 15 cm., and the cutting edge 5 cm. The total height of the figure is 26 cm. The portion which is meant to represent the exposed edge of the stone axe is coloured black, to distinguish it from the socket. The axe on the left is not so well finished. It measures 28 cm. high, and the blade, including the sheath or socket and the stone edge, is 19 cm. long.

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On the outer wall of the "anti-grotte" adjoining the last is a figure less distinctly formed than the others. It is 49 cm. high by 32 cm. wide. On the side wall on the left, in the same "antigrotte," is an image analogous to that of the "divinity" before described. In this case, however, it seems that folding draperies surround the figure. Here, again, on the walls to right and left of the entrance are two carved axes, measuring respectively 35 cm. and 33 cm. high. In the interior another implement has been sculptured with much care, the use of which is unknown. measures 24 cm. high by 6 cm. wide, its breadth diminishing gradually to 1 cm.

Near Uzès, in the Department of Gard, is the dolmen of Collorgues, an account of which has been given by MM. Lombard Dumas and L. Rousset.† The inner structure was a chamber, circular in form, and of beehive construction, having a passage leading into it. The interments were inhumated. A large, flattish slab formed the central covering of the roof, resting on which was the stone of which an illustration is here given, and

which measures 1.75 m. in length.

It will be seen at a glance that the characteristics of the sculpturings in the Marne caves are here reproduced, with the addition of eyes and arms, which in the former caves may have existed in colour. It is clear that the intention in each case was to form a female human figure. The vertical ridge deflected from the top is seen to be the nose, on either side of which is an eye. The breasts stand out prominently, and the necklace is also in high relief, below which two arms appear, and beneath them the image of a rude axe, so often repeated in the Marne caves, and in one example occupying, below the breast of the figure, precisely the same position that it does here.

The correspondence here observable between an object of remote antiquity found in the Department of the Marne, and one found as far to the S.W. as the Department of Gard, reminds us of a parallel set of facts observed by M. de Quatrefages,‡ namely, the wide range of the brachycephalic people, during the Neolithic Age, from the valley of the Lesse in the same direction, as

evidenced by cranial type, and distinctive flint implements.

The travels of this "Goddess of the Axe" were not, however,

^{† &}quot;Mem. de l'Acad, de Nismes," 1887. † "Hommes Fossiles," pp. 74 and 104.

limited to this one direction. Her presence is unmistakably indicated in sculpture on one of the supporting-stones of the dolmen (allée couverte) of Bellahaye, at Bourg in the Department of Oise,1 and again on a supporting-stone of the dolmen at Dampsmesnil, in the Department of Eure.² Thus her image may be said to extend from the Rhone to the sources of the Saône, and from thence to the N.W., the line on which they are found corresponding, roughly speaking, with the eastern edge of the dolmen-bearing districts of France. A very similar figure occurs on prehistoric pottery from Sardinia.3 The facial traits occur also on bone carvings which have been found in British barrows, and with great distinctness in bas-relief on one of the two singularly carved circular objects found by Canon Greenwell in a Round Barrow in Britain, and now in the British Museum.4 A precisely similar sculpturing to the latter occurs on one of the stones in the chamber of New Grange.5 On pottery from Hissarlik, found there by Schliemann,6 it also occurs, as well as on urns from tombs of North Germany of far more recent date. incised representation of an axe, whether on the stones of dolmens or on natural rocks in situ, is not infrequent. Perhaps the example which is best known is that which occurs on the under surface of the covering-stone of the dolmen at Locmariaker, in Brittany,8 called the Merchants' Table. A slab figured by Bertrand,9 also from Locmariaker, has five or six hafted axes engraved on its surface, surrounding a bell-shaped figure, possibly representing an inverted cinerary urn. Unhafted axes, or rather, perhaps, flat bronze celts are shaped out in one of the stones of a cist at Kilmartin, Argyllshire,10 and at Simrisland,11 in Scania, and at a place in Bohuslän 12 the figures of hafted axes are sculptured in natural rocks. The best representation of axes, however, which Scandinavia has produced are those carved in one of the stones of

^{1 &}quot;Materiaux pour l'Histoire de l'Homme" (1876), p. 178. The face is here represented by an oval, below which are the breasts.

2 "Materiaux pour l'Histoire d'l'Homme" (1888), p. 9, et seqq.

3 "Voyage en Sardaigne," by M. le Marquis Ferrero de la Marmora, pl. xxxii.

4 "Archæologia," vol. li., pl. i. fig. 2, and pl. ii., figs. 1 and 3.

5 See Mr. Coffey's photograph in the Trans. R.I. Academy, reproduced, supra, fig. 346.

See Mr. Coffey's photograph in the Trans. R.I. Academy, reproduces, 1.7.1. These urns are found in the Steinkistengrüber of Pomerania. They are so like old htruscan vases and those found by Schliemann, that the latter might have been their prototypes. See Lissauer, "Die Prahist. Denkmaler," p. 61, et seqq.

8 Simpson, Sir J. Y., "Archaic Sculpturings," pl. xxx.

9 "Diet. Archéol. in voc. Locmariaker," "les pierres plates."

10 "Scotland in Pagan Times," by Anderson (Bronze Period), p. 89.

11 "Congrès Prehist. Stockholm" (Paper by O. Montelius), vol. i. p. 460.

¹² Id. p. 472.

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the unique sculptured cist in the Kivik cairn, near Cimbrisham, in Bohuslan.†

Folk-lore, which is much more tenacious of the past than language, religion, historical tradition, or even racial type, has, in a large number of instances, preserved in the names popularly given to megalithic monuments and tumuli the remembrance of the connection with them, once a reality, and a terrible reality in all probability, of a goddess of tombs, under the designation of Witch or Hag. Witches, as we have seen, were believed to inhabit the tumuli and dolmens of Drenthe. In the Basque Provinces of Spain, a covered dolmen bears the name Sorguineche, i.e. "Hag's House," and in the same country another name for "witch," Jorguina, is also found associated with such monuments. In Ireland, the Calliagh, Cailleac, or Hag, presides over a large number of these sepulchral sites—probably at one time over them all—and in some instances her very name is on record. interesting name of a female divinity presiding over an ancient cemetery, where, although there is no dolmen, a fair or assembly was held in her honour, is that of Tailtiu, daughter of Magmor, wife of Eochu Garb, son of Dua Teimin, and foster-mother of Lug, son of Scal Balb. Her name might literally mean "Axe-Goddess," or, more correctly, "Adze-Goddess," an appropriate one for her, for which possibly we have, more hibernico, an etymological explanation in the story that she requested Eochu to cut down a wood for her, in order that an benach (fair) might be held round her sepulchral monument (lecht). That this is no fanciful interpretation of her name is shown in the case of a name applied to Patrick, namely, Tailcenn, i.e. Adze-Head, in allusion to the peculiar tonsure he wore, the whole of the fore part of the head being shaved, and thus giving it the appearance of an adze protruding from its socket.§ The association of Tailtiu, a mythical Irish personage, with a sepulchral site is curious in connection with what we have adduced in proof that an Axe- or Adze-Goddess was certainly associated with dolmens and artificial caves reaching back to the Neolithic Age in France. The constant custom of burying a stone axe with the dead had its origin, probably, in some cognate superstition.

It is noticeable that while in other countries the female

^{† &}quot;The Viking Age," by P. B. Du Chaillu, vol. i. pp. 86–88. ‡ Whitley Stokes, "Rev. Celt.," vol. xvi., No. 1, p. 51 (Jan. 1895). § Other examples might be quoted, as, for example, MacTál, "Son of the Adze," etc.

divinity of the tombs has been transformed by the force, we may suppose, of Christian anathema, into a "hag," or evil genius, she has received better treatment at the hands of the more kindly and gallant people of France. It is no witch, as at Slieve Callighe, in Meath, who drops from the gauzy skirts of her robe † the Pierre Levée (a monolith 9 feet high) at Vieux, but Saint Carissima herself, whose legend places her in the fifth century. At Verdier, not far off, is a dolmen around which the people believe that the Faytillèros (fairies) come in the night to dance. T Not infrequently it is the Virgin Mary herself who has taken the place of the native divinities, and who comes to play at quoits with the Devil. In the Pyrenees, Christian mythology has supplanted the Pagan system on its own ground. Shrines of Christian saints have been placed in the vicinity of the venerated stones, whichas in the case of the Caillaou de l'Araye—are still visited by the Nowhere, perhaps, in Europe, with the exception of Ireland, has the veneratio lapidum, inveighed against by Councils, been retained so long as among the shepherds of the Pyrenees. Bouquets of flowers are placed by stealth at the foot of the menhir, and on the table-stone of the dolmen. Young girls come to them to pray for a lover, and young brides for a child. It was the Mother of God, they say, who descended upon these granite blocks and sanctified them. Along the whole of the Pyrenean range supernatural power is attributed to the fairies who are called Hados, and in French Fées. They are dressed in white, inhabit the mountain-tops, and cause salutary plants to spring up wherever they dwell. They are the presiding genii of certain wells. On the last day of December, which there seems to have been substituted for All-Hallow-E'en, each family waits with anxiety their arrival, and prepares a feast for them. The offerings made to them consist of thick milk and white bread. If they are not propitiated, wolves devour the flocks. We hear of them making their abode in the centre of the mountains, like the Irish sidhe, whom in all their attributes, and in the veneration paid them, they so closely resemble.

Besides the ordinary fairies—the diminutive spirits of the dead—there seem to have been in Pyrenean mythology female divinities of greater power, who may be regarded as their queens.

[†] There is a dolmen in Wales (mentioned in the "Archæologia Cambrensis") and called the Giantess's Apron-full—the very name of which shows an exact parallel to this legend.

‡ "Archéologie Pyrénéenne," by Alex. du Mége, vol. ii. p. 55.

Of these, the three principal were Diana, Herodiade and Bensozia. The cultus of these mythological beings is matter of authentic history in the Middle Ages. Thus we find Aunger de Montfaucon, Bishop of Conserans, placing among the "statutes" issued by him in 1274, the following: "Let no women dare to boast that she rides at night with Diana, goddess of the Pagans, or with Herodiade and Bensozia. Let no band of women enter the lists of the divinities, for it is an illusion of the Devil." How great is the gap in time between this admonition and the present day, and how completely should we have imagined that all trace of such rites in Western Europe had been stamped out, had we not read the evidence in the recent horrible case of witch-burning in Tipperary, and learned that it was expected that the murdered woman would be seen at night riding on her witch's horse on the old rath or lis upon the hill near by! Is it not true to say that folklore transcends language, religion, and even racial type?

Tradition unquestionably associates megalithic monuments—circles especially—in the Pyrenees with the fairies. Lord Talbot de Malahide† has described some stone-circles and other remains in the Department of the Basses Pyrénées, in a paper in the "Archæological Journal," accompanied by sketches by Sir Vincent Eyre. These "so-called Celtic" remains are within a short distance of Pau, and were the only ones, it is stated, known to Villemarquè, south of Poitou. A group of circles is specially mentioned in a round valley at a spot called, in the dialect of Beárn, Hondaas de las Hadas, or the "Spring of the Fairies," just as on the Spanish side Gruta de las Hadas is the name of a chambered tumulus.

"In the month of May"—so Lord Talbot was informed—"there are great festivities among the peasantry, who dance and amuse themselves under the chestnut trees, which form a grove around the circles." It was considered a "blessed spot," and no evil spirit could venture to disturb their innocent amusement. The spring has a still holier character. "It is under the protection of the Virgin Mary, and its waters are held to be a sovereign remedy against the diseases of cattle." The circles are very small, the largest not measuring more than 4 or 5 feet in diameter. In all, there are between twelve and twenty of them. They are

^{† &}quot;Archæol, Journ.," vol. xxvii. p. 227, et seqq.; and "Proc. Roy. Ir. Acad.," vol. x. (1866-69), p. 472, et seqq.

formed of rough stones common to the country. At a little distance from the group, on a terrace overlooking the Gave d'Ossau, are about a dozen similar ones. The stones are, however, larger. These had been less disturbed than the others, probably owing to a superstitious dread which prevails in the

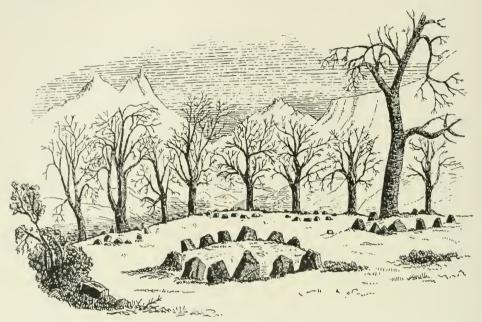


Fig. 519.—Stone-circles in the Basses Pyrénées. After a sketch by Gen. Sir Vincent Eyre, C.B.

neighbourhood respecting them. They are supposed to be haunted by Loupgarou, a class of fairy answering to the Leprahaun in Ireland, and "no peasant would venture to approach them after dark." In the vicinity there is a small, but very interesting dolmen, originally buried in a cairn, with a covering-stone resting on five supporters (Fig. 520).

M. Paul Raymond † notices these remains more explicitly. He counted forty-three circles in the Vallée d'Ossau, divided into three groups. The first group is near a chapel called "De Houdas," at the entrance of a glen which has the reputation of being haunted by the spirits. It contains twenty-four perfect circles, of from thirteen to twenty stones each, averaging from 25 to 60 cm. in height. The second group, consisting of six circles, is a little higher up on the banks of a stream. The third, comprising thirteen circles, is on a mountain plateau above the

^{† &}quot;Bull. de Comité d'Histoire et d'Archéol. de la Prov. Eccles. d'Auch."

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valley. Their diameter varies from 2.50 m. to 8 m. The stones have a smooth face on the inner side, but are rough externally.

In 1862 M. F. Couraze de Laa reported to the same society the discovery of five dolmens, one on the road to Urdos, on the left bank of the Gave, and four in the Vallee d'Ossau. One of these he describes as "magnifique." The others appear to be lichaven, or trilithons, and one of them is called Québe de Barelhole.

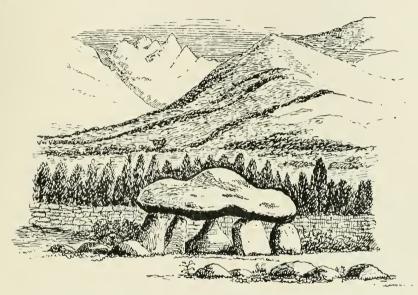


Fig. 520.—Dolmen at Buzy, near Oloron, Basses Pyrénées. After a sketch by Gen. Sir Vincent Eyre, C.B.

He also mentions a circle ("cromlech," as the French archæologists term it) at Bielle.

All these are in the Department of the Basses Pyrénées, in which M. Bertrand† places five dolmens. In this province is the little town of Saint Bertrand de Comminges, once the ancient Lugdunum Convenarum. The citadel occupied the level summit of a large isolated mass of rock, on which the present village stands, commanding an extensive view over the plain of Valcabrère as far as the Garonne, a district in which inscriptions in the Roman character, mosaics, altars, and coins are frequently found. An annual fair is held at the village in August, corresponding to the Lugnasad, or "Lug's Games," held at Tailten in Meath at Lammastide, in honour of Tailtiu, and instituted, according to the Irish legend, by Lug, who appears to be one and the same god,

^{† &}quot;Archéol. Celtique et Gauloise."

whether we find him in Scandinavia as Loke, in the Wetter-au where his statue was, as Lug, in Ireland as Lug and Lugaid, in Spain, with his fellows the Lugoves at Uxama, or in any of the many places to which he has given name, Gallia Lugdunensis, Lugdunum Celtarum (Lyons), Lugdunum Batavorum (Leyden), Lugdunum Convenarum (Comminges), Luguvallium (Carlisle), or, finally, whether we seek the site of his fortress at Dunlewey in Donegal, or at Dinlleu in Wales, or that of his grave near the town of Louth. In Ireland, as in Germany, the site of a dolmen was also in some cases that of an assembly which gives interest to the circumstance mentioned by M. Alex. du Mége,† that a dolmen exists at Comminges. It is called the Pierre de Crechets, and is said to have been placed in its present position by Saint Bertrand's mule, just as St. Patrick's Grey-Mare deposited her load in the form of a cairn at Broughderg in Tyrone. Places in the French Pyrenees bearing the name Pierre Fita ; are, like those called Piedra Hita in Spain, named from the presence either now or formerly, of an upright stone or menhir. A great upright block near Valcabrère is said to turn to the East on Christmas night.§

In the Department of the Landes, M. Bertrand places only a single dolmen, which is probably that mentioned by M. Alex. du Mége, at Saint Circ.

In the Department of Gironde, which extends across the Garonne, M. Bertrand places seven dolmens. At Saint Pau, not far from the ancient capital of the Sotiates (S. of the Garonne), there was a circle of nine stones called Las Naou Peyros. They are described as nine enormous unhewn blocks, near which stands a menhir. The monument is on raised ground in the middle of a wood, and near a lake which bears the same name.

In the Vallée d'Aran, once part of the country of the Garumni and Convenæ, stands a rude block called the *Peyro de Miech Aran*,†† from the fact that it was supposed to indicate the *middle* of the valley. Similar indicating ideas about their *middle* are believed by the superstitious to attach to menhirs elsewhere in France. One between Pont Leroy and Château du Rocher is called the *Pierre de Minuit*,‡‡ because at the *middle* hour of night it is said to turn round. Cambry mentions a stone having a like

gift near Blois, and La Pierre qui tourne at Morancez, near Chartres, is of the same class. Menhirs, called dalláns or galláns in Ireland, are frequently pointed out as being in the middle of a district or townland, and the famous Carrig-a-Chait, or Cat-Rock, at Ushnagh is said to be the middle of the whole island.

In the Department of the Basses Pyránées, in the tumulus of

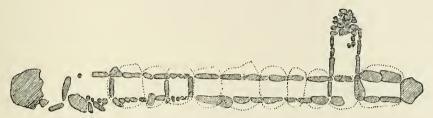


FIG. 521.—Plan of the allée couverte of the tumulus of Halliade, Hautes Pyrénées.

Puy Espy, is an interesting dolmen, which expands in the interior from a narrow entrance closed by two small stones. It is paved, and covered over by a slab 2.05 m. in length.†

In the Department of the Hautes Pyrénées, M. Bertrand places no dolmens. That they do exist there, however, cannot be



FIG. 522.—"'Les Pierres fiches' de tumulus des Deux Menhirs," Hautes Pyrénées. From "Mat. pour l'Hist. de l'Homme."



Fig. 523.—The dolmen de Puyo-Mayou.

doubted. I have before me, for example, as I write, the plan of an allée couverte in a tumulus at Halliade,‡ in this province, which has a special interest in connection with Irish examples of the chamber type, such as that in Achill, and those at Lough Arrow. The plan of the structure will show at a glance how close the resemblance is. A long narrow chamber, covered by ten roofing-stones, is divided into five or six compartments or septa, by means of transverse flags. At right angles to this shaft, as it were, of the structure, an arm branches off, while on the opposite side a gap in the stones indicates possibly that formerly there was another. In this case the arrangement would have been cruciform,

^{† &}quot;Mat. pour l'Histoire de l'Homme" (1884), p. 582. ‡ Ibid. (1881), pl. xviii.

although in any case the parallel to the Sligo and Mayo chambers is close enough. Another example of a dolmen in this province which reminds me strikingly of examples in the county of Clare, and especially of that in the Deer Park, Lemeneagh, will be found in the "Materiaux pour l'Histoire de l'Homme" (1881, p. 522, pl. xviii.). It is called the Dolmen de Puyo-Mayou. Together with this is an illustration of a monument called *Les pierres fiches de tumulus des deux menhirs*, which shows a creep or hollow formed by a flagstone on edge, raised on the point of another stone.

A somewhat similar monument is the *Mên-an-tol* in West Cornwall, meaning the "Stone of the Hole."

Pottery, found in tumuli and dolmens in the Basses Pyrénées and near Lourdes, bears in form and ornamentation a great likeness to some of the urns found in Ireland and Cornwall, especially to those with perforated cleats found in the latter district.†

In 1859 and 1861 M. Charles Duponey‡ was engaged in collecting materials illustrative of the archæology and folk-lore of this department. The answers he received to the questions he circulated are of much interest. The tumuli are surrounded with vallums rising to half their height, apparently like those to which Signor Martinez de Padin gives the name of castros in Galicia. At Lassalles there are three tumuli of this kind, bearing respectively the names Tépoulet, Castéradon (Fairy's Castle), and Castéra. The generic names applied by the natives to such artificial eminences are tucoos, tuques, tusques, pujoos, and pujolets. In French they are called mamelons, which corresponds to the name for them in the Iberian peninsula, mamoas. Some of these tucoos are, like the round hill-forts or duns of the British Isles, large enough to support a fortification on their summit.

At Lourdes there is a legend that the ancient town once stood in a place now occupied by an extensive lake, and on the road to Pontyferre is a huge rock, supposed to be a woman turned into stone under circumstances recalling the story of Lot's wife. On Saint John's night, that is, Midsummer Eve, the inhabitants of Lourdes congregate on the margin of the lake, and lying on the ground, listen at midnight for the sound, coming from its depths,

^{† &}quot;Mat. pour l'Hist. de l'Homme," id. pl. iii. ‡ See the publications of the Société Académique des Hautes Pyrénées, of which he was secretary.

of the bells of the ancient town. After that they bathe in its waters, and by the effects of that bath they set great store. M. Charens, the director of the High School at Lourdes, who communicates this legend, thinks that the great rock is a megalithic monument.

At Argelès, in the district of Balandraü, was a great rock, supported on another, called the *Caillou déra Encantado*—that is, the Enchantress's Boulder. Under it, according to a legend, is a hole which serves for the retreat of the fairy called "La béro det balandraü." At Avezac, besides two caves inhabited by fairies, are several tumuli, known by the names Pujoo-Lardou, Pujoo-Houradaat, Pujoo-de-Lestaque, and Tretze-Pujoos. Near these, says the legend, a great battle was fought, the sounds of which may still be heard, and armed horsemen are seen coming out of the sides of the mound, from which circumstance one of them is called Houradaat. A similar legend attaches to a tumulus at Slieve Kielta, in the county of Wexford.

A battle legend is also told of a great pillar-stone on the mountain of Miremont, near Orincles, and which was said to have been set up by human agency. The natives say that if this were to be removed, general disaster to the crops would follow; an immense volume of water would rise from the spot where the stone had stood. No human power could avail to stay the torrent, which would carry down into the plain the wreck of forest and mountain. Toulouse itself would be submerged, and its site strewn with Pyrenean rocks, above which this *Pierre Blanche*, as it is called, would lift its head as a memorial of divine displeasure.† A legend somewhat resembling this is common in Ireland. It is generally told of a woman who offended a well by omitting to replace its cover. Lough Neagh, with the submerged city said to lie in its depths, was said to have been formed by a flood so caused.

M. V. de Chausenque ‡ says that a long list of venerated rocks in the Pyrenees might be given. They seem, generally speaking, to be erratics, which, while the ancient rustic people attributed to divine agency, modern antiquaries, equally ignorant of their real origin, attributed to the Druids. Such, seemingly, is the true account of the Caillaou d' l'Araye, or de la Raillé, in the valley of

^{† &}quot;Archéol. Pyrenn.," by A. du Mége, vol. ii. p. 271. ‡ "Les Pyrénées, ou Voyages pédestres," by M. le Capt. V. de Chausenque, edit. 2, vol. i. PP- 354, 355.

Heas, before mentioned, famous for its pilgrimages, and near to which the shepherds built a little chapel to the Virgin. It is greatly reverenced, and is described as a great block of gneiss, of cubical form, from which the pilgrims chip off fragments. With this we may compare such venerated rocks in Ireland as that on the summit of Slieve Liag, in Donegal, by the side of which Christians built a little chapel, called, like the rock, by the name of a supposed hermit, Aedh Brecain. It is the object of great devotion and pilgrimage, and from it devotees chip off fragments. M. de Chausenque mentions in the same category a block at Hagetman, the sacred stones at Heycette at the entrance of the Vallée d'Aure, certain rocks at Barousse, which look like altars, and the Pierre de Tou above Lartique de Salabre.†

So closely similar is the folk-lore of the Pyrenees to that of Ireland, that I am inclined to pursue the subject further. The worship of wells and lakes is distinctly characteristic of the Pyrenean cult. It is forbidden to say impious words when standing near the brink, or to throw stones into the water, a superstition most prevalent in Ireland, and found, as we have seen, among the Esthonian Finns. The lake at Gembrie was held in great veneration. Near it was a rock called the Pierre de Lios, which was said to have been carried thither; and not far off was the "Tombeau de la Géante," or Grave of the Giantess.

The miraculous and holy wells are so numerous that three classes of them are distinguished. The first comprises those the waters of which are held to be curative at all seasons; the second, those whose healing properties are only manifested at certain periods known to the inhabitants of the country round; the third, those which bear the name of *Fontaines Solaires*,

[†] It is worthy of note that the word Tawlmen, singularly like the Daulmen, or Tol-men, "Tablestone," or "Holed-stone," whichever it should be, of the Bretons and Cornish, is used in the Pyrenees in the sense of a sepulchral monument, such as those set up by the shepherds to the memory of any one of their number who might have perished in the mountains. The account of the customs of the shepherd community is given in M. A. du Mége's work ("Archéol. Pyrenn.," vol. ii. pp. 24, 31, and 38), on the authority of M. Pages, who communicated a paper upon that subject, apparently unpublished, to the Académie des Sciences de Toulouse. The passage relating to the Tawlmen is as follows: "Lorsque les neiges ont disparu, nos bergers se rassemblent aux premières lueurs du jour; ils s'arrêtent en silence le lever du soleil. Dès que l'astre du jour parâit, le plus âgé d'entr'eux commence une prière, et tout l'écoutent dans le recueillement. La prière achevée, ce veillard, pontife d'un moment, a perdu tous ses droits; ce n'est plus qu'un pâtre. Les bergers partagent alors entr'eux les montagnes où doivent pattre leurs troupeaux, et les huttes, les cabanes qui doivent les abriter; en sortant de la reúnion, ces bergers forment de petites peuplades. Chacune élit son chef; la couronne est toujours sur des cheveux blancs. Celui qui a porte a le nom de Père, de Vieux. Ensuite, les différents chefs s'assemblent; ils jurent de révèrer et d'aimer Dieu; de montrer la route aux voyageurs égarés dans nos montagnes, de leur offrir le lait de leurs troupeaux, l'eau, le feu, l'abri de leurs chaumières; ils y ajoutent la promesse de poser le tawlmen sur les infortunés que la larre ou la tourb feraient périr; de révèrer les fontaines [conla eras houns], et d'avoir soin des troupeaux."

because it is at the summer solstice, when the people believe that they see the sun dancing in the midst of the morning fog (ech Soureil que trepo el dio de Sant Jouan), that the waters acquire the power to heal terrible maladies, and to give life and hope to human beings. On the eve of this great Midsummer festival, fires, lighted simultaneously, blaze from the banks of the Gironde to those of the Rhine. It is the custom to leap over the fires, and afterwards to collect the remains of the pile. Torches snatched from them, called haïllas in the language of the district, illumine the mountain heights along the whole isthmus which is traversed by the Pyrenean range. "They announce," says M. du Mége, "alike to Iberia, to Gallia Aquitania, and to Gallia Narbonnensis, at the same instant, that the day is about to return when the sun comes once more to ripen the harvests."

The same writer adds a list of holy wells. At Bourg-de-Viza was one to which the people resorted on the 5th of May. The hamlet of Mas Garnier was, until 1789, the scene of a fair held at the summer solstice on a piece of land where they built a church of St. John. From the foundations of this edifice issued the waters of a well, gifted with healing properties. Thither, before the sun was up, came immense crowds of people, the greater number of whom bathed in its waters, while others carried away water for those who could not come. When the sun appeared, it was said, the waters of the well turned red, and were no longer efficacious.

To the well De la Mandre, on the day of the summer solstice, the people of Soreze came in crowds, to await there in silence the rising of the sun, because then, they said, he would show them his sacred dance.

A well near the Chateau de Ramondens was resorted to by brides in hopes of being mothers, and pilgrims might frequently be seen kneeling and dipping glasses in the basin.

At the Fonteine de la Reine, on the mountain of Candeil, a queen (regino) presides, and never fails to cure her devotees.

At Toulouse the water has to be drunk out of a new cup, which is then broken and the fragments thrown into the water, together with pieces of silver. At a well near Sos is a cave into which women go to ask the Virgin for milk to nourish their children. This place is called the *Houn de las Poupettes* (the Dolls' Well); and there is another of the same name near the

ruins of the Chateau Nerac. In Basque the word for the "poupette" which it was customary to affix to a tree on Mayday was Sitsa.†

At the brink of a well at Latone, at an oratory bearing the name of St. Radegonde, is a stone having a cavity scooped in its surface, said to have been formed by the knees of the saint. Hither, on the 15th of August, pilgrims came in crowds, to obtain remedies for ailments in the water which escapes from the basin. Here we have the exact counterpart of Irish custom and belief. The bullán stone, with the story of the knee, is found alike in connection with wells, crosses, sanctuaries, dolmens, and circles, resorted to by pilgrims at stated seasons and for a like cause. Examples of the occurrence of wells by the tombs of saints are as plentiful in the one country as in the other, and even the reverence paid to the sacred tree which stands by the well is known also in the Pyrenees.

Some very interesting comparisons may be drawn between the superstitious and early cultus which attached to lakes in France and North-Western Spain on the one hand, and Ireland on the

In Gregory of Tours's "De Gloria Confessorum" we read of a lake in a mountain called Helanus, in the county of the Gabali, that is to say, in the diocese of Mende,‡ north of the Cévennes Range, in the midst of a district rich in dolmens and menhirs and rocking-stones.

To this lake, at a stated period of the year, the peasants were in the habit of resorting for the purpose of throwing into it pieces of linen cloth, and shreds of men's clothes, by way of offerings. Some threw in fleeces of wool, but most of them figures shaped out of cheese, or wax, or bread, and various sorts of things, too numerous to specify, each individual according to his station of life. They used to come, too, bringing drink and food in waggons, and slaughter animals on the spot, and hold a three-days' feast. Gregory goes on to describe how on one occasion a thunderstorm dispersed the devotees, after which the cultus of the lake was transferred to that of St. Hilary of Poitiers.

[†] It is tempting, but I think inadmissible, to compare this word to the Irish sidhe, and the sitte of the Lapps. Van Eys, Dict. Basque-Français, in voc.

‡ Mende was called Mimatum Gabalorum, otherwise Anderidum, Anderedon, Anderitum (comp. Anderida in Britain). It was a bishopric, the first occupant of the see being called Severinus, and the third Firmin, not to be confounded, however, with the apostle of Austria, and the saint of Pfeffers. See "Zedler," vol. xx. p. 632, and "Greg. of Tours," Paris (1696), p. 894.

At Loughadrine in the county of Cork is a "sacred lake." On the side of the hill adjoining it on the north, a clump of furze was pointed out, says Windele, which was called the "altar," pointing not improbably, I think, to the presence here in former times of a dolmen, since, as in the case of the Bealick at Carrigdangan which stands on an elevation above Lough Kil Hanna (Johnstown Lake), and many other Irish dolmens, the brink of a lake was a situation specially selected for such remains. This so-called "altar" at Loughadrine was a grand "Station" in the times of the "Rounds," before the priests interfered to prevent them, as they have done, says Windele,† of late years. Offerings of rags were tied on the bushes.

There were several "Station Days" in the year, but the principal "Stations" were on May Eve. The great "Pattern Day" was a Saturday in June, when faction-fights took place. There were floating islets in the lake. The trout in it, on being boiled, turned into blood. On "Pattern Days" the devotees flung bread and biscuits into the water to these holy fishes, saying certain prayers when making the offering. On such occasions one could take up "kish-fulls" of bread out of the water. Cures of every kind were effected at this lake. Windele's informant had a daughter cured of the effect of some stroke (fairy-dart) by the potency of its waters. As in the Lozère, the period of devotion was always closed by revelry.

Windele adds to the above account, "Our lake-legends are worth being collected and examined. Many of these sheets of water are supposed to cover subaqueous regions—lands of enchantment and wonder." He proceeds to refer to the lake-legends in the medieval MSS., notably to "the story of the land beneath En-Loch, *i.e.* Bird-Lake, in Magh Ai in Roscommon, into which Laoghaire Libhan, son of Criomthan, King of Connaught, went on an adventure." The subaqueous city with its "Round Towers," which lies beneath Loch Neagh, is well known to romance.

In the Pyrenees and in the province of Galicia, lake-legends, according perfectly with those found in Ireland, are abundant. Villa Amil y Castro states that the legend of the sunken city is common to nearly all the lakes and pools in Galicia. About thirty miles from Mondonedo is a lake now named Cama de

[†] MSS., J. Windele, in Lib. R.I.A., "Cork W. and N.E.," p. 759.

Santa Christina, but in the sixteenth century La Lamas de Gua, in which the river Tamago rises. In "La Descripcion del reino de Galicia de Molina de Malaga,"† it is stated that, at certain times of the year, the noise of loud and terrible bellowing is heard arising from the lake. Upon a person's going to that part of the lake from which this sound proceeds it is immediately heard in another part. Although no one has ever seen the animal from which the sound proceeds, it is said traditionally to be a kind of cow-precisely the Irish Phooca, in fact. The legend is fully believed in the vicinity. It is also stated, with regard to this same lake, that, after a dry summer, when the water is low, quantities of iron objects, worked stones, bricks, tiles, vases, and other things are laid bare, showing that in former times the place was the residence of an extensive population. The Padre La Gandara, who lived in the century succeeding that in which this account was written, in his "El Cisne Occidental," I tells the same story. Lastly, Bohan, who, living also in the seventeenth century, wrote an "Historia del Reino de Galicia," goes so far as to assert that he had himself heard the bellowing, and seen the objects discovered.

Near the Bandon Mountain in Cork is a little lake called Loch-bo-booirha, i.e. "Lake of the Lowing Cow." The Bandon Mountain itself is called Sliabh-bo-booirha, from the same enchanted animal that once lived there.\ North of Ross, also in Cork, are two lakes, the one called Lough-bo-finna, i.e. "Lake of the White Cow," and the other Lough-a-tarriv, i.e. "Lake of the Bull." A Piast, i.e. in general, "Serpent," was said to be still at the bottom of one of the lakes in this vicinity; but that it was in this instance akin to the bovine species is clear from the legend that it used to come up out of the lake, and consort with the cows on its bank.\ The Phooca is often represented as a water-calf, possibly, however, through some confusion of the name of this mythical beast with the Latin Phuca—a seal. On a man trying to drain a lake called Veildeheen (in Desmond), the water lit up, and a beast came out "like a dunkey," says Windele.\

To return to Galicia, Signor Manuel Morguia †† tells us of a legendary city called Villaverde [Goidelicé Ballyglass] lying

submerged in the lake of Carrigal at Dimo. When the water is clear there appear at the bottom the ruins of buildings, the great beams of which are visible. The popular belief is that this town was submerged as a punishment to the inhabitants who, when the Virgin came there disguised as a poor beggar, treated her badly.

M. Cartailhac† regards these stories of sunken towns and of objects discovered at low water as evidences of the former presence of lake-dwellings. Signor Villa Annil y Castro compares the legends with those told of the lake of St. Andéol in the Lozére, and that of Paladru in the Dauphinè. M. Alexandre du Mége, in his "Archéologie Pyrénéene," † has noticed some lakelegends at Toulouse, Bearn, and Comminges—the waters at each of which places were the object of veneration, prayers being addressed to them, and offerings of bits of silver, woollen stuff (étoffes), food and flowers being thrown in. He adverts also to the story that treasure was concealed beneath the lake of Toulouse. The tale that it was placed there by the Volcæ Tectosages, and discovered by the consul Cæpio, is to be discredited. With this legend of hidden treasure, and with those of subaqueous cities, we may compare that told of the little tarn which sleeps beneath the summit of Slieve Callan in Clare, called Lochbooleynagreine. Near it, at the head of a pass, is the dolmen of Knockalassa, "Knoll of the Sea-green (Cow)," and close above it on the hillside is a stone, upon the face of which is an ogam inscription, and which is called traditionally Leaba Conain, or Conoin, i.e. Conan's Bed. The tradition of the peasantry regarding this stone was that it marked or covered a grave, and that should it be removed, and the grave opened, "the wild, inhospitable mountain would at once become a fertile plain; that a beautiful city which lay enchanted in the lake would be opened by a key which was said to be buried with Conan in his tomb, and that a great mass of golden treasure was then to be acquired."

The "terrible supernatural being" who, according to M. A. du Mége, inhabits the depths of the Lac de Tabe in the Pyrenees, may certainly be compared to the Piast of Lough Veildiheen—

^{† &}quot;Ages préhist. de l'Espagne," pp. 70-73. ‡ Vol. i. pp. 107-110; vol. ii. xxix. xxx. § Compare this name with that of Conan's Stone in Co. of Waterford, Ord. Surv. Map No. 17. § See papers by Sir Samuel Ferguson, Proc. R.I.A., 2nd Ser., vol. i. pp. 160, 167, 265, and 315.

not far from which, by the way, is a dolmen described by Windele as of considerable size. "This lake," says that writer in his MS. Notes, "is enchanted.† It contains a great Worm (? Crom), or Piast. This serpent lies imprisoned under a great tub or vat, whence is derived the name of the lake. The monster in old time was a pest to the country, and so powerfully malignant that no one could approach the mountains, much less the lake. At length St. Patrick arrived at the Galtees on his mission of peace and beneficence, and he held a colloquy with the Piast, who, overcome by the soft sawder of the saint, consented to try the luxury of a short sojourn under the cover of a vat which the saint procured, Patrick promising to set him at large after the day of Luan. But this was a mere taking advantage of the poor monster's simplicity, for the Saint's "Luan" is a time more remote than Tib's Eve, or the Greek Kalends; and ever and anon the poor serpent is heard painfully calling out, Is fadda an Luan i a Phadruig, that is, 'It is a long Luan (Monday), O Patrick.'"

A supernatural Piast resides also under the waters of Lough Keel Hanna, in the Parish of Kil-Michael and county of Cork. "The Tarn is a small one, covering about ten acres. It lies in a moory hollow, interspersed with rude rocks, and is surrounded by low banks. It contains several floating islands, or rather turfy tussocks, near its northern shore. The lough is sacred water, and a place of weekly devotion. The floating islands have been objects of superstition, apparently from pagan antiquity. 'Rounds'§ are given at the part where they lie. Three islands are said to move, but no eye is upon them when they do so. The reason why the eastern side of the lake is bald is this: A mower once used his scythe upon it. Immediately there shot forth from the island and upward from it a shower of blood, and from that day to the present no verdure has been produced upon it. The moving islets, so runs the legend, are three sisters of different ages. The eldest always leads, when a desire to change arises, and the two juniors, with sisterly duty, follow. Devout people come here on Saturday nights, to perform 'Rounds.' The religious ceremonies consist of making three rounds, and saying a rosary on the Sunday. The water of the lake is then rubbed into such portions of the body

[†] MSS., J. Windele, "Topography of Desmond," p. 254. ‡ Id., "Cork Topography," p. 501; and "Cork W. and N.E.," p. 509. § This circuit seems to me to be the "paganus cursus, quem Vrias vocant, scissis pannis vel calceis," mentioned in the Capitularies of Charlemagne, Anno 743.

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as may be afflicted with rheumatism, which is the complaint for which the water is a remedy."

On the banks of the Lac de Tabe, inhabited by the Piast above mentioned, no person must speak an impure word, or throw stones into the water. If they do, a fearful thunderstorm ensues. This superstition, as to insulting wells and lakes, and causing their migration in consequence, is found both in Ireland and Esthonia, as we have seen.

About the Lake of Limia in Galicia many legends are told. One of these, according to Villa Amil y Castro,† is that an enormous swarm of buzzing gnats, which in summer-time surround its waters, are "the enchanted army of King Arthur of England." How this legend arrived here I cannot tell, unless we look upon it as an importation coincident with the establishment of a bishopric at Bretãna, which was probably of Breton origin. Legends of insects, however, seem to be connected with Irish lakes. The name of the Lake of Connshingann in Cork is explained by "Glen of the Ants." This lake is said, also, to be inhabited by a supernatural Water-Serpent of monstrous length and bulk, having a horse's head and mane. He sometimes rises and disports himself on the surface.

At the Lake of Gougann Barra, also in Cork, I was told the legend of St. Finnbarr and the Serpent or Dragon, who used to dwell beneath its waters, until slain at the rapid and fall through which it discharges its waters. Luan, a servant of Finnbarr, was standing on the brink when the Piast rose and swallowed him. Finnbarr was away, but returning, and finding what had happened, he cursed the snake, who forthwith fled to the river, and, after having vomited Luan into the first pool, was there slain.

With the name Luan I am inclined to connect the name Vinceluna, which is explained "Lunæ Defectio" in the Cartularies of Charlemagne, and the superstitions connected with which are there forbidden. On the occasion of an eclipse of the moon it was believed that it had been swallowed by a monster, who could only be forced to release it by being frightened by noise. People therefore assembled and made all the noise in their power by shouting and other means. The monster who committed the atrocity seems to have been the sun. Upon this

^{† &}quot;Antiguëdades," Lugo, p. 75.

subject some very curious passages might be quoted.† A similar belief in a dragon swallowing the moon obtains in China; and in Japan, on the occasion of an eclipse of the sun, people assemble and clash together sounding metal, to make her look out of the cave in which she is concealed.

In the Department of Ariége,† M. Bertrand places eight dolmens. In that of Pyrénées Orientales there are said to be ten,

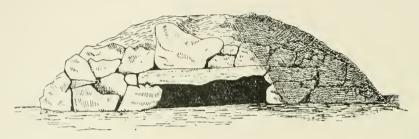


Fig. 524.—Dolmen under tumulus in the Gorge de la Vall, Pyrénées Orientales. From a rough engraving in "Mat. pour l'Hist. de l'Homme."

bordering on those in Gerona and others in North-Eastern Spain. In this Department M. V. de Chausenque § specially mentions that of Vicdessos; and another writer, in the "Materieux pour l'Histoire de l'Homme," || figures and describes two—one under a tumulus in the Gorge de la Vall; the other called Balma (flagstone) del Moro, or otherwise the Dolmen de la Roque. In the Department of Aude M. Bertrand places four, and in that of Tarn, to the north of it, twelve. Of the megalithic remains found in these districts M. du Mége has much to say. He reminds us that in early

[†] Plutarch, "Life of Æmilius," Langhorne, p. 193: "The Romans, according to their custom, made a great noise by striking upon vessels of brass, and held up lighted faggots and torches in the air in order to recall the moon's light." Tac. "Ann.," lib. i. p. 28; Juvenal., vi. (Delph. edit.), p. 443; Liv., lib. xxvi. p. 5; Senecæ "In Hippol.," notæ M. A. Delrius, 1576, p. 168: "Tinnitus deaimus; solebant antiqui pelvium tinnitu et tubarum strepitu deficienti lunæ auxiliari ut apud poetas passim." See also Andoen's "Vita S. Eligii," in Archery's "Spicelegium," p. 97, where this superstition is mentioned together with a number of pagan practices forbidden to Christians—the most curious list of them—which is preserved: "Nullus, si quando luna obscuratur, vociferare præsumat." See also Bede, "De Remediis Peccatorum," in the "Canones Pænitent." of Ant Augustin Archepis, Tarracon., 1584, p. 116: "Nolite exercere, quando luna obscuratur, et clamoribus ae maleficiis sacrilego usu, se defensare posse confidunt;" also S. Maximus, Epis. Taurinensis, Romæ, 1684, p. 334, Homilia C, De defectu Lunæ: "Nam cum ante dies plerosque de vestræ avaritiæ cupiditate pulsaverin, ipsa die circa vesperum tanta vociferatio populi extiit, ut irreligiositas ejus penetraret ad cælum. Quod cum requirerem quid sibi clamor hic velit? dixerunt mihi quod laboranti lunæ vestra vociferatio subveniret, et defectum ejus suis clamoribus adjuvaret. Risi equidem," etc. This homily, in a Vat. Codex (4951, p. 213), is attributed to S. Augustin, and headed "Ad eos qui defectum lunæ suis clamoribus adjuvare nituntur;" also Pope Gregory III., "De Diversis Criminibus," in "Bib. Patr.," De la Bigne, Paris, 1610, vol. vi. p. 512: "Si quis maleficus aut malefica filium suum aut filiam supra tectum aut in fornace pro sanitate febrium posuerit, vel quando Luna obscuratur, vel clamoribus suis vel maleficiis sacrilego usu se defensare posse confidunt, vel ut frater in honore, Jovis vel Beli aut Jani, secundum paganum consuetudinem honorare presumpserit, placuit secund

historic times this was the country of the Volcæ Tectosages. He finds, also, certain names of places which indicate here as elsewhere the presence of ancient monuments; as, for example, the Peyro Traucado in the Bois de Beléne, called the Pierre Trouée de Moélan, and the Peyros d'Antix near Martignac. At Malves, in the country of the ancient Atacini—so called because

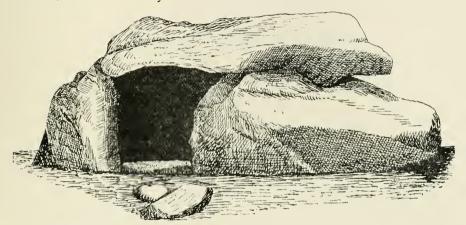


Fig. 525.—The Balma del Moro, Pyrénées Orientales. After a rough engraving in "Mat. pour l'Hist. de l'Homme,"

they bordered on the river Atax, now the Aude—there stands, he says, a menhir 7 m. high, 2 m. broad, and about 1 m. thick. Menhirs are also found at Alet, Peyroles, Belcastel, and in the arrondissement of Carcassone.

Proceeding northwards into the Department of Tarn, we find mention of the dolmen of Andouque, called the "Tomb of the Three Kings," or, as the Christians called it, "of the Magi." Of the monolith at Vieux, and the legend regarding it, I have already spoken.

At Vaour, in the Department of Tarn et Garonne, is a dolmen a good illustration of which will be found in the volume of the "Congrès Internationale d'Anthropologie" for 1868 † (Fig. 526).

In the country of the Albienses, on that side of it which touched the borders of the Tasconi and Cadurci, are the remains of stone circles and also a dolmen.‡ The Palet de Notre Dame and the Palet du Diable, near the town of Alban, have been before noticed. The most famous of these Pyrenean "Quoits" is the Palet de Roland (Fig. 527) at Arles-sur-Tech in the Department of the Pyrénées Orientales, on a spur of the Carrigon, a view of

which is given in "Materiaux pour l'Histoire de l'Homme."† In the same locality is a trilithon on a hill called Lo Troulierro, which bears the name Lou Sent Rouoc. It is situated in the district of the Rutheni, near the border-line of Hérault.

This monument is, like others before noticed, attributed

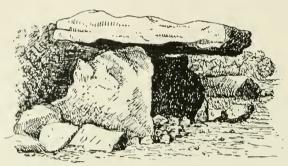


Fig. 526.—Dolmen de Vaour (Tarn et Garonne). From "Congrès d'Anth. et d'Archéol.," 1868.

popularly to the Virgin Mother of the Christians' God, who seems universally throughout this district to have taken the place of the elder and native divinities. The supporting-stones

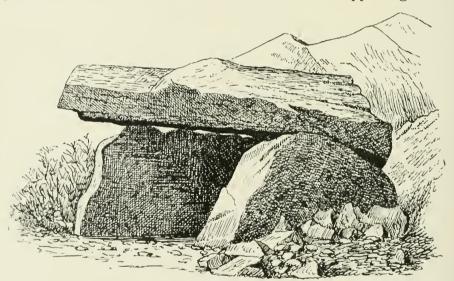


Fig. 527.—The "Palet de Roland," at Arles-sur-Tech, Pyrénées Orientales. From "Mat. pour l'Hist. de l'Homme."

she is said to have carried under her arms, the transverse stone poised upon her head, and for all this, during the time it took her to complete the distance from the quarry where the stones were

cut to the spot on which she set them up, her hands being free and provided with a distaff, she covered the spindle seven times with a fine silken skein. Traditions of its having been a tomb also attach to this monument, and it probably is a ruined dolmen.

The Lou Sent Rouoc overlooks to the north a large fertile plain called La Coumbo (valley) of Auribal, where there is a dolmen, and also a tradition of a bloody battle. To the north of this, again, is a dolmen, or *Cibournié*,† and around it a number of small stone heaps, the *débris* of tumuli. The place is called Carroillasses. West of the Lou Sent Rouoc is another dolmen of large size, and a line of ten others, more or less denuded of their tumuli, one of which (the covering-stones had been removed) measured 15 m. long.

Rocking-stones are met with in the same district, among which the best known was the Pierre Martine. Near it were two menhirs, 30 paces apart, the one 15, the other over 20 feet high. The place where they stand is called Bélinac. Other rocking-stones exist in the district called Sidobre, near Castres.

Of the antiquities of the Province of Hérault we are fortunate in possessing an excellent map drawn up by M. Cazalis de Fondouce.† The number of dolmens there indicated is sixtythree, the same number which M. Bertrand assigns to it. They are divided into two principal groups-the one at the extreme S.W. of the Department, in the mountainous districts of the ancient Pagus Narbonensis; the other in the country known as the Pagus Lutevensis, in the north central portion. Small groups of twos and threes occur-also in the mountains-to the E. of these, in what was the Pagus Magalonensis, whence they extend through Gard and Ardéche (where there are no fewer than two hundred and twenty-six) to the banks of the Rhone. The presence of one isolated example in the S. of Hérault, in the Pagus Agathensis, as well as that of a few in Var and the Alpes Maritimes, proves that the limits of the people who erected them were not wholly or always confined to the mountainous districts alone.

I have hitherto endeavoured to keep myself free from hazarding any theory as to whether the people or peoples by

Published in the "Memoires de la Societe Archeol, de Montpellier" for 1881, vol. vii p. 273, et seqq.

[†] Literally "ash-heap," a name not infrequently used in France to designate the heap mixed with charcoal and ashes which covered a dolmen or cist, and hence the structure itself.
‡ Published in the "Mémoires de la Société Archéol. de Montpellier" for 1881, vol. vii.

whom the dolmens in Europe were erected can be traced ethnologically to any of those races or tribes to whom History presents us as the inhabitants of these regions when first she lifts the veil. The discoveries, however, which have been made in the dolmens in this part of France force upon us the consideration of the survival of this class of monument into the later ages of archæology.

From an ethnographic point of view the remarks of M. Cazalis de Fondouce on this point are of considerable value. discoveries made in the Hérault dolmens consist not only of flint arrow-heads, but of rings and arrow-heads of bronze, also articles of glass, amber, and even pottery of the Roman period, all which go to prove that, however remote in origin these ancient monuments may be, the custom which prompted their erection for purposes of sepulture covered in survival a very extended period, reaching to even more recent times than the close of the Bronze Age, to which epoch, however, the greater number of them may be most safely assigned. Some of the dolmens in this Department, as in those of Aveyron, Gard, Lozère, Ardèche, and in the Cévennes district generally, are found to be of the same wedge-shaped type (in ground-plan) which is found in Germany on the N.E., and in Southern Portugal on the S.W. In these, and in the sepulchral caves of the same district, are found more objects of pure copper than of bronze, and M. Cartailhac attributes them to a period of transition between the Ages of Stone and Metal—to a Copper Age, in fact.†

In the mountainous regions especially—so well adapted to shelter old populations and sustain old practices, while the littoral, being on the high-road of commerce, adopted the customs and arts of foreign civilization—we find the dolmens, as might be expected, in greatest number. A coast route connected what is now the Department of Hérault with Spain on the one hand and with Italy on the other. The Phænicians had possessed, at a period which has been assigned to the fifteenth century B.C., an extended line of colonies and markets all around the western basin of the Mediterranean. For the transport of merchandize, routes were established which traversed the country of Nemausus, and passed into Spain and Italy. Under the Romans these routes became the Domitian and Aurelian Ways.

^{† &}quot;Âges préhist. de l'Espagne," p. 212.

Polybius, who wrote in B.C. 154, tells us that these routes were already in existence before the Second Punic War, and mentions an ancient road which, starting from Carthagena in Baetica, passed through Emporiæ in Catalonia, and traversing the Narbonaise, led to the Rhone. This road, says M. C. Charvet, was already in existence before the Romans made themselves masters of the country, and was, doubtless, the work of the native tribes, the more civilized of whom, long before the Roman conquest, had been initiating themselves in the art of constructing great public works. The facilities, therefore, for close and constant intercommunication between the tribes occupying Western Italy, Southern Gaul, and Eastern Spain, were, from the earliest times, very great indeed.†

Now, the people who occupied Languedoc when the Romans conquered it in B.C. 121, were the Volcæ, called, as it is certainly curious to note, "Belgæ" in some Codices of Cicero. I They were divided into the Arecomici, who occupied the Bas-Languedoc, and the Tectosages, who occupied the rest of the province on the Toulouse side. The line of demarcation between these two tribes of Volcæ, running from north to south, would have divided the present Department of Hérault into two unequal These peoples, says M. Cazalis de Fondouce, whose capitals were respectively Nismes and Toulouse, have left behind them but few traces of their presence. In no case could their monuments be traced very far back if, that is to say, we accept the view taken by M. Amédée Thierry, and regard these Volcæ as an offshoot of the Belgæ, who, at a date which he fixes as the fifth century B.C., coming from the north-east, penetrated like a wedge across the populations who occupied the coast of the Mediterranean, and south-central Gaul. On these grounds it is concluded by M. Cazalis de Fondouce that the dolmens cannot be assigned to them.

Without committing myself to any theory with regard to the origin of the Volcæ,—and while feeling quite unable to admit their identity with the Belgæ,—the plausibility of the view which would connect one branch of them (the Tectosages) with the Tectosages whom Cæsar found dwelling in wealth and honour in his own time on the further side of the Rhine, in the Hercynia Silva,

[†] M. Cazalis de Fondouce, op. cit., p. 276. ‡ See Roget de Belloguet, "Glossaire Gauloise," 2nd. edit. (Paris, 1872), p. 402. VOL. II. U

is beyond dispute. Equally is it beyond dispute that time was when the pioneers of the Aryan speech, whoever they were, were driving across Gaul the "wedges" of that language which philologists have arbitrarily chosen to term "Celtic," and which in process of time ousted all other forms of speech, imposing itself upon the Ligurian populations, if, that is to say, these latter peoples did not themselves possess already the germs of Aryan speech,† and driving back the Aquitanian tongue into those mountain passes where the latter still exists, perhaps in modified survival, as one form of Basque, side by side with the notdistantly related dialects of Spanish Basque, and tracing back, in common with them, to a long-lost and ancestral Iberian stock. That the Volcæ Tectosages in Languedoc may have been originally one of these "wedge" people who brought the Celtic language is likely enough, but that they were an off-shot of those in the Hercynia Silva, as M. Thierry supposed, is in direct opposition to the explicit testimony of Cæsar, t whose statement about these people is that they it was who, crossing the Rhine, and therefore passing eastward, had overcome the Germans, and occupied the most fertile portions of the country around the Hercynia Silva.

With regard to the general question of the spread of the Celtic language in the regions of the Rhine, while on the one hand Etymology, as interpreted by Müllenhof, gives us reason to suppose that it was once the spoken language of the North of Germany as far east as the Weser, and perhaps beyond it, whence we may suppose it to have been pressed westward by advancing Teutons, History, on the other, taking cognizance of later times, shows us that the German peoples further south were giving way before those tribes who spoke this Celtic tongue, and who, as Helvetii and Boii, Vindelici, Ræti, Norici, and Carni, were carrying their speech southward over the heights of the Alps, or eastward down the Danube. That at a very early date Celtic-speaking peoples had made their way into Greece and Asia Minor, there is no room for doubt. Plutarch's mention of Celto-Scythes on the Pontus, at a far later date, would seem to indicate the presence of an element there neither German nor wholly Scythian, nor Mongol, but which was recognized as having had its origin in the West.

[†] See above, p. 526.

At the dawn of history, then, the tendency of the Celticspeaking peoples in Gaul was towards the South and East. For this movement some cause of displacement must be looked for. such as a movement of north-eastern or Baltic tribes over the Rhine and around the northern and western coasts of France. Of such a movement the tradition of the Belgæ that their ancestors had crossed the Rhine may be evidence, as also the similarity of the names of the peoples on the Southern Baltic and in Northern Gaul.† The origin of the Celtic language—the first instalment of Aryan in the West-was in the East, however, on the Middle Volgat, where brachycephali and dolichocephali dwelt side by side. Who, then, were the peoples whom the Volcæ would have found already settled in Languedoc? In the first place, there were those foreigners who had founded cities and established commercial centres at various points along the littoral-the Phœnicians, the Rhodians, the Phocæans, and others. At the date to which belong the materials which served Festus Avienus as the basis of his geography, and which some place as early as the sixth century B.C., the Rhone divided the Ligyes or Ligures from the Iberes. The Helisyci, who, according to Avienus, were the earliest inhabitants of the country about Narbonne, are called, however, by Hecatæus a Ligurian tribe. Scylax assigns to the Ligurians the coast of the Mediterranean as far as the mouth of the Rhone, while the district from that river to Emporiæ in Spain he describes as one in which Iberes and Ligures were intermingled. Thucydides, again, speaks of the Ligures as having expelled the Sicani, an Iberian tribe, from the banks of the Sicanus in Iberia. Æschylus represents Hercules as contending with the Ligurians on the stony plains near the mouth of the Rhone—a legend found also in Pomponius Mela. where two giants, Albion and Dercyon (or Bergion?), are put in place of the Ligurians, and seem to represent two native peoples with whom Hercules (representing the Greek colonies) had to contend. Herodotus speaks of the Ligures as occupying the country above Marseilles. In Italy they were to be found around the Gulf of Genoa, with an extension southward into Etruria, a country subsequently held by the Tyrrheni.

[†] e.g. Veneti; Lemovii (Lemovici); Curi, Osili (Curio-solites); Vinili (Unelli); Osii (Osismii); Galindæ (Caletes); and perhaps Iuchti (Pictones).

† This view, held by Schräder and others, dispenses with the objection that dolicephali must necessarily have carried the Aryan language into Western Europe.

of Byzantium connects their name, but unauthoritatively, with that of the river Liger, the Loire.

The opinions of modern critics are as conflicting as is the testimony of early writers with regard to these people. Some French authorities, and among them M. Cazalis de Fondouce, have regarded them as the precursors of the "Indo-Europeans," in which view, provided the term be used philologically, and not ethnologically, the theory I venture to propound concurs. The Ligures would have found on their arrival the Iberes, who are regarded as the autochthones in possession of the country. Certain it is that these Ligures are clearly distinguished from the Iberes on the one hand, and from the only Celts known to ethnology on the other, for with both these peoples they are represented to have been at war at one time, and intermingled at another.†

When we speak of Celts, we must remember that this term had two meanings, which have been a fertile source of inexplicable confusion. These meanings take their rise from two seemingly conflicting statements of Cæsar, from the first of which we gather that the people called Celtæ belonged only to the portion of Gaul which formed a central band between the district occupied by the Aquitani on the S.W., and that occupied by the Belgæ on the N.E., and from the second of which we quite as distinctly derive the information that Galli and Celtæ are synonymous terms, which would extend the meaning of the latter term not only to the inhabitants of the whole of Gaul, but (as we find it used in later writers) to those of Gallic descent in other lands as well.‡ Celtica, it may be said in parenthesis, in the sense in which Herodotus and the earlier writers use it, carried with it no ethnological meaning whatever, any more than the term Scythia, the latter being used as a general geographical term including all the region north of the Danube and the Black Sea, and the former including all the country adjoining it to the northwest, bounded by the coast of France, the British Isles being specially excluded, and spoken of as "opposite Celtica."

[†] Avienus, "Ora Mar.," 132-137; Skylax, "Gail," i. 237; Strabo, "Geog.," 4, p. 200.

‡ Procopius speaks of the mountains in which the Danube rises as the Celtic mountains, and then applies the same name to those in which the Rhine rises. Zosimus informs us that in Rhætia there were Celts. It is curious to observe that among the later Byzantine writers the word Celtic regained its most ancient meaning, for it was applied to any people, irrespective of their language, who came from the N. and W. of Europe. Pachymeres calls the Varangian guard "Celts," and Zonaras calls the Germans—for whom the Selavonic name was Nemic or Nemitz—a Celtic nation.

The question then arises, "Who were the 'only Celts known to ethnology'—the Celtæ, namely, of central Gaul—whom Cæsar locates there?" While not actually identical with the Ligurians, whose ancestral type of race is represented by those pronouncedly brachycephalic skulls which are found in the dolmens of the Lozère, the Celtæ, too, were brachycephalic, and, according to M. Broca, their type was that which is found in survival in the heads of the Auvergnats at the present day. The representative of the earlier Ligures is the modern Ligurian of North Italy, whose cephalic index is 86, while that of the Auvergnats is 84.

The discovery of the brachycephalic skulls, together with a few dolichocephalic ones, and some of mixed or medium type in the dolmens of the Lozère, while in those of Aveyron only dolichocephalic skulls were found, seems to have weighed with M. Mortillet in coming to a conclusion that there was in reality no dolmen-building race, by which I understand him to mean that the custom of erecting these structures appertained to no one people, nor had any common place of origin. I think, myself, that the truth on this point lies too deeply hidden in an impenetrable past to admit of any definite conclusion on the subject. France, in the Neolithic and Bronze Ages, we clearly have two races occupying the country side by side, and subsequently intermingling, and the dolmens present us with the skull-types of all three, that is to say, of each of the extremes and of the middle one, which so largely predominates that it has become known as the dolmen-builder's skull. As a parallel to these data we have at the dawn of history two races dwelling side by side—on the one hand the Iberes, who were dolichocephalic, and, on the other, the Ligures, followed by the Celtæ, who were brachycephalic; and, besides these, in evidence of the intermingling which was taking place, "Ligues (i.e. Ligures) and Iberes mixed" (μιγάδες), as well as Celto-Ligues and Celtiberi.

Some of the discoveries in the dolmens in Hérault belonged, as we have seen, to the Iron Age and to historic times. May we not see in these the sepulchres of the mountaineers who, descended from these races, preserved the customs of their ancestors?

M. Cazalis de Fondouce would put the Ligues out of the question, and, regarding the Iberes as autochthonous, would refer the dolmens to them alone—a view which would ignore the fact of

the immense divergence of racial type which an investigation of their contents discloses. That the Iberes were the primitive inhabitants, and may have been the descendants of dolichocephali of the Neolithic Age, I do not doubt, but the lessons derivable from the artificial caves of the Marne, and from the natural caves of Belgium,† show us that the brachycephalic race was not far behind in point of time. There is reason to believe that both these races,—the Turanian and the Iberian or Atlantic, -worshipped the spirits of the dead whose remains they buried first in natural, and then in artificial caves. As in the course of time they met, whether in war or peace, there would be an assimilation of custom. The closed cist in the tumulus, which experience directs us to associate with the brachycephali, would expand into the elongated form of the dolmen, and be provided with an aperture, or means of access to the tomb, while, on the other hand, the dolmen would, as is found to be the case with the caisses class of dolmens of the French antiquaries, assume the appearance of an enlarged cist. In dolmens thus modified, we might expect to find what, indeed, we do find, the medium type of skull known as the "dolmen-builder's."

Having spoken of the Iberes of history as possibly the descendants of the original dolmen-builders of South-Western France, it is essential that I should say something of the Basques, in whose country, as we have seen, a series of megalithic remains occur side by side with a folk-lore which, from a comparative point of view, is of very great interest, having its affinities in Ireland and Esthonia.

With regard to their language, so much has been written that the subject forms a literature in itself. A very curious reason has been brought forward by the Abbé Inchauspé ‡ for carrying it back even into the Neolithic Age. In Basque aitz or atch signifies "a stone," "pierre de roche," the Spanish "pena," and the Latin "saxum." The word for an axe is aitzcora, literally, he says, "a hafted stone;" a pickaxe is aitzura, literally, "a stone for tearing or hacking" (déchirer); a knife is aizttoa, literally, "a small stone;" and a pair of scissors, aizurac, "a small stone for hacking purposes." With regard to this "bed-rock language" of the Pyrenees, four dialects of which are still recognized, spoken by two perfectly distinct types of men anthropologically considered, it may be

[†] e.g. The Trou Rosette on the Lesse. ‡ Quoted by M. Cazalis de Fondouce, loc. cit.

taken for granted that it has existed ages out of mind in the mountainous region where it lives to-day. Some writers have held that from barbarous ages until the present day it has never extended far beyond the limits in which we find it, since the rudimentary condition in which it presents itself, and its powerlessness to express abstract ideas, show that it cannot be looked upon as descending from a stock once belonging to people in a high state of native civilization, such as the Iberes were on the one side, and the Aquitani on the other. Of its relation to these two peoples respectively, and their relation to each other, M. Luchaire, who made a cautious and careful study of the question from the etymological point of view, speaks as follows:—

"At the time of Strabo, Pliny, and Ptolemy, there existed in the southern, central, eastern, and north-eastern parts of Spain, certain localities, the names in which are capable of probable explanation, both as regards their form and meaning, by the Eskuara (i.e. Basque), still spoken in a corner of the Pyrenees. These names are so numerous and the likenesses so striking that we can safely conclude that a language other than Celtic was spoken, in ancient times, throughout a great part of the Spanish territory, and that this language was related to the Basque. At the same time we must be careful not to infer, with Wilhelm von Humboldt,‡ the ethnic identity of an Iberian people with the Basques as the latter exist to-day, nor even a linguistic identity between the ancient Spanish form of speech with the Eskuara. We must be content to have established the incontestible fact that a relationship existed between the two languages, and we shall then have arrived at the utmost point that we can with certainty reach in the 'Iberian Question' (la Théorie ibérienne). We shall have before us enough to render extremely probable the hypothesis that in the Basque we recognize the last representative of a family of languages which had once dominated the entire Spanish Peninsula."

Upon the relationship of the old Aquitanian language to the Iberian and the Basque, M. Luchaire says: "The direct information furnished us by the ancient writers on the subject of the Aquitanian language amounts to very little. Cæsar simply

^{† &}quot;Les Origines linguistiques de l'Aquitaine," par A. Luchaire, Pau, 1877, from the "Bulletin de la Société des Sciences, Lettres, et Arts de Pau."

‡ "Pruefung der Untersuchungen ueber die Urbewohnes Hispaniens vermittelst der Waskischen Sprache," 1821. Humboldt worked out a theory already propounded by Hervas and Leibnitz.

states that the Aquitani were distinguished in their language from the Celtæ and the Belgæ. Strabo, more explicit, says that the language of the Aquitani differed completely from that of the Celts, and approached more nearly to that of the Iberes. But the resemblance between Aquitani and Iberes did not, according to him, end there, for it was also in their physical characteristics that these two peoples resembled each other, and were differentiated from the Celts." We here recall the fact that in the "Life of Agricola," ‡ Tacitus notes the resemblance which was observed by the Roman general, who had himself served in Spain, between the Silures of South Wales and the Iberi, so that, following Strabo, the Aquitani would also have resembled the curly-haired, swarthy, long-headed, plucky little Welshmen.

"To these positive assertions of Cæsar and Strabo may be added, firstly, that certain customs, such as the devotio, or bond by which certain warriors called soldurii pledged themselves to serve their chief in life and death, were common to the Iberes and the Aquitani; secondly, that the two peoples lived on terms of intimacy, and made common cause against the Romans; thirdly, that in primitive times the name 'Iberia' was extended to the Aquitanian country," and, fourthly, that Iberes were dwelling, as we have seen, next to the Ligures, in what was afterwards Gallic territory. facts M. Luchaire infers, "that the Aquitani were linked to the Iberes of Spain by a bond of real relationship, and that their language was either an important dialect of the Iberian, or an idiôme related to it, and consequently that the Aquitanian language itself belonged also to that family of language which is represented at present by the Basque"—the last survivor of a primitive stock which once covered we know not how much ground in Western The great caution which is observable in all that M. Luchaire has written on this subject only permits him to admit that the evidence he has so far adduced from the ancient writers furnishes only a presumption in favor of a thesis, and not actual proof, and he therefore produces in evidence certain nouns-substantive supposed to have belonged to the language of

[†] See Cæs., "De B. Gall.," i. 1; Strabo, "Geog.," iv. 2; Pliny, iv. 31 and 33; Pomp., "Mela," iii. 2; Amm., "Marc.," xv. 29.

‡ "Vit. Agrie.," ii.

§ Plutarch, "Sartorius," 14.

Mommsen, "Hist. Rom." (French translation by M. Alexandre), vol. v. p. 168; vol. vii.

pp. 8, 9, 63.

Aguitaine, as well as proper names on coins and in inscriptions. With regard to the majority of the words, he regards them as Celtic † in form, in use among the Bituriges at Bordeaux, and the Volcæ Tectosages at Toulouse. The names, too, of the kings of the Sotiates I on coins seem to be Celtic. With respect to those in the inscriptions, however, M. Luchaire finds many which he does not hesitate to attribute to the Aquitanian language. Some of the names of the gods \ have "an incontestably Basque character." Certain names of men and women, of which he gives a list, can, with great probability of truth, be explained by the Basque These are sometimes comparable to proper names actually in use in the districts in which the Eskuara is spoken; sometimes, too, with the names of Pyrenean seigneurs found in medieval documents, which do not appear to be either Celtic, Germanic, or Roman.

From the Straits of Gibraltar to the Garonne is a large slice out of the map of Western Europe, and yet throughout this entire stretch of country we have reason for thinking that one race and one stock of languages, now only found in survival in the Pyrenees, once prevailed. Did this race and this form of speech ever reach further north, into Brittany, into the British Isles? Of the primitive people and language of Brittany we know nothing, except that there are clustered an immense number of those megalithic remains which are common to the whole Atlantic coast. In the British Isles we have one primitive people at least, seemingly the survivors from Neolithic times, namely the Silures, who are specially selected by so competent a witness as Agricola as worthy of mention in respect to the likeness they bore to the Iberes. With the Silures, the evidence on the subject of nigrescence would lead us to class the dark short race of Western Ireland, a country filled with dolmens, and perpetuating a whole system, as we may call it, of folk-lore and superstition which even in detail reproduces precisely that which still survives in the mountains of the Pyrenees. Can we fail to feel impelled to the conclusion that the northern boundaries of the Aquitani were by no means the limit

[†] See "Ueber die Marcellischen Formein," J. Grimm, 1855; The prescriptions of the doctor Marcellus contain words in which the combinations gr, cr, scr, occur, admissible in Celtic, not in Eskuara. See also Virgil the Grammarian quoted in "Ethnogénie Gauloise, Glossaire Gauloise," by Roget de Belloguet (Paris, 1872), pp. 416, et seqq.

‡ "Révue Numismátique," 1851, p. 11.

§ Roschach, "Catalogue des antiquités et des objects d'art du musée de Toulouse," 1865; Roget de Belloguet, op. cit.; A. du Mége, "Archéol. pyrenn.;" Sansas, "Congrès scientifique de Bordeaux," 1861, vol. iv. p. 176.

in prehistoric times of this non-Aryan, pre-Aryan stock, but that it extended yet further northward, so as to include North-Western France, and portions of the British Isles, and possibly has left traces of its presence also wherever in Sweden, or Denmark, or Germany, or Holland, the long-headed short race is found in connection with the dolmens—where, that is to say, the gång-grifter, the hinebedden, the giants' graves, are the names by which the people of those northern lands know monuments which are to all intents and purposes, and very frequently in minute details of construction, identical with the antas, the galerías, the grottes des fées, and the tombes des géants of the Iberian peninsula, the northern valleys of the Pyrenees, and, as we shall see, the islands of the Mediterranean respectively?

There is a theory which would answer this question, and account for the parallel phenomena which archæology presents. I propound it with hesitation and deference. It is this:—

While still in their Neolithic epoch, and commencing to erect their elongated dolmens in place of the caves which, whether natural or artificial, they had previously employed for the burial of their dead and the rites connected with sepulture, the dolichocephalic inhabitants of France and Spain found themselves pressed westward by an immigration into their country of a brachycephalic race coming from the east and north-east of Europe. If such were the case, traces of the later stages of the progress of the incomers may have reached us from the earliest historic period in the traditions of conflicts between the Ligures and the Iberes, whether in France or Spain. The Iberes, a darkhaired, swarthy people, were everywhere driven either into the Pyrenean mountains or towards the western ocean, where they held their own during a period in which the dolmen-building industry was principally developed among them. Being still hard pressed, as wave succeeded wave of brachycephalic intruders, each more powerful than that which went before, three courses were open to them: firstly, to stand their ground among the cliff and mountain fastnesses whither they had retreated; secondly, to go southward into Africa; thirdly, to go northward to the islands of Britain and the coasts of the Baltic. The place where they would naturally have adopted the first of those courses was the north-west promontory of Brittany, where, as if to bear out this theory, we find their remains thickly compressed into a

comparatively small area, and where those remains themselves show stages of development indicative of a lengthy occupation of the district by their builders. Had any of them adopted the second course, and passed into Africa either from the French or Spanish coast, the vast dolmen fields described by General Faidherbe and others would be memorials of their presence.

Had contingents of this population, again, gone north, some might well have occupied the nearest promontory—that is, the Land's End district—while others would have rounded it, and, passing up the Severne Sea, have placed their tombs on the coast, or pursued the rivers into Gloucestershire, where the Long Barrows occur. Ireland, till then perhaps uninhabited, would have offered to them her entire surface, of which, as the number of dolmens may testify, they would have availed themselves. Others, proceeding up the English Channel, may have left sparse traces of their presence in Somersetshire, Wiltshire, Berkshire, and Kent. The coast of Belgium was perhaps held by the hostile peoples, but Holland may have offered an open field, and, passing over the intermediate rivers, they might have reached the southern coast of the Baltic, where the Vistula marked the eastern limit of their march; again, northward, they extended themselves into Denmark and Sweden, where the Malar Lake was their limit, and where, in their hands, the implements of the Neolithic industry were brought to the zenith of their perfection as objects of art. The circumstance of the occurrence of the dolmens in greatest numbers on the west coast of Spain, on the west coast of France, on the west coast of Britain, and on the west coast of Ireland, gives countenance to this view, as does also the fact that it is in mountainous districts, and on rivers and arms of the sea, that they are most frequently met with. I do not mean that the dolmens are referable to any one migration, or to one period alone. Some may be the spontaneous creations of early settlers in the north, whom the desire of finding new habitations and no pressure from without induced to seek new abodes. Some, again, may be as late as the Bronze Age, or even later. A careful study of their several types might lead to speculation as to the point of departure of this or that form. For example, the Yr Ogof dolmen in Wales is so exactly similar in plan to the passage dolmens of Portugal, that a common place of origin might well be supposed. The wedge-shaped dolmens of Ireland, again, are so similar to monuments found in Sweden and North Germany, that the same might be said of them. But there is no necessity to suppose that these several varieties broke away from a parent stock at one and the same time. On the contrary, the inference is that long periods elapsed between the several migrations.

In any case, the S.W. of Europe would have been the starting-point for such departures, and this, be it remembered, was the cradle-land of the dolichocephali of the West. Here, in the "Reindeer Period," dwelt the man of the Cro-Magnon cave, with his cephalic index of 73°34, and whose skull M. Broca compares with that of the Guanches of the Canary Isles. Here, in the Neolithic Age, dwelt the denizen of the Caverne de l'Homme Mort, whose skull may be compared with those of the Spanish Basques, of the Berbers of North Africa, and of the Corsicans.

In the dolmen-bearing districts of the upper tributaries of the Garonne, we find that the distribution of these structures in the Department of Lot reaches the highest Breton average for one province, namely 500. Thence, passing to the north-west, the dolmen-belt reaches the Loire and its tributaries, the banks of each and all of which are plentifully strewn with them, as far east as Loiret. In Brittany, however, the average is far the greatest,

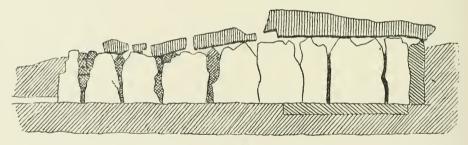


Fig. 528.—Sectional plan of the allie converte at Mané-Lud. After Bertrand, "Dict. Archéol." Scale 10 millimétres = 1 métre.

if we take together the three coast provinces of Morbihan, Finisterre, and Côtes du Nord, which contain respectively 500, 500, and 89, according to a computation of them taken in 1875.

Here the long dolmen, buried in its mound, identical with the Long Barrow of Britain, the Langdyss of Denmark, and the covered Galería of Spain, is represented in many excellent examples. At Kerlescant, in 1867, the Rev. W. C. Lukis† examined a mound

^{† &}quot;Jour. Archæol. Assoc.," vol. xxiv. p. 40.

measuring about 130 feet long by 50 feet broad, the ends of which were rounded off. Extending along the central line he found a passage-vault 52 feet long by 5 feet wide. It was divided into two compartments by two flags set up on edge, from the inner edges of which semicircular pieces had been broken out, so that they formed together an ovately circular slit or aperture, which has its exact counterpart at Rodmarton in Britain, in the dolmen of Des Maudits near Mantes, in that



FIG. 529.—Section of the chambered tumulus of Gavr Inis. After Bertrand.

at Dilar in Andalucía, and elsewhere. In the interior of the dolmen, Mr. Lukis found, among the débris, an immense quantity of broken pottery, some of fine quality, and among the rest a cup with a handle very closely similar to one found by myself in a barrow at Denver in Cornwall.† To the deeply entombed dolmens of Brittany belong those at Mané Lud (Figs. 419, 528, 529), Kercado (Fig. 418), Locmariaker, and Gavr Inis.‡ With these are to be compared that at Bougon in the Department of Deux Sèvres, where the vault measured 7:48 m. E. and W., by 5:10 m. N. and S.; § that at Equilaz, near Albeniz, in the jurisdiction of Salvatierra, in the country of the Spanish Basques; that at Ubi in Zeeland, etc. The grandest monument of this class in existence is that at Antequera in Andalucía, which we shall notice later on.

Of the *allée couverte* at Mané-Lud I have already given a ground-plan (Fig. 419) for comparison with other elongated dolmens. From a section which is here added, it will be seen that the structure of the roof is that of the dolmen, and not of the chamber (Fig. 528).

To this I add a section of the Gavr Inis tumulus (Fig. 529), the structure in which would have been a counterpart of that at New Grange, had the latter stopped short at the point where the

[†] Now in the Brit. Museum.
‡ Bertrand, "Dict. Archéol.," in voce (Fig. 417).
§ "Monuments du Poitou, Mus. de Niort," Soc. Statist., vols. v. and viii. See also "Seminario Pintoresco Español," 1850–1851, p. 393; also Chas. Arnaud, in "Dict. Archéol."

| "Sem. Pintoresco Esp.," 1846, p. 406.

beehive-roofed chamber begins.† Of the carvings on the stones in the Gavr Inis structure I append also six examples from Bertrand, for comparison with those at New Grange, Dowth,







FIG. 530.—Sculptured stones in the chambered tumulus at Gavr Inis.

From Bertrand's "Dict. Archéol."







Fig. 531.—Sculptured stones in the chambered tumulus at Gavr Inis.

From Bertrand's "Dict. Archeol."

Loughcrew, Annan Street (Scotland), and with decorative designs displayed on pottery and metal.

To these I add a sculptured stone (Fig. 535) from the tumulus



Fig. 532.—Vessel from Bohemia. From Waring.



Fig. 533.—On an urn from Italy.
From Waring.



Fig. 534.—On an urn from Germany.

From Waring.

of Renougat (Finisterre), the marks on which may be compared

with those on the Horseman's Stone at Clonmacnoise, and with others upon a rock in Galicia, figured by Signor Murguia.† I here insert also the covering-stone of a cist at Tréogat (also in

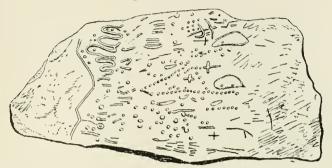


Fig. 535.—Sculptured stone from the tumulus of Renougat (Finisterre); length 2.95 m. From "Mat. pour l'Hist. de l'Homme."

Finisterre), traversed by cavities of peculiar form (Fig. 536), very similar to those found on the tops of dolmens in Ireland, Palestine, Corsica, Spain, and elsewhere. Two dolmen slabs in the same district (Fig. 546) also deserve notice.

With the peculiar concentric semicircles or arches in the Gavr

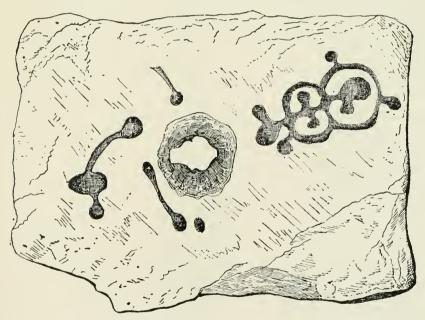


Fig. 536.—Covering-stone of a cist at Tréogat (Finisterre)—an urn with ashes was in the cist. From "Mat. pour l'Hist. de l'Homme."

Inis sculptures, found also at Loughcrew and New Grange, we are inclined to compare similar devices upon pottery found in

Germany, Bohemia, Italy and Greece (Figs. 532, 533, 534, 558, 559). With the herring-bone pattern at Gavr Inis we may



Fig. 537.—Gold cap. From O'Connor's preface to "Keating's History," 1723, p. v. †



Fig. 538.—Terra cotta bottle from Assyria, in Brit. Mus. After Waring.



Fig. 539.—From Speyer. From Lindensmidt.



Fig. 540.—From Corinth. From Lindensmidt.



Fig. 541.—From Poitiers.

From Thom's notes to transl. of Worsaac's "Prim. Antiquities."

[†] Found in a bog, at a depth of ten feet, on the top of a hill called Barnanely, or the Devil's Bit, Co. Tipperary; weight about 5 oz.

compare that on bronze celts in Ireland, of which I adduce two examples (Figs. 545, 547). Concentric circles, chevrons, and herring-bone patterns occur on Assyrian vessels (Fig. 538).

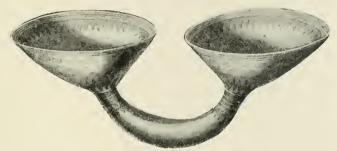


Fig. 542.—In the Museum, Trin. Coll. Dublin. No particulars as to locality where it was found; weight, 33 ozs.; length, $8\frac{3}{3}$ ins.

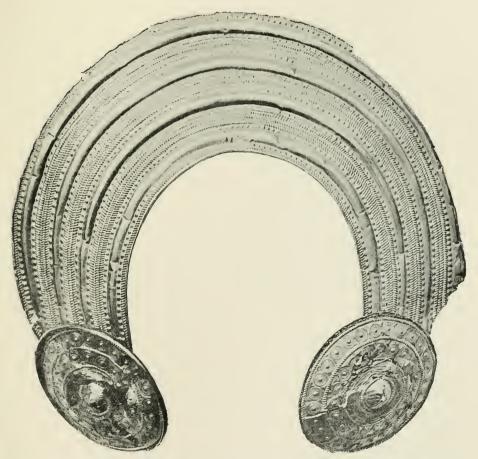


FIG. 543.—Gold ornament in Mus. R.I.A.; found in 1836, lying on the gravel 4 feet deep in a turf bog in the Townland of Burrisnoe on the E. side of Bendubh Mountain, Co. Tipperary. Diameter (out to out), 10½ ins.; weight, 4 ozs. 6 dwts. 2 grs.

An urn from a sepulchral chamber at Danesfort in the county VOL. II.

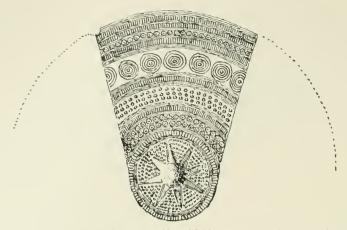


Fig. 544.—Example of decoration on a golden shield. From a tomb at Jægersberg; in the Museum at Copenhagen; one-fourth of the size.

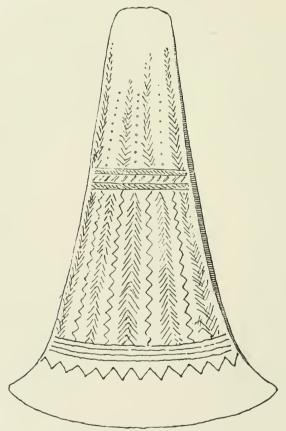


FIG. 545.—Bronze celt (Ireland). From the collection of Mr. 7'. Hewitt, of Cork. From Windele's MS. "Archwongia," p. 407.

of Kilkenny (Fig. 548) repeats the features of the concentric semicircle and the herring-bone, as does also, in regard to the herring-bone, a handsome little vessel from Ballywillan in Antrim. The cover is a feature of German and Danish sepulchral vessels, on which the herring-bone type of decoration also appears. For comparison with some of the designs at Loughcrew I give an illustration of a very remarkable piece of pottery found at La



FIG. 546.—On slabs in dolmens in Finisterre. From "Mat. pour l'Hist. de l'Homme," 1881, p. 265.

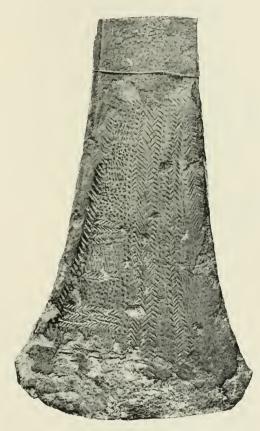


FIG. 547.—Bronze celt in the Mus. of the R.I.A.

Tourelle (Fig. 553) in Brittany. It belongs to a type usually called Gaulish by French archæologists, and is referable to a survival of type into the Iron Age.

In order to instance the wide diffusion of the concentric circle ornamentation on gold objects, I give seven examples—three from Ireland (Figs. 537, 542, 543), one from near Copenhagen (Fig. 544),† one from Poitiers (Fig. 541), one from Speyer

[†] See also Mestorf, "Alt. Schleswig-Holstein," pls. 32, 33; Worsaae, "Nord. Oldsager," pp. 61, 62, etc.

(Fig. 539), and one from Corinth (Fig. 540) respectively. In point of decoration the three latter are marvellously alike.

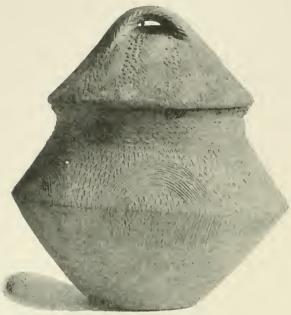


FIG. 548.—Urn from Danesfort, in Mus. R.I.A. Height of cover, 2½ ins.; total height of urn and cover, 5¾ ins.; greatest diameter, 7½ ins.; diameter at base, 3 ins.



Fig. 549.—Urn from Ballywillan. Height of the upper urn, forming the cover, 3\s^2 ins.; height of lower urn, 4 ins.; together, 7\s^2 ins.† From a photograph by Mr. G. Coffey.



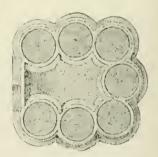


Fig. 550.—Urn from North-Italy (\frac{1}{2}\) size), apparently the model of a temple possibly raised on piles, the outer walls richly decorated with spirals such as those found at Mycenæ, and elsewhere in Greece and Asia Minor.

It can be shown that much of the Irish pottery, both in form and ornament, was copied from vessels in gold and bronze, found

[†] For urns with similar decoration to that on the cover of this one, see Worsaae, "Nordiske Oldsager," p. 19, fig. 95; also Mestorf, "Vorgeschicht. Alterthüm. Schleswig-Holstein," pl. xvii. fig. 145. For covers see Mestorf, "Urnenfriedhöfe," pl. ii. fig. 6; pl. iii. figs. 1 and 2; also Lissauer, for West Prussian examples.

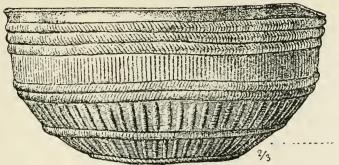


Fig. 551.—Golden bowl from Schleswig-Holstein, † Mestorf.



Fig. 552.—Urn from Bishop's Cairn, Glenwherry, Co. Antrim; height, 4 ins. From a photograph by Mr. G. Coffey.



Fig. 553.—From a subterranean chamber at La Tourelle, Finisterre.

[†] Found with bronze knife, with horse's head for hilt, and many other objects, in a grave with broken pottery and burnt remains, at Gönnebek; now in the Kiel Museum.

in Sweden and Denmark. Fig. 552 is a common type of Irish bowl-shaped vessels. The decoration is to be compared with the gold bowl from Gönnebek (Fig. 551).

As an illustration of the treatment of spirals for comparison with those at New Grange, I cannot do better than adduce the very remarkable little urn from North Italy (Fig. 550). I add also sixteen designs from vases from Greece, upon which are found almost every type represented in the sculptures of Brittany and Ireland (pp. 624, 625).

The class of dolmen, so common in Ireland, which had but a slight covering, is also represented in Brittany. A fine example of it is that of Krukenno. The side pillar-stones are four in number on the W. side, and five on the E., but in the latter case the passage expands into a squarish vault having two side-stones,

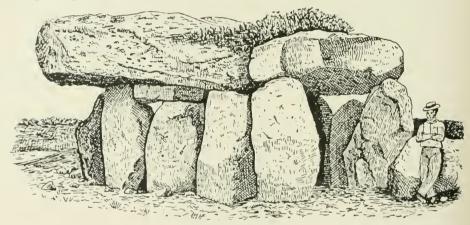
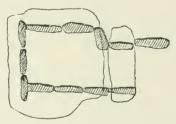


Fig. 554.—Dolmen of Krukenno at Plouharnel. Etched after Mortille.. †

and three end-stones. The passage is open to the S.S.E., and the length of the interior 25 feet. It is covered over by two roofing-



stones, of which that at the N.N.W. end is by far the largest. This description, as will be seen, tallies precisely with many typical Irish examples, and is represented at Drenthe. The entrance, however, as in the Irish dolmens, is from the end, and not the side.

Fig. 555.—Plan of the Dolmen de Krukenno; the opening faces S.S.E. Finisterre," mentions several in that district, of this unmounded type. On the extreme point of the

^{† &}quot;Musée Préhistorique," plates lvi. and lviii.

promontory near Plouneour Trez are two dolmens, the one 14 feet long and 7 feet high; the other 20 feet long and 5 feet high. Near Kerroch is one 34 feet long and 15 feet broad, called the "Dancing Maidens."

In the Channel Islands are some interesting dolmens. They have been well illustrated by Captain Oliver in the "Quarterly Journal of Science," especially those at Ancresse. The examples bearing the names "Autel des Vardes," "Autel du Grand Sarrazin," † and "Creux des Fées" are excellent specimens of the type known



Fig. 556.—The "Trepied" on Catioroc. After Lukis.

in Ireland as Giants' Graves, each covered by five or six roofingstones. Among those of the Channel Isles is that of Catioroc, in Guernsey,‡ which is of the type of which we have last spoken, two cap-stones being in place, and covering a long area flanked with stones on edge. With respect to the spot where this dolmen

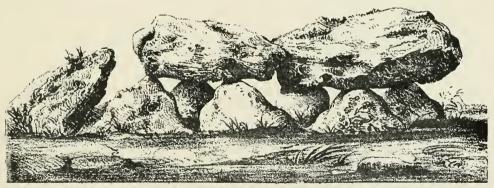


Fig. 557.—Dolmen at Epônes. From Cassan.

stands, a superstition prevails that it is haunted by night, at which time the natives will not approach it. Strabo mentions a similar superstition attaching to Cape Saint Vincent, where stones piled

[†] Mine refuse in Cornwall is called popularly atal Sarasin, a term which has been misinterpreted "Jews (i.e. Saracens") refuse." The term, however, is found also in Belgium, where the name for scoriæ of iron found at the village of St. Denis is Crayats de Sarrasins, Sarrasins being mine fairies. "Bull. de l'Acad. de Bruxelles," xv. pt. 2, p. 195; see also Grimm, "Teut. Myth."
‡ See Lukis, "Prim. Ant. of Channel Islands," Arch. Journ., vol. i. p. 222.

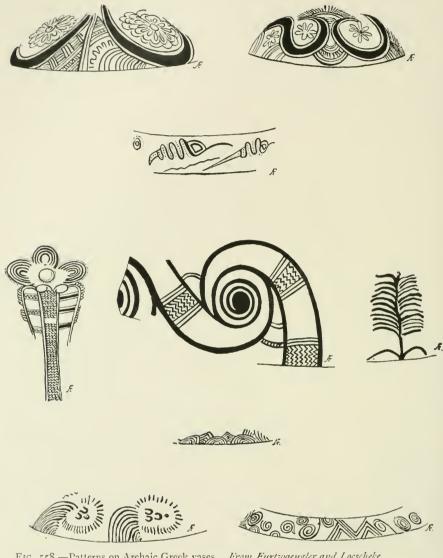


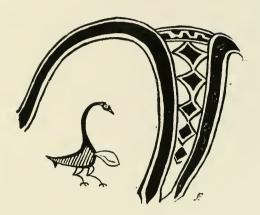
Fig. 558.—Patterns on Archaic Greek vases. From Furtwaengler and Loescheke.

The three at top are from Attika (Spata), as are also the middle one on the left, the one below the central one, and the lower one on the right. The central figure is from Mycenæ, and the one to the right of it from Athens. The one in the lower left corner is from Cyprus. These and those on the opposite page are given for comparison with the rock-sculpturings at Newgrange, Dowth, Loughcrew, Gavr-Inis in Brittany, and (as in the case of the central one on this page) with some of the engravings on gold ornaments.

Some are referable to the lotus conventionalized (e.g. the middle one on the left).











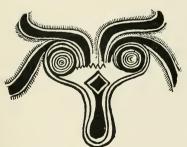




Fig. 559.—Patterns on Archaic Greek vases. From Furtwaengler and Loescheke.

The four on the left are from Attika (Spata); the three on the right from Boeotia (that at the top), and the two others from Mycenæ.

on others were turned by devotees. Circles in the Pyrenees were, as we have seen, haunted by night, and Mount Gabriel, in Cork, was similarly dreaded, as the abode after dark of a lower order of angels who had become demons, so that none would cross that mountain by night.

Another dolmen, which, as will be seen by the accompanying



Fig. 560.—Dolmen de la Justice, at Presles (Oise). From Mortillet.

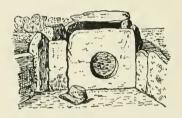


Fig. 561.—Dolmen at Constans-Sainte-Honorine (Seine et Oise). From Mortillet.

copy of a rough engraving, closely resembles some of the Cork examples, is that of Epônes near Mantes. Six supports, each about 0.60 m. high, support two roofing-stones, measuring together 4.5 m. long, and 12.43 m. in circumference. Near it is a second dolmen.†

In a little work entitled "Nouveaux documents Archéologiques,"



Fig. 562.—Rodmarton (Gloucestershire).
From Lyons and Mortillet.

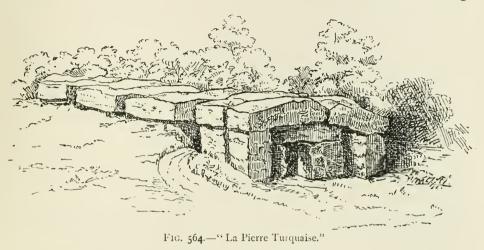


Fig. 563.—Dolmen de Gramont (Hérault). From a photograph by M. Cartaillac; Mortillet.

by M. L. De Maule-Pl. (Paris, 1872), there is a curious account, accompanied by two elevations, of a dolmen discovered in 1868 at Des Maudits near Mantes. It is described as measuring 16½ "coudées" in length, or 17 if the overlapping stone which formed the roof of the portico be taken into account. At the end remote from this portico the structure extended under the soil, terminating in a natural cave. Two pillars, which the writer calls the "antes," supported a great freestone, 7 "coudées" long, and 1½ thick, at a height of 3 "coudées" above the ground. The end of

[†] M. Armand Cassan, "Stat. de l'arrondissement de Mantes" (1833), p. 209.

the structure within and between these pillars presents a remarkable appearance. There appears to be a hole, or creep, into the cell within, on a level with the ground, at the base of the closing and terminal stone, above which is one of those slits, or foramina, which we have noticed at Kerlescant in Brittany, and at Aveling



and Rodmarton in Gloucestershire (Fig. 562), and to which we may here add examples from the dolmens of Constans-Sainte-Honorine

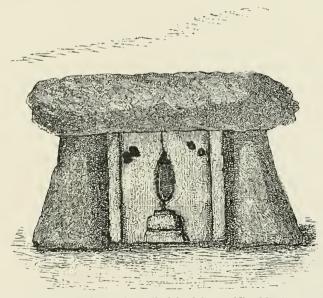


Fig. 565.—Entrance portico or "antæ" of the dolmen of Des Maudits near Mantes.

From Maute-Pl.

(Seine et Oise) (Fig. 561), the dolmen de la Justice at Presles

(Oise) (Fig. 560), and the dolmen de Gramont (Hérault) (Fig. 563).† In the latter the cavity is at the base of the supporting-stone. The dolmen of Des Maudits was formed of slabs of chalk, and paved within. Skulls found in it were dolichocephalic, and with them were polished stone axes, the antlers of a deer perforated, and a bronze arrow-point of a form found in Spain.

Unmounded dolmens are met with in many parts of France. M. H. d'Arbois de Jubainville has furnished descriptions and illustrations of types in the Valleys of the Seine and the Orvin, the former of which (Fig. 570A) recalls the common type in Cork

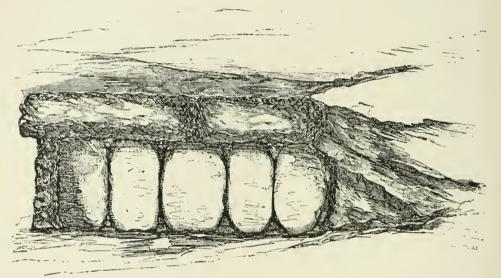


Fig. 566.—The dolmen of Des Maudits, terminating in a natural cave, near Mantes. From Maule-Pl.

and Kerry, while the latter (Fig. 570B) reminds us of examples in Clare.§ M. Gailhabaud | has figured several which in point of size and symmetry may be said to vie with that of Antequera in Spain. That at Mettray near Tours (Fig. 569) is a fine example, composed of twelve slabs, three on either side, two at one end, and one at the other. Three blocks form the roof, the centre one

[†] See ground-plan of this compared to that of an Irish Christian leaba, infra, p. 637.

‡ Spectanti mihi foramina hujusmodi tam in Britanniâ quam in Galliâ, Hispaniâ, Scaniâ, Caucasiâ, Palestinâ, Indiâ, reperta, venit non raro in mentem an simulacra essent vaginæ Matris Terræ quam coram vel potius intus, id est, quasi in utero Deæ Matris, supplices, prostrati inter disjecta procerum membra, facere aut vota reddere aut responsa petere soliti essent.—G.C.B.

The German tribes worshipped the Terra Mater under the name of Hertha. The rites of Saturn in Italy took place "sub effossâ humo." Those of the female death-goddess may well have been practised also in caves and tombs. To this cause may be due the presence of the image of a female in the cave-tombs of the Marne and elsewhere. Above all, this would explain the singular tradition about a dolmen at Drenthe mentioned in a note at p. 555.

§ "Rev. Archéol." 1859, p. 427, and pl. 368.

["Architecture Anc. et Mod." vol. ii. pls. 7 and 8.

of which is about double the thickness of either of the others, and of immense size and weight. Another specimen, much larger than

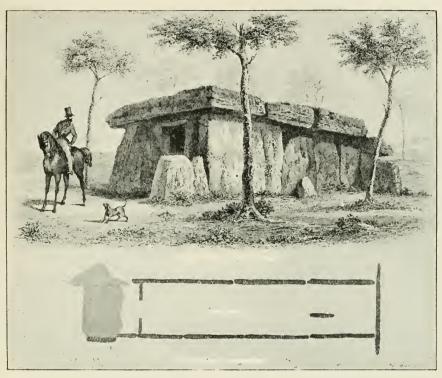


Fig. 567.—The "Grotte aux Fées" near Saumur. From Gailhabaud.



Fig. 568.—The Grotte d'Esse. From Gailhabaud.

this (Fig. 567), is at Saumur near Bagneux. It is composed of four stones on one side, and three on the other, which cover a

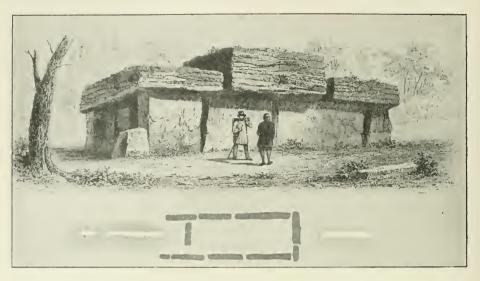


Fig. 569.—The "Grotte aux Fées," at Mettray, near Tours (see p. 628). From Gailhabaud.

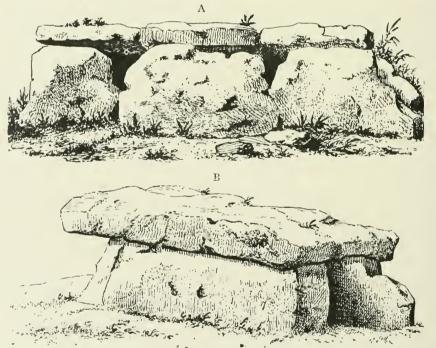


Fig. 570.—Dolmens of the Champagne ("Rev. Archéol.," 1859). A, in the valley of the Seine; B, in the valley of the Orvin (see p. 628).

length of 57 feet 6 ins., the breadth being 14 feet 4 ins. Another, at Essé (Fig. 568), is of still larger proportions, although the

stones forming it are not individually so great in size. It measures 61 feet long, by 12 feet broad at the narrower end, where the entrance is, increasing in breadth (as do the wedge-shaped examples of Ireland, Sweden, Drenthe, Germany, and, as we shall see, the Jordan) to 14 feet at the inner end.

Perhaps the most interesting of all the French dolmens is that in the Department of Seine et Oise, called "La Pierre Turquaise" † (Figs. 564 and 573). It is roofed in by five stones, and two over the portico set pediment-wise, as if in imitation of the pediment

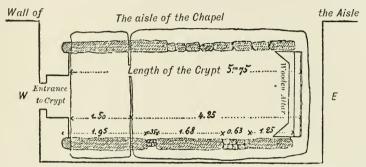


FIG. 571.—The dolmen of the Chapel of the Seven Saints near Plouaret, Côtes-du-Nord. From Cartailhac.

over the entrance of a classic temple. In ground-plan, too, it resembles ancient Greek shrines, as will presently be shown. The cap-stones measure from 3.50 m. to 4 m. across, and from 4 m. to I m. long, the total length of the covered structure being about 14'50 m.†

As then, if my view be right, France was the cradle-land of the dolmen builders, so, also, it was the country in which they brought these works to their greatest development, and in which, perhaps, also the veneration attaching to them lasted as long as anywhere, since Christian edifices were built on the tumuli in which they were concealed, as at Carnac, and, as in the case of the Chapel des Sept-Saints, near Plouaret, in the Department of Côtes-du-Nord, where the dolmen was actually used as a crypt to the Christian church (Fig. 571).

SPAIN AND PORTUGAL.

From France we pass into the Iberian Peninsula, § and proceed to extend our comparative analysis to the southern

[†] See ground-plan of this compared to that of a Greek temple, infra, p. 639.
‡ "Mat. pour l'Hist. de l'Homme" (1868), p. 162.
§ The works to which I am principally indebted for the summary here given of the prehistoric monuments of the Peninsula are the following: "Antigüedades Prehistóricas de Andalucía," Madrid, 1868, by Signor Manuel de Góngora y Martinez; "Descripção de alguns dolmins ou antas de

valleys of the Pyrenees, and to Spain and Portugal in general. A few years ago, the materials for our purpose, as far as Spain was concerned, would have been far to seek. Some little has. however, been done of late years to remedy this, but what is still required is a searching archæological survey, undertaken on a uniform system, by resident antiquaries, many of whom, in the papers they have contributed to local journals, have already shown themselves well qualified for such a task. There are districts in eastern Spain now supposed to be utterly destitute of megalithic remains, with regard to which such a sweeping negative assertion as that they do not exist, carries little weight, unless we know that they have been thoroughly explored by those possessing the necessary qualifications. As a proof of what might result from such an investigation, it was held, until a short while since, that not a single dolmen existed on the east coast of Spain, including the south-eastern valleys of the Pyrenees, whereas the information collected in the "Revista de Ciencias Historicas," published at Barcelona, under the able editorship of Signor Sanpere y Miguel, has added the provinces both of Barcelona and Gerona to the dolmen-bearing districts of Europe.

The distribution of the dolmens in the Peninsula follows the same rule observed elsewhere. They belong, that is to say, to the sea-coast, thinning out as they reach the interior. This holds true of three sides of the Peninsula, the N.W. and W., and the S. The eastern side affords an exception, since, from the Province of Barcelona southward, not a single dolmen has been noticed until the borders of Andalucía are reached. It is true, as we have

Portugal," Lisbon, 1868, by Signor F. A. Pereira de Costa; "Introducção á Archeologia da Peninsula Iberica, Parte primeira,—Antigüedades Prehistóricas, Lisbon, 1878," by Signor A. F. Simoës; "Revista de Ciencias Historicas, Contribution al estudio de los monumentos megalíticos ibéricos," vol. ii. 1881, p. 434. et seqq., edit. Signor Sanpere y Miguel; the works of Signor F. Martins Sarmento (styled, and rightly, the Schliemann of his country, on account of his memorable exploration of the citanias of the Minho), including an account of an archeological expedition to the Serra da Estrella in 1881, and also his "Os Argonautos," Oporto, 1887, and his "Os Lusitanos;" Les Ages Préhistoriques de l'Espagne et du Portugal," by M. Emil Cartailhae, with preface by Quatrefages, Paris, 1886; also various brochures contained in the journals of the Scientific Societies, among which are the "Memoires de l'Academie Royale d'Histoire l'ortugueze;" "Boletim de Real Associação dos Archeologos Portuguezes;" "Museu español de Antigüedades;" "Congrès International d'Anthropologie et d'Archéologie Préhistoriques," Lisbon, 1880; also articles in periodicals, among which are the "Seminario Pintoresco Español;" the "Ilustracion Españiola y Americana:" the "Archivo Pittoresco;" the "Ilustracion Gallega y Asturiana," and others; lastly, the works of local antiquaries and historians, among which, for the interesting province of Galicia, may be mentioned, the "Historia de Galicia," by Signor Manuel Morguia; "Antigüedades de Galicia," by Signor Ramon Barros Sivelo; and "Antigüedades Prehistóricas y Célticas de Galicia, Lugo," 1873, by Signor Josè Villa-Amil y Castro. In regard to other provinces and towns, I might greatly amplify this list. It will be sufficient to mention Signor Gabriel Pereira's "Antas dos arredores de Evora," and the account of the monument at Antiquera, in a little work specially devoted to the subject by Signor Raphael Mitjana y Ardison.

said, that perhaps sufficiently careful observations have never been made here; but, even so, they must be of exceedingly rare occurrence, or they could not have failed to attract some notice.

We now turn to the classification of the monuments, the names they bear, and the folk-lore, if any, attaching to them. Signor Martinez de Padin, author of the first volume of a "History of Galicia," which he did not live to complete, divides the prehistoric monuments of that province into two classes—namely, castros,† and mamóas. He describes the former as artificial mounds, upwards of six varas (yards) high, their ground plan being circular or elliptical, and their diameter proportioned to their height. Two examples which he cites near Brandomil, in the Parish of Castrelo and Province of Coruña, are round tumuli, possessing a central vault or dolmen, which is exposed. The walls of this structure are formed of flat stones placed on their edges, in the form of a circle (a characteristic of Peninsula dolmens), and it is covered in by a large round stone, giving to the whole the appearance of a garita (sentry-box), the name by which they are popularly known.

The mambas are smaller tumuli, lower in elevation, and found in groups, in valleys or on mountain plateaux. The precise meaning of this word mamoa may be worth working out. In ancient charters the word frequently occurs, owing to the fact that in Spain, as elsewhere, tumuli and megaliths were found convenient landmarks for the boundaries of property. Signor Simoes gives us, from these sources, the forms mamóla, mamonela, mamula,‡ and they were also called mamúas, and mamunhas, the latter term especially belonging to Portugal. In Galicia, besides mamóas they were called modorras. Lexicographers, including Viterbo, and antiquaries, including Signor Simoes, consider that this word is derived from the Latin mamma, a teat, from their appearance. One, near the mines of Braçal in Beira, bears a longer name, mamalter. Signor Sarmento defines the "mamóa, mamóinha, or mamunha," as "the popular term for the mounds of earth which cover the sepulchres of the dead." Signor Pereira da Costa states that the name mamunhas was sometimes applied to the dolmen which the mound had covered, as in the case of

[†] These were also called cróas, a word which was thought to be connected with corona, from their circular form.

‡ Another name was colles manufacti.

examples at Mamalter, and at Carrazedo in Tras-os-Montes, where the vault had been denuded of its envelope. In the case of the latter of these, which stood on a level spot on the summit of an oblong elevation, he speaks of the structure as being formed of nine slabs of granite of various length, but of uniform height, which formed the facing of a circular excavation, the earth from which had been thrown up in a bank around it.

Signor Simoes tells us that some mamunhas are cenotaphs containing no dolmen nor sepulchral interment at all. They are regarded, however, popularly as sepulchral, and in many instances they have been found to contain cinerary urns. He remarks also that, while in Galicia free-standing dolmens are scarce, mamunhas are common; in Andalucía, on the contrary, where dolmens are numerous, he finds no mention of mamunhas; in Portugal, similarly, dolmens are very numerous, especially in Alemteyo, where no mamunhas appear; in the northern parts of that kingdom, however, where it borders on Galicia, they are met with again. Here we recognize the same parallel phenomena which meet us in Ireland, Sweden, and Germany-namely, the square cist formed of great flat slabs, buried in its tumulusthe hallkista or hügelgräber of the north, and the ruder and loftier dolmen, with its passage, as we shall presently see, answering to such examples as that of Yr Ogof † in Wales. Signor Simoes does not consider that all the dolmens in the Peninsula were covered over, and in proof of his contention he instances those at Tisnada and Pinheiro, which are built, like some of the Swedish examples, on mounds, not in them. I

To return to the name mamóa, there appears some reason for thinking that, granted that it signifies a breast, there may have been a significance in the term beyond and beside that of the appearance of the rounded hillocks—a meaning which, in the cultus of the dead, would have connected it with the great Earth-Mother, within whose breast all mortals after life will lie.

Mamu§ is the name by which modern Basques designate a

[†] p. 450, supra.

‡ In the case of some of the dolmens in the African province of Constantine, the interment was placed in the bottom of the vault, which was then filled up with earth to half its height, and a mound, raised around the structure to the same level outside, the effect being that the upper portion of the monument appeared like a perfect and uncovered dolmen standing on a tumulus, and not half buried in it, as was really the case. See the Magasin Pittoresque, 1864, pp. 79, 80: also "Rec. des notices et memoires de la Société Archéologique de la Prov. de Constantine, 1863."

§ See Van Eys, "Dict. Basque-français," in voc.

horrible mask which frightens children. It is not improbable, therefore, that under this name we have as a secondary meaning that of a discredited female pagan divinity. In a charter of the thirteenth century, a tumulus is called Memóa-Negra, "Black Memóa," or Mamua.†

This leads us to consider the meaning of the second name for these mounds, namely, modorra, which is a synonym for mamóa. As we shall presently see, the dolmens of the Peninsula were, just as in Ireland and at Drenthe, connected with the idea of a terrible female, an enchantress or witch. Now, as we learn from Cobarruvias,† it was an attribute of the Holgina, or Jorgina, the name (originally Vascon) for a witch, in the practice of her art to induce drowsiness or an enchanted sleep. This is exactly what modorra means.§ It is one of the few Iberian | words which Spanish has retained, and its occurrence as an equivalent of mamóa is therefore interesting, the two terms seeming to present to us the idea of the dark mothergoddess of earth and of death presiding over the mound in which her priestess, the witch, held the dead in their enchanted sleep. Other meanings of modorra strengthen this view. They are given by Pineda ¶ as "lethargy," "the dead of night," "the time we are asleep," "the period which immediately precedes the dawn."

In some ancient documents, according to Viterbo,†† the mambas are called areas. This word area enters into a very large number of names of places in the Peninsula. It became, indeed, almost the general term for boundary, as we find from Lachmann's "Gromatici Veteres." ‡ It had, however, as Ducange points out, its special meaning. It was a little building "square

[†] Signor Josê Caidas, "Archéol. préhist. dans la Prov. de Minho (Congrès int. d'Anth. et d'Arch."), Lisbon, 1880, p. 344.

† "Tesoro de la lengua Castellana," by Don. Sebastian de Cobarruvias Orozeo, Madrid, 1611, in voc. "Holgin," fol. 475: "holgina, parece ser lo mesmo que Jorgin, y Jorgina = Hechizero y Hechizera;" also in voc. Jorgina: "Jorgina, dizen ser nombre Vascongado y que vale tanto como la que haze adormecar, o quitar el sentido, cosa que puede acontecer, y que con intervencion del demonio ecken sueño profundo en los que ellas quieren para hazer mejor sus mal dades."

§ Pineda, "Dict." in voc.

§ See Luchaire, op. cit. supr.

¶ "Dict." in voc. mamóa.

†† "Dict." in voc. mamóa.

†† "Dict." in voc. mamóa.

†† Berlin, 1848: See also "Rei Agrariæ auctores legesque variæ, Wilhelmi Goesii, cum notis Rigaltii;" Amsterdam, 1674—"Glossæ Agrimensoriæ," by Nich. Rigaltius, in voc. arca., p. 292.

Also "De Agrorum conditionibus Hygeni Gromatici," Paris, 1554 (with illustration of an arca), p. 155. An arca, when it was not an ancient monument ready made on the spot, was constructed in the form of an uncovered cist or pound, a four-sided enclosure, built, however, of masonry, not of single slabs. In some cases the walls were built round a more ancient tomb. See Lachmann, ut supr., p. 364. Ducange (in voc.) says: Arcam representat (Hygenus) forma quadrata, atque intus cava, quemadmodum sunt arcæ, sive cistæ, unde et nomen inditum.

in shape, and hollow within, as cists are, and from this resemblance it derived its name." The picture of one, among the illustrations which accompany the Casæ Litterarum, looks like a small square-walled pound. In other places "aggeres terræ" are spoken of as areas, and the word is derived "ab arcendo," in the sense of bounding the estate.

In Galicia, and the north-eastern provinces bordering on

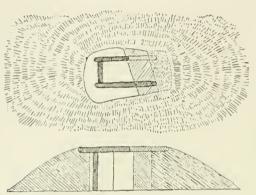


Fig. 572.—Arca de Padorno, Galicia. Plan and section by a single roofing-slab, and by Villa Amil y Castro.

the Pyrenees, the word area is applied to dolmens, and to tumuli containing the cist exposed. Signor Villa-Amil y Castro gives plans and sections of two examples in Galicia, which plainly show that the original monuments consisted of large cists formed of slabs about 4 feet 6 ins. in height, covered in by a single roofing-slab, and enclosed in a mound. These

were the true *arcas* in the original acceptation of the word—the ancient megalithic four-square flag tombs which served for the boundary points of property, and from the form of which

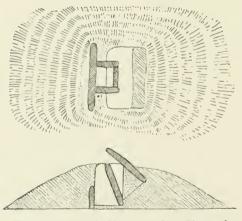


Fig. 573.—Arca de Sinas, Galicia. Plan and section by Villa Amil y Castro.

the square-walled enclosures were copied, in obedience to custom, in the Middle Ages. How numerous the prototypes must have been, when the lands were being parcelled out by monks and lawyers, is shown by the fact that their name became the term in general use for structural boundary-marks, as distinguished from natural ones, such as watercourses, mountains, and the littoral.

In the whole of the varied nomenclature of the dolmens of Europe there is no more interesting name than that which is applied to them in the Peninsula, and almost exclusively in Portugal, namely, antas. The anta is the dolmen in its uncovered state. Much has been written on the meaning of the term. Signor Martinho Mendouça-de-Pina, the first writer whose treatise on dolmens in Portugal was published,† thought the word belonged to "the language of ancient Portugal." Servius, in his "Commentary on Virgil," connects it, or, perhaps, rather confuses it with the term antes, signifying the buttress-stones in the walls of vineyards, at the end of each vine-row mentioned by the poet, and other classic authors.

Viterbo, who gives the plural form antas, as well as the singular anta, finds in it, with more reason, the Latin architectural term, used also in Portugal, for the high square columns which adorn the entrances to temples and palaces, or the great stones set up to mark the entrances to certain well-known estates, whence, he says, the word came metaphorically to signify the atria, or entrance-porticoes to such lands. In a separate paragraph this lexicographer gives for antas the synonym aras, altars, in which definition Moraes follows him, speaking of them as "ancient altars distributed along the roads to serve as landmarks."

M. Roulin‡ wrote a treatise on the definition of the word antas, in which he expresses his opinion that its occurrence in Portugal in connection with the dolmens is a proof of the great antiquity of those monuments in the Iberian Peninsula. He considers that the Romans, recognizing in these structures a likeness to their own miniature temples, applied to them the name antæ (which in the Romance idiom of Portugal would take the accusative form antas), and that, from having simply designated the pillars at the ends of the walls, or at the entrance, the term came in time to indicate the whole structure. Thus anta, he holds, when used in the singular, refers not to the supports of the dolmen only, but to the entire erection.

Basilius Faber, § correcting Servius as above quoted, says that antæ are square columns, guarding either side of an entrance or mouth, a definition which he derived from Festus, who says:—
"Antæ, i.e. pilæ sive columnæ lapideæ in lateribus ostiorum."

All these authorities agree in finding for the term a Latin origin, and, if they are right in this, the definition which ascribes

^{† &}quot;Memoires de l'Acad. Roy.," Lisbon, vol. xiv. (1733). ‡ "Memoires de l'Acad. des Sciences," Paris, 1869. § "Thesarus Latinus," in voc.

it to the likeness which the monuments bear to vestibules or porches is most plausible, since wherever dolmens occur the resemblance strikes us at once. I cannot too strongly express my acquiescence in the view of M. Roulin, which connects it with the antæ of the Roman temples. A dolmen, wherever found, is no mere tomb made to be closed for ever on the remains within, or buried in a tumulus without an approach being left to the central vault, or cell; it was a temple as surely and as truly as the

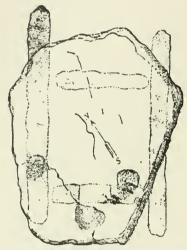


Fig. 574.—Ground-plan of the Dolmen de Gramont † (Hérault).

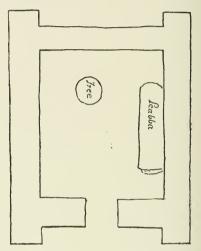
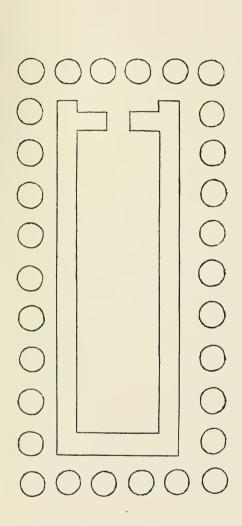


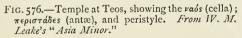
FIG. 575.—Ground-plan of the Leaba Mologa, Co. Cork, for comparison with dolmens with antæ. From ground-plan by J. Windele.

any of the cellæ memoriæ of pagans first and Christians afterwards. It either did contain the body, or was believed at all events to contain the spirit, of some person or persons who were dead, whether they had been merely famous as chieftains or priests, or whether (as in the case of the higher and more abstract cultus attained by classic civilization) they had attained divine honours. More than this, the plan of the dolmen in several districts was as nearly identical as possible with that of the classic shrines, plans of which we have in abundance, and which Vitruvius has left us instructions how to build in the approved conventional style, which had been handed down from ages out of mind. In Ireland it was identical also in form with the primitive leabas or Saints' Beds of the Christians, such as the Leaba Mologa. The latter were, in fact, pagan leabas built with masonry in place of vast slabs.

[†] The three blotches represent cavities sunk in the covering-slab. For an elevation of this dolmen, see p. 626. The plan is from "Mat. pour l'Hist. de l'Homme."

The classic shrine was to consist of two parts, an outer and an inner. The outer part was called the antæ (in Greek $\pi a \rho a \sigma \tau \acute{a} \delta \epsilon s$); the inner was called the cella (in Greek $\nu a \acute{o} s$). The antæ had a double signification; (a) portions of the side walls of the building brought out beyond the terminal wall of the inner





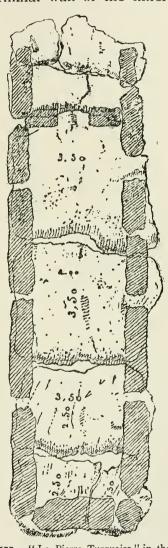


FIG. 577.—"La Pierre Turquaise" in the Depart, of Seine et Oise, for comparison with temples with anta. Mat. pour l'Hist. de l'Homme; see pp. 627, 631, supra.

part, in the centre of which was the doorway; (b) the area or space between these projections, that is to say, the *pronaos*, or portico. The *cella* was the actual shrine itself approached by the doorway in the inner terminal wall of the *anta*.

The simplest form, and the most ancient, of temples constructed in this manner, is probably that at Teos, a ground-plan of which is given by Mr. W. M. Leake, in his "Journal of a Tour in Asia Minor" (1824).† Here we have simply the four walls of the cella with a narrow doorway at the western end, and the two side walls extended in the same direction to form the anta, the entire structure surrounded by an oblong peristyle. In some cases, as in that of the temple at Priene, the side walls were extended at both ends, and there were two entrances. In this latter example, two free-standing pillars are inserted to support the roof of the portico between the projecting anta, and in the same line with them. The rules for the respective proportions of cella and anta given by Vitruvius in the case of one of these more elaborate shrines, held good, no doubt, in the simpler ones. For a temple "in antis" of the Doric order, the breadth should be half the length; five-eighths of the length should be occupied by the cella, including its front walls; the remaining three-eighths by the pronaos or portico; the anta should be of the same thickness as the columns; in the intercolumniations there should be a marble balustrade, or some other kind of railing with gates in it; if the breadth of this portico exceeded 40 feet, there should be another pair of columns behind those between the anta, etc.

The Greek temples generally faced west, but sometimes fronted a river, in which case the western aspect was not necessarily observed. The peristyle or range of pillars parallel with the walls, at the sides and ends, and supporting the overlapping portions of the roof, was a characteristic feature. In the $\nu\alpha\delta$ s of a Greek temple was a statue of the divinity; but that some shrines were regarded in their true light as tombs at which sacrifices were to be offered, vows made, and the dead supplicated and consulted by the pilgrims and devotees, is made plain by Pausanias, who speaks of the sacrifices made by the Thebans at the tombs of several heroes, as well as at those of the children of Ædipus, and at that of Pionis, one of the descendants of Hercules.‡

In the later days of the Roman Empire, the practice of constructing cellæ memoriæ, the direct successors of the cellæ of the earlier temples, became a recognized institution in connection with the cultus of the dead. Sometimes it was a

building large enough to contain those who came to celebrate an annual feast in honour of the deceased, who was buried either under or near it. Sometimes it was a little memorial chapel erected in the cemetery, in some cases large enough to hold those who came to pay their devotions to their dead relatives. In others it was a mere model in miniature of the more pretentious edifice, of which kind we find examples in the curious little structures carved out of single blocks of stone in the Musée de Lorraine at Nancy, and which measure only 2 feet to 2 feet 6 ins. long, by I foot to I foot 6 ins. broad, and I foot to 2 feet 6 ins. high.† The fabrica which, as late as the third and fourth century, Pope Fabricius was causing to be erected in cemeteries, though large enough perhaps to hold the body of a devotee, were doubtless genuine cella, and so too were those curious little buildings which are still to be seen in several of the graveyards around the sites of the earlier Irish churches, as at Clonniacnoise, for example. All were of sepulchral origin, and none were absolutely closed, but possessed at one end an aperture of some kind, through which it may be supposed the offerings to the dead were inserted. It is, however, not of the cellæ, but of the antæ, that, in connection with the Portuguese term, I have here to speak. To the former of these terms we will return when we come to consider the meaning of the word cille in Ireland.

In the districts in which they are found, there is a popular belief in the sacredness of the antæ. The Christians appear to have endeavoured to divert the veneration they attracted to their own behest, for upon several a cross has been carved, sometimes in simplest form, sometimes in that known as the Signum Vincentii. There appears to me to be every reason, then, to believe that this traditionary sacredness has been handed down from times when they were actually used as little temples of the dead, at the antæ of which the sacrificia mortuorum were performed, and that the name they bear may be taken as proof of the resemblance which those who first spoke the Romance language in Portugal saw in them to the well-known temple type of pagan and afterwards of Christian churches.

The word *anta*, besides designating individual dolmens, enters into several place-names, as, for example, Anta-de-Rioconejos in Gamora, Antas-de-Penalva, Antas-de-Penadono, and Santiago-

^{† &}quot;Ulster Journal of Archæology," vol. xvii. Sir Sam. Ferguson on Cills.

d'Antas in Portugal, where it is also a surname. In France, in the department of Calvados, a stream is called *Ante*, and a village in that of Deux Sévres was formerly called *Antæ.*†

I now proceed to notice in order the megalithic remains in the Peninsula according to their distribution, commencing with those in the provinces on the north-east, where until recently their presence was unrecognized by archæologists. To Signor Sanpere y Miquel‡ we are indebted for the knowledge of the existence of dolmens in no inconsiderable numbers, not only on the southern side of the eastern extremity of the Pyrenean range, but also at some distance from the mountains in the provinces of Lerida, Gerona, and Barcelona. One, near Pedro á Moyá in Lerida, he describes as formed by three rough supporting stones surmounted by a tabular rock, the surface of which has



Fig. 578.-Dolmen in the Vall Gorguina.

a depression in the centre. Another, in the same province, is constructed of three large slabs forming the sides and end of a chamber, covered by a single slab. This latter is called the Roca Encantada, i.e. "Enchanted Stone." In the Pla de Gibrella near Olot in Gerona many megalithic monuments occur. One dolmen, of which I gave an illustration, appears to be a fine specimen of the type of

those supported by "free-standing" columns. It is situated at the head of a gorge or glen called the Vall Gorguina, *i.e.* Vale of the Enchantress, Witch, or Hag—another instance of her association here, as in Ireland, and at Drenthe, with these monuments. It is formed of seven unhewn blocks bearing on their summits a slab 3.05 m. long by 2.46 m. broad.

Not far from this is the dolmen of Puig sas Llosas, so called from the little hill on which it stands in close proximity to a

[†] See "Descripçao de alguns dolmins," by F. A Pereira da Costa, p. 43, et seqq.; also Viterbo, Moraës, and Ducange.

‡ "Revista de Ciencias," vol. ii. 1881, p. 459, et seqq.

chapel dedicated to Saint Jorge, a circumstance to which Signor Sanpere points as worthy of notice because, he says, it is not the only instance in which the conjunction of Christian with megalithic monuments has been observed in Spain. The saint selected seems to have been the one of all others in the calendar whose name Jorge most nearly approached that of the Jorgin or Hag, who was probably the elder genius loci. From the drawing and description of this dolmen, it appears that it had retained its elongated form. The stones of which it was composed were of considerable size—one measuring 4.20 m. long by 1.70 m. high, and serving as one of the side slabs to an enclosed area 7 m. long. Of the roofing-stones which once covered it not one remained.

During a scientific excursion made in 1880 by the members of the Asociacion Catalanista in the Provinces of Gerona and Barcelona, Signor Conde de Belloch obtained descriptive notes of dolmens and other megalithic remains in those districts. Not far from

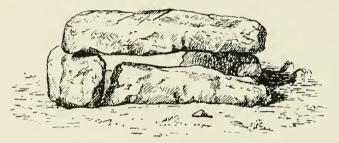


Fig. 579.—Dolmen at Villalba Saserra.

the town of Cardeden, at the extremity of the plain called Pla Marsell, and near the Roman road leading through Gerona from Tarragona into France, he found a ruined dolmen in the centre of a circle 29.86 m. in circumference, consisting of seven stones, some of which appeared to have been roughly worked. Another example in which the circle consisted of eleven stones, and measured 31 m. in circumference, occurred in the territory of Villalba Saserra, in the district of Aremys, parish of Colsabadell, and province of Barcelona. The dolmen consists of three stones on edge supporting a slab 2.30 m. long, by 1.47 m. broad, and 0.45 m. thick. As it stands, it is apparently of the long grave-shape type, like that of Pawton, in Cornwall,† and (in survival in a Christian burial-ground) that of Tumna in Roscommon. It is called the Pedra Arca, and is remarkable for the circumstance that it bears

[†] Borlase, "Nænia Cornubiæ," pp. 32, 33.

an inscription, the letters of which look like V>AI<. The practice of erecting stone-circles around dolmens is found to have existed also in Andalucía, and it recalls the passage in Aristotle's † *Politica*, where the Iberes are represented as setting up circles around tombs, the number of stones being proportionate to the number of enemies slain by the deceased hero there interred.

Near Espolla, on the outskirts of the Pyrenees, are several dolmens. One called *Cabana Arqueta* is described as having a covering-stone measuring 2.10 m. long, 1.60 m. broad, and

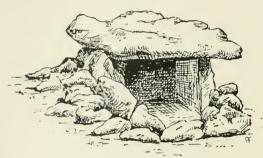


Fig. 580.—Dolmen near Espolla.

o'40 m. thick. At Gutina, in the same neighbourhood, is another having a covering-stone measuring 3 m. in diameter. Not far from these is the dolmen of the *Barranco*, i.e. "Glen." The vault measures 3 m. long by 2'10 m. broad, and is covered at the

inner end by a roofing-stone 2:30 m. broad. It is open at the other end, and seems to have been carried further in that direction. In this respect it may be compared in its present incomplete and ruined form to a very large number of dolmens in various parts of the world, as, for example, to the "Sepultura Grande" I in Andalucía, s to the dolmen at Alemtejo in Portugal, to those of Loughry (Tyrone) and Brenanstown (Dublin), in Ireland, ¶ to a Syrian example given by M. Chantre, †† and very many others. The upper surface of the roofing-stone is covered with scorings, among which is the name of a modern Iberian Stubbs, "ROCA, 1750," but among which also are some which may be genuinely ancient, since they are of the Greek ϕ type, a form of rock-marking almost as universally distributed in the Bronze and Iron Ages, as is that of the Svastika. Examples of the form occur on the one hand on a natural rock, at a place called the Cividade in Galicia, ## and on the other on the so-called Horseman's Stone, also a natural rock, near Clonmacnoise in Ireland. §§

[†] Edit. Firmin-Didot, Paris, 1874, vol. i. p. 603, l. 20.

‡ See Gongoray, Martinez, and Fergusson, R.S.M., pp. 385, 386.

§ Vide infra.

¶ "Ages préhist. de l'Espagne," p. 173.

† "Recherches dans le Caucase," vol. i. p. 61.

‡‡ "Hist. de Galicia," by Signor Murguia, vol. ii., pl. at end.

§§ "Trans. Kilk. Arch. Soc.," vol. v., New Ser. (1864-65), p. 354, et seqq. See pp. 695, 696, supra.

Near this dolmen is a fine menhir called *Murtra*, measuring 3.25 m. high, 1.30 m. broad, and 0.43 thick. Near Espolla, too, is the dolmen of *Puig de la devesa de Torrent*. In the case of this monument, as in that of the last, the side-stones of the vault are continued beyond the portion covered by the roofing-stone, which latter measures 3 m. long, by 2 m. broad. Doubtless here, also, the vault declined in height, and, perhaps, also became narrower towards the end at present uncovered.

There is a dolmen also in the beautiful valley of Arranyagats in the upper ridges of the mountains, and another in the same district, but at a lower level, the vault or cell of which measures 1.50 m. long. The latter bears the name of La Font de Roure, an instance by no means uncommon of the association of the idea of a spring-well with a dolmen, as we shall see in the case of Portuguese examples, and, to take an Irish instance, in that of the dolmen of Maul-na-holtora, in Kerry.†

A famous rocking-stone, as I must not omit to mention, measuring from 8 to 10 m. in length, and a purely natural phenomenon, is perched on the summit of one of the granite tors of Gerona. Rocks possessed of this characteristic were held in high veneration in the Peninsula, as they were in all dis-

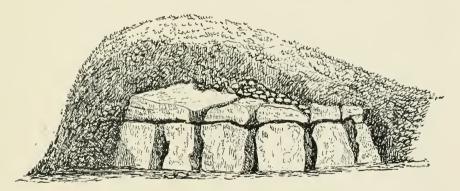


Fig. 581.—Section of the dolmen of Equilaz. After a drawing in the Seminario Pintoresco.

tricts where the *veneratio lapidum* formed a part of the cultusof the ancient pagan races. They happen to occur continually in the same districts in which dolmens are found.

Passing westward along the southern foot-hills of the Pyrenees, we will now extend our search for megalithic monuments to the Provincias Vascongades, or the Basque Provinces of Spain.

In 1833, Signor P. A. Zabala laid before the Academy of San Fernando an account of a remarkable sepulchral vault which had been discovered the year before at Eguilaz near Salvatierra, in the Province of Alava. An account of it, accompanied by a sectional illustration, is contained in the Seminario Pintoresco Español.† To the remarkable likeness it bears to examples in France, at Drenthe in Holland and elsewhere, I have already alluded. In the description, the vault and the passage leading to it—that is, the lower or eastern end of the structure—are treated separately. former, called the "tomb," measured 13 feet (Spanish) long by 15 feet broad. The slab which covered it was 19 feet long by 15 feet broad. The passage leading into it was 20 feet long, 4 feet broad, and 4 feet high. From these measurements we may take it that the whole structure measured 33 feet long, and expanded internally from 4 feet at the east end, to 15 feet at the western and higher extremity. When opened, the interior was found to contain human bones, and lance-heads of stone and bronze.

In the same communication Signor Zabala states that, at a place called Arreche, that is, in Basque, "Stone-House" (Casa de Piedra) was another monument of the same description. The popular name for this latter was Sorguineche, which, translated from Basque into Spanish, is equivalent to Casa de Brujas, that is to say, the Hag's or Witch's House, Sorguin here being the same as Jorguin, in the Eastern Pyrenees, and the exact equivalent of the Irish Cailleac, as in Leaba-na-Callighe (Labbacalle), near Fermoy, and "Calliagh Dirra's House," near Monasterboice, both of which monuments resemble structurally these Vascon examples as closely as can be.

In the dolmen at Arreche the construction was as follows: six stones were set up perpendicularly in a mound, in much the same rude fashion as at Eguilaz. Three of these measured 9 feet (Spanish) from the level of the ground, by 5 feet broad, and 2 feet thick. They supported a covering-stone of rudely circular form, 10 feet in diameter. The remaining three upright stones, though they helped to form the walls of the vault, did not support the roofing-stone. The vault itself was of circular form, and measured 6 feet in diameter.

This must certainly be the dolmen of which Signor Simoes

[†] For 1846-47, pp. 404-6.

gives a ground-plan and two sections, and which he places at Eguilaz-na-Chapada.† The structure is shown to be symmetrically formed, and the nine stones of the vault, which is rather oval than circular, are disposed in threes along the two longer sides, with one at the inner end, and two in the position of jambs, one on either side the entrance. The plan is singularly like that of the vault at Cloverhill (Sligo), some of the enclosing slabs of which were sculptured. At short distances to the S. and N. of this tumulus traces of others which had been destroyed were visible.

This is, perhaps, the same monument as that described as the dolmen of Arrizala, figured in "España los Monumentos y Artes," ‡

to which is also given the name Sorguineche. In the same work, Signor Becerro § mentions two mounds in this same district, each containing a dolmen. One of these was popularly known by the name of Eskalmendi, that is to say, the "Mound of the Basques." It was situated, so Signor Simoes states, above the river Zadorra, one league from Victoria, also in the Province of Alava, and was dis-

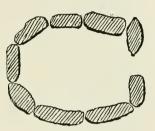


FIG. 582.—Plan of the chamber at Equilaz. From Simoes.

covered when the mill of Eskalmendi was repaired. It contained skeletons, arranged in three lines between rows of small flagstones, which reminds us of one of the modes of interment in the Marne caves.

The association of the name *Eskal* with one of these dolmenmounds shows that in the popular estimation they had been set up by the ancestors of the Basques. Signor Simoes notices the existence of another dolmen at Ocáriz, near Salvatierra.

In this same Province of Alava is a monument the accounts of which are so various that it is difficult to speak with certainty. Some writers, Signor José Amador de los Rios, for instance, regard it as raised by human hands, while others (who I think must be in the right) look upon it as purely natural. Be this as it may, the extraordinary situation in which it is found leaves no room for doubt that it was an object of great veneration to the stone-worshippers of ancient times. Signor Miguel Rodriguez

^{† &}quot;Introducçao," p. 92. † "Provincias Vascongadas," Barcelona, 1885, edit. by Signor Antonio Pirala, p. 51. § Id., p. 52. ¶ "Introducçao," p. 91. ¶ Id., p. 92.

Ferrer, in his work, "Los Vascongados," † speaks of it from personal observation. About twenty-five miles from Bilboa is the church of the hermitage of St. Miguel de Arrechiuaga. Within the nave of this, and covered by the fabric, stand three stupendous monoliths, grouped together in close proximity. The space they occupy is no less than 110 feet (Spanish) in circumference. The tallest measures 29 feet in height, the next 18 feet, and the shortest 14 feet. They rise pyramidally, and, in one account, are said to support each other. In one of the recesses formed by the gaps between their bases is placed the modern altar of

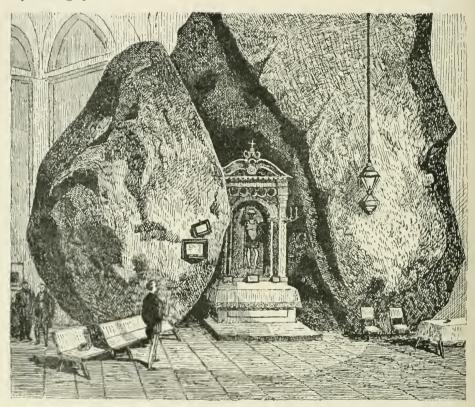


Fig. 583.—Interior of the Ermita de San Miguel de Arrechiuaga. Etched by the Author from an engraving.

St. Miguel, over which is a figure of the Archangel, in the costume (if we can trust the illustration) ‡ of a Roman soldier—his right arm raised and the hand holding a spear, and on his left arm a round shield.

[†] Madrid, 1873, p. 13 n.

‡ "La Ilustracion Españiola y Americana," 1877, No. II., pp. 27 and 37. The illustration given is exceedingly rough, and the upper portion of the plate is truncated, so that the tops of the rocks are not seen. Fergusson (R. S. Monuments, p. 388) gives a copy of it, with some variations, taken from Frank Leslie's Illustrated Newspaper.

This singular monument is in a country purely Basque, and that it was held sacred by the ancient Iberes there can be little doubt, since the Christians, not being able to destroy it, evidently appropriated it and the proceeds of the cultus attaching to it,—placing it, as was customary with all the rock and mountain deities of the pagans, under the protection of their own god of rocks and high places, St. Michael, and bidding the votaries transfer their adoration to him.

Having already spoken of the megalithic monuments of the French Basque Departments, we proceed to the Province of Navarre. Signor Manuel de Assas mentions the existence of menhirs here.† Near the town of Los Arcos are three. One is called the Piedra Hita, and measures 12 feet high. The other two, also of large size, are in the form of irregular cones, and face one another in a field. They are called by the people LasPiedras Mormas. The same writer, in his article entitled "Monumentos Celticos," quotes Signor Angel de los Rios for the statement, which I do not find confirmed elsewhere, that near Reinosa, in the province of Santander, are two menhirs, called respectively Peñona de Izara and La Peña-larga, in Fresno, the first of which is 60 feet (Spanish) high by 46 feet in circumference; the second 50 feet high, by 36 feet in circumference. In the accounts of these writers it is extremely difficult to discriminate between what is natural and what is artificial. It is certain, however, that many purely natural rocks commanded the veneration of the inhabitants, and that notices of them, therefore, are in place in any archæological conspectus, which, like the present, aims at comparing the folk-lore prevalent in the various countries of Western Europe, as well as the actual structural remains.

Signor de Assas describes, and figures an example of a class of pillar-stone which occurs notably in Ireland, namely, the "Holed-Stone." The example in question is called *La Piedra Horadada*, and is described as a rough pillar, pierced with one or more slits or holes, half a foot in diameter. The popular belief about such monuments is that the ancient people used them for healing wounds or long-standing complaints in their arms and legs. The drawing of one of them, which Signor de Assas appends, shows that the stone is not pierced through the centre, but through

an angle or corner of it. † In this respect it resembles exactly two holed stones which stand near the two "Churches of the Men and the Women" (Teampull-na-bhfear and Teampull-na-mban), on the Island of Inishmurray, off the Sligo coast, figured by Col. Wood-Martin.‡ They are sometimes called "Praying Stones," and that near the "Church of the Women" is still resorted to by women desiring a favourable confinement. The suppliants kneel at the stone, which is pierced through each of the angles of the front which faces them. They then "pass the thumbs into the front and their fingers into the side openings, thus gaining a firm grasp of the angles of the stone." Upon one of the stones, as shown by Col. Wood-Martin, a cross (of the form which in Portugal would be called the signum Vincentii) has been cut.



Fig. 584.—Megalithic chamber under the church of Santa Cruz de Cangas de Onis. From the Seminario Pintoresco.

There is a remarkable monument, mentioned by Signor Manuel de Assas, which he styles a dolmen complicado, or one of those popularly known by the name of Gruta de Las Hadas (Cave of the Fairies, Grotte des Fées), which was discovered in a cairn on which stood the little church of Santa Crus de Cangas de Onis, by the riverside near the splendid bridge for which that place is famous. | It consists of unhewn flags set on their edges, and covered in by others laid across them. The circular vault to which a passage leads is formed by seven upright stones slightly inclining inwards so as to give the structure a conical shape. It may be compared in its ground-plan with that at Eguilaz la Chapada, and with the dolmen of Mont d'Algéda, to be noticed presently. The circular or horse-

shoe shape for these dolmen vaults is a distinguishing characteristic of the Peninsula examples, as also is the inward inclination of the side-stones, giving the section π . The passage or galería has three flags on either side placed obliquely, and the entrance

[†] See the holed stone at Lackadarra, in the Co. of Cork, in the MSS. of J. Windele, R.I. Acad.

Acad.

† "Rude Stone Monuments of Ireland," p. 102.

§ "Sem-Pint. Esp.," 1857, p. 163.

|| See picture in "Recuerdos y bellezas de España" (Asturias y Leon), plate facing p. 30.

¶ Signor Simoës remarks this feature as one common to the dolmens of Alemtejo and Galicia.

Signor Sarmento of Guimaraës, in a letter which he kindly wrote me on the subject of the dolmens and other antiquities of his district, informed me that the characteristic of inclined jambs was everywhere noticeable in the earliest architectural remains in the Peninsula, and that all the dolmens he had seen possessed it. had seen possessed it.

is provided with two stones for jambs. Tradition associates the church with Favila, and Ambrosio de Morales states that in a crypt beneath it that king was buried.

The fact, however, is that here, as in so many other instances in other countries as in this, a Pagan tumulus has been surmounted by a Christian edifice, and with the transference of veneration a new legend was substituted for the old.

Signor Joaquim Costa† has some remarks on this transference of cultus, which are worthy of attention. Among the pagans, he says, the tombs were the temples of the dead. In the mambas or tombs, which, he adds, the Gallegos, called also Lovios,‡ dwelt the Manes in intimate and continual communication with their descendants and relatives who were still alive. To them the latter offered bread, wine, and fruit, consecrated in the fire of the hearth, which is the meaning of a passage in St. Martin of Braga (6th century), "fundere in foco super truncum frugem." On the antas, or dolmens, offerings were, according to Signor Costa, also made, as well as at the terminos [? arcas] at the boundaries of the estates. When Martin of Braga wrote De correctione Rusticorum, offerings of bread and wine were made at the Wells (vinum et panem in fontem mittere). This nature cultus of the Iberes, which must have preceded the private family rites (sacra) of the Celtici, ¶ and the subsequent god-system of the Romans, was made the object of attack by several Spanish Councils,†† and was wellnigh suppressed by the process of excommunication. Priests were forbidden to tolerate it, and were further enjoined to engrave crosses on the rocks which served as altars, or as centres for assembly, to the rustic population. Examples of the practice Signor Costa instances in the case of the dolmen-tumulus of Fornella; and in that of the natural altar of Gondomil. Some sacred places, he adds, they transformed into Catholic churches, as that at Cangas de Onis, and at Arrechiuaga, both of which we have just described. He cites also the rocking-stone in Galicia called La Barca de Nuestra Señora, "The Ship of Our Lady," to which a Christian legend is attached, to be noticed presently.

In the Province of Santander are several rocking-stones.

^{† &}quot;Organization política, civil y religiosa de los Celtiberos," Madrid, 1879, pp. 12, 22, etc.

‡ It has been suggested that this word is the same as Lugoves, who seem to have been divinities connected with tombs, e.g. "Lugovibus Sacrum" (Hübn. C.I.L., vol. ii. (Hisp.)), 2849.

§ Cap. 9, in "España Sacrada," tom. xv.

|| See Marrast, Pref. to Humboldt's "Prim. Hab. de España," 1866.

¶ "Plin. Nat. Hist." iii., 3.

†† Concil. Tolet, xii., cap. xi.; xvi., cap. ii.; Concil. Bracar. ii., cap. xxii.

are in the Sierra de Sejos, one of which is called the Piedra de Concha, "Rock of the Shell." Another curiously placed rock is the so-called dolmen "del Abra." Upon the flat surface of a large natural rock are three comparatively small stones, on which, in table fashion, rests a square, flattish block, giving to the whole much the appearance of an altar, such as one figured by Mr. Du Chaillu in his "Viking Age," which he regards as sacrificial, and which is certainly artificial. Near the "dolmen del Abra," on the same elevated ridge, is a hermitage called by the name of the Virgin del Abra, a proof probably of the pre-Christian sanctity of the spot. In Santander, also, is a very curious natural rockingstone, called the Pedra Balonçante de Boariza, of which Signor Simoes gives an illustration.

In the Christian legend-lore of Galicia and the Asturias, the Apostle Saint James occupies a position analogous to that of Saint Patrick in Ireland. At Padron is a monument consisting of a rude flight of steps leading up to a pillar-stone on the top of great rocks dedicated to the saint. At the same place a large natural rock is pointed out, held in great veneration, and called the "Altar of the Apostle."† On the top, a plain Latin cross has been fixed. I Saint Patrick's "stones," as well as those of other saints, in addition to those of Finn Mac Cumhail and other giants, are to be found all over Ireland.

Another class of stone monument, according to Signor Manuel de Assas, is represented by the Piedra con Pila—the stone with a trough or basin. It is a rough and perfectly natural block of granite about 6 feet high, having on its upper surface a cavity from which a fissure or channel proceeds to the outer edge of the stone. It is said to be an ancient altar. A cross standing by its side marks the usual attempt to transfer the veneration paid it. Stones with similar hollows and trenches were frequently selected as the roofingstones of dolmens; for example, at Haroldstown (co. Carlow, Ireland), in the Vallée de Couria (Corsica), etc., etc. With such natural cavities on the surface of rocks, about which traditions of sacrifice existed, we may fairly compare the very curious and evidently artificial cavities and trenches on the surfaces of natural

^{† &}quot;Le Ilustration Gallega y Asturiana," for June 20th, 1879. ‡ See "Recuerdos de un viaje á Santiago de Galicia por el. P. Fidel Fita, y D. Aureliano Fernandez-Guerra," Madrid, 1880, p. 28. See the same work for the legend of "Sant-Iago," and the "Dragon" given in a note, *infra*. § "Notes d'un Voyage en Corse," by M. Prosper Merimée; plate facing p. 26.

rocks, used as altars of sacrifice in Roman times at Pannoyas, on the hill called the Assento, near S. Pedro de Valdenogueiras, in the district of Val Real, in Portugal, where it would appear that sacrifices were offered by Romans on the great natural rocks, which the native Lusitanians had previously consecrated to their bloody rites. A better proof than is afforded by these inscribed altar-rocks, that in many cases the venerated natural blocks were indeed and in reality the pagan altars, which a vague tradition holds them to have been, could not be found.

Signor Villa Amil y Castro gives an illustration of a huge boulder with "rock-basins" and a trench, in Galicia, called the Pena Avaladoira. Signor Manuel de Morguia mentions also, in his "History of Galicia," a "natural altar" at Corme, which has a cross carved on the top, and an irregular rock-basin with channels leading into it. On one side it bears the figure of a dragon I well sculptured. At Logrosa (Negreira) are two stones, the one placed on the top of the other. On the lower stone are three circular holes of unequal depth. The same writer gives an illustration of a rough rock called the Pena da Croa at Recadieira, which he calls a natural altar.

There are, at least, seven celebrated "rocking-stones" in Galicia, two of which are in the islands of Cies and Bayona. Of these, that at Mugia is the more noteworthy. It is the one to which Signor Joaquim Costa alluded above. "It is commonly called," says Signor M. de Morguia, "the Rock of the Virgin de la Barca;" but Signor M. de Assas gives it a more special name—the Vela de la Barca de la Virgen—that is, the "Sail of the Virgin's Ship." Signor Martinez de Padin speaks of the "immense religious homage paid by the common people to this stone, the oscillations of which they attributed to the miracles and marvels of the neighbouring sanctuary and hermitage of Our Lady of the Barca." It is situated on a rocky promontory at gun-shot distance from the Mugia Point. It measures 103 feet in circumference.

^{† &}quot;Memorias para Hist. Eccl. de Arcebispado de Braga," by D. Jeronymo Contador el Argote, tom. i., lib. ii., tit. i., c. vii., p. 325. See also an account written in 1721 by And. Gonsalvez, padre of Valdenogueiras, sent to the "Academia Real" by order of H.M. the King of Portugal; also Hübner, C.I.L., vol. ii. (Hisp.) 2395, and "Lusitanian Sketches," vol. ii., p. 349, et seqq., by W. H. G. Kingston. See engraving, p. 663, infra.

‡ I think we can identify this dragon. In the legend of "Sant-Iago," an immense dragon had acquired for himself the greater part of the mons vocatus Illicinus, nunc vero Sacer, breathing out pestilential breath, and killing all animal life. He rushed hissing at the saint and his companions. The saint made the sign of the cross, however, and the dragon vanished as smoke. The Mons Illicinus and its legend answers exactly to that of Croagh Patrick, in Mayo. Patrick is Saint-Iago and Crom is the servent or dragon. and Crom is the serpent or dragon.

and rests on another rock similar to itself. At its base are several cavities, the force of the wind in which causes the oscillatory movement to be more or less marked. So strong was the local belief in the Christian origin of the supposed miracle, that the Spanish writer (himself a native of Galicia) is constrained to apologize in a note for venturing to attribute to it a pagan one. "We doubt not," he says, "that some will take it amiss that we have cited the Stone of Mugia as a Gentile monument, the common people believing it to be the Bark which brought the image of the Virgin to these shores. The position of this rock is very similar to that of the Logan Rock on Treryn Point, near the Land's End in Cornwall. As to the legend, we have only to turn to the accounts of St. Declan's Stone; on the seashore at Ardmore (co. Cork), which was believed to have been wafted thither over the sea from Rome, bearing the bell and the vestments of the saint, and the marvellous veneration in which it was held by the common people; or to the story of the rock called St. Bodan's Boat, In Inishowen, in Donegal; or to that of the "moor-stone trough," on the banks of the Fal, in Cornwall, in which St. Kea made a voyage to the Cornish shore; or to that of St. Piran's millstone; or of St. Patrick's altar, \ which similarly conveyed those several sacred personages to the same coast, to comprehend that an identical myth, to which all these legends remotely trace, was the common property of the prehistoric populations of the coasts of Western Europe.

In Galicia, according to Signor Siveto, are many menhirs. There is one in the district of Lobios, in the Serra de Gerez, measuring 6 m. high. In that of Esgos Signor Simoes mentions a remarkable one, 11 m. high, but formed of four stones placed one over the other, and resembling in this respect a monument in Portugal. Signor M. de Murguia speaks of menhirs near La Puebla, placed in alignments, and near a dolmen-mound. A genuine menhir is in this country called Piedra Fita, that is, Petra Fixa, but some of the stones which are so called may be accounted for by having been set up for boundaries. |

Of the dolmens in Galicia, the two of the large-cist type, of which we have spoken when referring to the term area, and of

[†] See "The Holy Wells of Ireland," by Philip Dixon Hardy, 1836.

; "Innis-Owen and Tirconnel," by W. J. Doherty, p. 55.

§ See all these folk-lore stories collected in my "Age of the Saints," 2nd edit., 1893, p. 87, et seqq.

| "Petræ fixæ, quæ ab antiquo pro terminis fuerunt constitutæ."

which Signor Josê Villa-Amil y Castro has given plans, are called respectively the *Arca de Sinas*, and the *Arca de Padorno*. That writer also mentions several others, as, for example, the *Arca de la Piosa*, and one in the Valle de Oro. We may suppose that the *Arca quæ dictur de Sobereira* and the *Arca de Montonto* are of the same class.

On the hill of Recadieira, near Mondoñedo, there is the *Peña de Croa*, a dolmen figured by Signor M. Murguia,† consisting of one large covering-stone, resting diagonally on a supporter, precisely in the position of the Rathkenny dolmen (co. Meath). On the back of the covering-stone is the remnant of the mound which doubtless once enclosed it.

In the case of some Galician dolmens only two stones support the roofing-slab, so that, were the other side and end stones

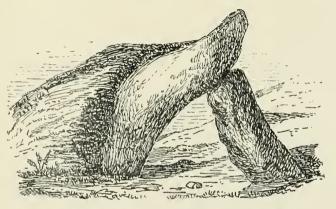


Fig. 585.—Near Mondoñedo, Galicia. From Murguia.

removed, they would form trilithons. Signor Simoes thinks that dolmens constructed in this manner resemble certain dolmens in the province of Constantine in Argelia (Africa) in which objects of bronze and iron have been found. Signor M. de Murguia speaks of a dolmen-mound at La Puebla, and also others called Piedra de Aviso, Arca de Ogas, Arca de la Vimianzo, the names of which are worth preserving. There was also one at Erbellido. Probably, if sought for, dolmens would be found along the entire northern coast of Galicia. At Fecha in the Castro Grande is a rock called the Piedra del Paraguas, or Umbrella Stone. It is surrounded by a ditch and counter ditch on an ancient fortified height, within the circumvallation of which are numerous partition

^{† &}quot;Hist. de Galicia," vol. ii. plate at end.

walls. The rock is in the form of a mushroom, flat and smooth on its under face, but rough on the top. It rests on a small stone, which, again, rests on the natural rock. It seems to be comparable to such natural formations as the Cheese-Wring, in Cornwall (which is also surrounded by an entrenchment), the "Cloch Morhit," in the county of Sligo, and the Carrig-a-Choppeen, in that of Cork. All these were venerated sites.†

Between Fecha and Bachado, near Santiago, is a monument consisting of two stones set upright, with a third crossing them, like a table. The side-stones measure 2'90 m. high by 6'35 m. broad. The flagstone crossing them measures 3:30 m. (N. to S.) by 3 m. (E. to W.). It is probably the remains of a dolmen. The popular name it bears is Pena Cabalada. † A legendary connection between horses and horsemen, and venerated rocks is common in Ireland.§

A stone-circle in Galicia, at Monte das Fachas, consisting of five stones, is mentioned by Signor Villa Amil y Castro. It resembles several in the county of Cork. The hill of Faxildre, between Noya and Santiago, is described by Signor Murguia as being covered with



Fig. 586.—Circle of Monte das Fachas.

stones arranged in lines or in segments of circles, "like a miniature Carnac scattered over with tiny menhirs," or, perhaps, still more like the alignments and circles of Achill or Dartmoor. the mountain of Corzan, in the district of Jallas de Porqueira, when the furze is burnt, it is seen that the surface is covered with circles or portions of circles, some larger than others, several of considerable size, some entire, others broken down in places, but all alike formed by small contiguous stones, fixed in the ground so as to form rude enclosures, the circuits of

[†] A sketch of the first of these was taken by Gabriel Beranger, who calls it "The Riding Stone."
One of the second is among the MSS. of J. Windele, in the R.I.A.

‡ In the Estrada is a dolmen called Pena Caballeirada.

§ e.g., Reen-a-goppul, Garran-ban, the Horseman's Stone, etc., etc.

which are here and there interspersed by stones set on end, larger than the others, although only about 18 inches high. Near them is a mamóa, described as one of the largest and most curious known. Hundreds of similar circles—the huts and pens of a primitive pastoral population—exist on Cornish, Welsh, and Irish moors.

Among the ancient names for boundaries in Galicia is that of *Petræ Nofæ*, used to denote graves hewn out of a single solid stone. Such sepulchres were in use amongst the ancient inhabitants of the Serra da Estrella in Portugal. Signor Sarmento gives two examples from that country, and one from Galicia is figured by Signor Josê Villa-Amil, who calls it a *Piedra Noffa*. *Noffus*, or *Naufus*, according to Ducange, was a term usually applied to a wooden sarcophagus. In any case it took its name from its resemblance to a ship.† It was the hollow keel in which the voyage to the islands of the dead in the West was to be made. In the Balearic Isles, as we shall presently see, this term *navita*, or *nau*, was applied both to sepulchral caves hollowed out in the form

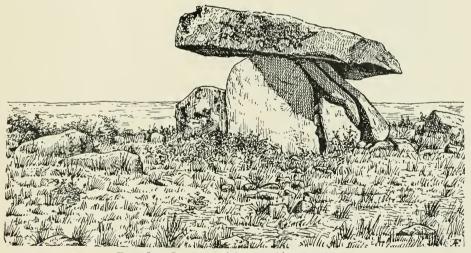


Fig. 587 .- Portuguese dolmen. After Cartailhac.

of vessels, and for buildings erected for tombs, having their interiors shaped like ships, and their exteriors, in conformity with the same idea, presenting the appearance of inverted keels. The stone troughs in which legend asserted that the saints made their voyages were in reality nofæ, or stone coffins.

The prehistoric antiquities of Portugal have received a closer

^{† &}quot;Naufo; nostris (i.e. Francis), Nau, Noue (dicta)," Fr. Pithou, Gloss. Leg. Sal. in voc.

attention than those of Spain. In the beginning of the eighteenth century, when the subject had scarcely been entered upon seriously by the antiquaries of France and England, the Padre Affonso-da-Madre-de-Deos Guerreiro presented to the Academy at Lisbon a brief report, noticed by the President in the year 1734, on the subject of the Antas, the number of which then existing in the kingdom the author computed at no fewer than three hundred and fifteen. Unfortunately, this valuable communication was never published, and appears to have been lost. In 1773, however, Don Martino Mendouça-de-Pina presented to the same learned society a paper upon the same subject, which was printed in the 14th volume of its "Memoires." In this it was stated that in the neighbourhood of Evora alone there were then no less than sixty-seven examples of dolmens. In 1868 appeared a work on the Antas by Don F. A. Pereira-da-Costa, which is the principal authority on the subject written by a native author. In this forty-

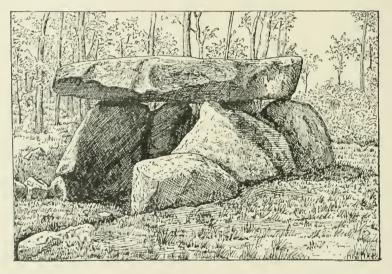


Fig. 588.—Lapa dos Mouros, Portugal. After Cartailhac.

four stone monuments, nearly all of them dolmens, are described, and nearly one half of them illustrated by plans and drawings. Other elevations of dolmens will be found in Signor Sarmento's communication to the Geographical Society of Lisbon, giving the results of an expedition to the Serra da Estrella. Pictures and descriptions of *Antas* will be found also in the work of Signor Manuel Simoes, to which reference has been frequently made. More recently (in 1886) M. Cartailhac has summed up the

researches of earlier writers, and added new material collected by himself in his "Ages préhistoriques de l'Espagne," a work in which the illustrations of dolmens are of peculiar excellence.

From all these sources it may be gathered that in type the Antas do not differ greatly from each other. The roofing-stone is usually supported on the upper edges of two, three, or more sidestones of the vault, set on edge, and, as we have said, slightly inclining inwards as they rise. Many of these structures owe their preservation to the use they have so easily been made to serve as houses for cattle and goats, the interstices between the stones having been filled in with masonry or plaster. In some

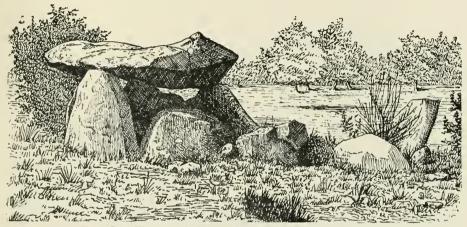


Fig. 589.—The Anta de Serranheira, Alemtejo. After Cartaithac.

instances, such as in that of the Anta de Melriço, the side-stones which did not support the roof have been removed, leaving the monument in the condition of the "Broadstone," in Antrim, like a three-legged milking-stool.

As in the case of the Irish dolmens, so in that of the Portuguese, I fail to be able to draw any line of distinction between those monuments which, in their present state, appear to be simply vaults open on one side, without any prolongation in that direction, and those in which the passage-way or galería is still in existence. To make my meaning clear, I take in evidence three examples from M. Cartailhac's work,† the Antas, namely, of Parédés, near Evora, that called Lapa dos Mouros, near Ancora in the Minho, and one in Alemtejo. In each of these cases, although broken down, distinct traces of the continuation remain. Being lower and

narrower than the portion which formed the vault, these *galerías* have been more easily demolished, and, where the process of this demolition has proceeded a stage further, nothing is left but the vault or cell itself, shorn of the approach which once abutted on and filled up its open end, for, in these Antas one side is invariably open.

The dolmen of Parédés bears a striking and unmistakable resemblance to three Irish dolmens, that on Bear Island,† in the county of Cork, and the two terminal ones in the row of six at MacKee's farm in Glenmalin, in the county of Donegal.‡ With that near Ancora (p. 658, Fig. 588), I would specially compare in point of

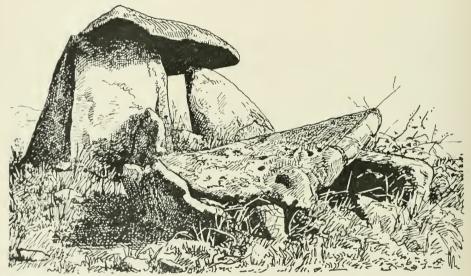


Fig. 590.—Anta of Parédés, near Evora. Etched from a photograph in Cartailhae's "Ages préhist. de l'Espagne."

ground-plan that at Brenanstown, in the county of Dublin, although the roofing-stone is of insignificant size compared to that of the Irish example. The Alemtejo monument finds its counterpart in any dolmen in Cork, Clare, or Sligo, from which all the cap-stones, save the largest terminal one, have been removed. The smaller of two dolmens at Paço da Vinha, near Evora, is marvellously like that at Shanganagh (co. Dublin), while the larger one at the same place resembles those in the county of Clare, where broader side-slabs are employed. In the case of those Portuguese monuments where the side-stones of

[†] At Ardaragh, pp. 40–43, supra. || p. 393, supra.

the lower end, that is to say the galería, still remain, the same resemblance to Irish structures is noticeable, but with this difference, that, instead of the vault gradually expanding so as to show a wedge-shaped ground-plan, as in the Drenthe and some Swedish examples, the passage terminates in a more or less circular or oval cell, corresponding more closely with the Vestergötlande type at Ottagården, given by M. Oscar Montelius,† and very closely, indeed, to the "passage-dolmen" of Yr Ogof, in Wales.†

Another point in common between the dolmens of Portugal



FIG. 591.—Small Anta of Paço de Vinha, front view. From Cartailhac.

and those of Ireland, Sweden, Cornwall, and elsewhere, is to be found in the little artificial cup-markings which (quite distinguishable from the natural holes resulting from rain or from the borings of a marine creature) the table-stones of some of them bear on their upper surface. M. Cartailhac figures two covering-stones thus marked, those, namely, of the Antas of Paço da Vinha and of Parédés, with which may be compared those of the dolmens of Fasmarup, in Scania, § of Clynnog Fawr, in Carnarvonshire, of that called the Three Brothers of Grugith (a demi-dolmen), in

^{† &}quot;Congrès int. d'Anth. et d'Arch.," Stockholm, 1874, vol. i. p. 164. ‡ "Archæol. Cambr.," 1869, p. 140. See p. 450, supra, and for ground-plan of the Paço de Vinha dolmen, see p. 449, supra. § "Congrès Int.," Stockholm, 1874, vol. i. p. 157 (Fig. 448, supra). | "Archaic Sculpturings," Sir J. Y. Simpson, plate ix. (Fig. 449, supra).

the Meneage district in Cornwall,† and of several in the county of Cork, and elsewhere in Ireland. The covering-stone of a cist at Bakerhill in Ross-shire‡ bears similar cup-markings, some evidently artificial.

A circular dolmen from which the roofing-stone has been removed, on Mont d'Algéda, situated at a distance of 1200 m. to

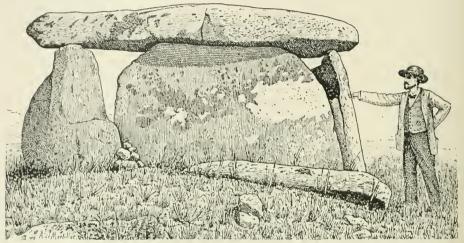


Fig. 592.—The Anta de Paço de Vinha, near Evora. From Cartailhac.

the S.W. of the Pyramide de Barros, and a plan of which is given by Signor Pereira da Costa, § deserves special mention from the fact that in the surface of a large stone to the right of the entrance a bowl-shaped cavity has been sunk. The circular chamber

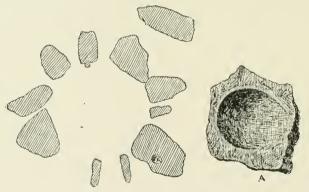


Fig. 593.—Dolmen of Mont d'Algéda. From Pereira da Costa. A, basin in stone. measures 3'97 m. in diameter, and is formed by eight stones, with a ninth lying outside, and two jamb-stones at the entrance, apparently the commencement of a passage like that at Cangas de

Onis. The stone containing the basin measures 2 m. broad at the base, and 3.66 long. It is in the inner face of the stone, and is 0.18 m. in diameter.

Stones having similar artificial basins are common in Ireland, where the basin is called the *bullán*. In some districts the water in them is considered holy, and in some cases possessed of curative properties. They are often found in proximity to Christian edifices of early date, but they are not unknown in connection with circles and dolmens. Two such cavities exist in the upper face of a stone in the circle at Kippagh, in the county of Cork; another



Fig. 594.—Sacrificial rock, with basins, at Pannoyas. From an old steel engraving.

in one of the eight stones forming a circle in the county of Fermanagh, at Castle Archdale; † and at the entrance to the dolmen at Newgrove, near Tulla, in the county of Clare,‡ is a fine example.

In the natural rock which forms one of the two supports of the table-stone of the demi-dolmen called the "Three Brothers of Grugith," in Cornwall,§ a basin of this kind has been scooped out. It is placed just at the entrance of the creep or passage under the roof-stone, and my opinion is that it was in some way connected with the superstitious practice of creeping under rocks set up in this manner, perhaps intended to contain water for purification, or sacrificial blood.

In the sacrificial altar-stones at Pannoyas, to which I have referred, circular basins have been cut, which may be taken as

[†] MSS. of J. Windele, R.I. Acad., Dublin; Kilk. Archæol. Soc. Journ., 1874-75, vol. iii. p. 467.

‡ Fig. 103, supra.

§ pp. 482, 483, supra.

§ "Argote, Lisbon," 1732, book iv. cap. vii. sec. 576, p. 347.

evidence that in Portugal, at all events, they were used in the ceremonies there performed (Fig. 590).

In some few of the *antas*—the Anta da Tapada, for example, a high stone stood at either end, the plot between being marked out by side-stones. In such cases there were probably no roofing-stones, but the monument resembled the ship-graves of Denmark. Examples of circular dolmen-vaults are furnished by Signor Pereira da Costa in the cases of the Anta de Murteia-de-Baixo, in Alemtejo, and of that of Campo das Antas in Beira. The Anta



Fig. 595.—Dolmen at Fonte Coberta on the Douro. Photographed by Lieut -Col. J. G. Sandeman.

of Monte Branco affords an instance of the circular form with the entrance-stones of the *galería* in place.

In 1886 I accompanied Lieut.-Col. J. G. Sandeman in an excursion up the river Douro, in search of what proved to be a remarkably fine anta, much further inland than it is usual to find them. It lies about twelve miles from Pinhaõ, in the hilly country of Alijo, in the Province of Trasos-Montes. From the high ground close above the plateau on which it stands, the ancient fortification, called the Castello, or Castro, de S. Romaõ, can be seen far to the southward, and beyond it, again, the mountains of the Estrella. Closer at hand are the rugged peaks called the Fragas, while to the north lies the Serra de Moraõ.

The enclosed land in which the dolmen stands is called the Fonte Coberta. Although none of the stones are hewn, the dolmen presents a neat and square appearance, like a house built with cards. It is known by the name of the Casa dos Moiros ("The Moors' House"), but another ancient name is, perhaps, preserved in the name of the field (Fonte Coberta), the association of springs of water with dolmens, stone-circles, and primitive burying-places being found in many other districts. In Portugal there are two other examples of its occurrence in the case of dolmens called respectively Fonte-de-Mouratao and Anta do Fontao, and in the Pyrenees we have noticed one called La Fonte de Roure.

In Ireland some sepulchral tumuli are popularly believed to contain wells. A dolmen-like structure covering a well in which a *Magus* was buried is mentioned in the "Life of St. Patrick,"



Fig. 596.—Anta de Candiera, Portugal. From Cartailhac.

and one such is known to exist at Ballycroum in the county Clare, while at the dolmen of Maul-na-holtora, in Kerry, a spring is said to have existed within the vault, so that the customary rites proper to a holy well were paid to it. To this superstition I shall again refer.

The dolmen of which I am speaking, near Alijo, is formed of eight stones, seven of which make the enclosing wall of the vault, which, from floor to roof, measures 8 feet high within. The VOL. II.

covering-stone is 12 feet in diameter, but was at one time larger, a piece having been broken off from its eastern end. It is about 2 feet thick. The structure stands in a low mound or cairn, the present diameter of which is about 50 feet. On the outer face of one of the southern side-stones a small plain cross X has been carefully incised, most likely to Christianize it according to the injunctions of the ecclesiastics,† or to mark it as a boundary of lands. On the upper surface of the covering-stone there are several distinctly marked artificial cups. On the N.E. side three are traceable, measuring respectively $2\frac{1}{4}$, $2\frac{3}{4}$, and 3 inches in diameter at the orifice, and $\frac{1}{4}$, $\frac{7}{8}$, and 1 inch deep. Two are placed 5 inches apart, and the third is 2 feet 9 ins. from them.

The first writer who noticed the existence of a holed dolmen in Portugal was Signor Gabriel Pereira, and since then it has been described both by Don Pereira da Costa and M. Cartailhac.‡ It is at Candieira, near Rodondo. The hole is squarish, like that in the roofing-stone of the dolmen of Trethevy in Cornwall, a monument which closely resembles Portuguese examples. The anta, in the end or inner stone of which it is placed rather high up, was provided at the other end, now open, with a passage, and from the sketch of the structure it appears to me that the sidestones of the inner end, protruding beyond the vault, formed just such an open antechamber, or portico, as occurs in so many Irish dolmens.§

Signor Gabriel Pereira has also recorded the fact that near Vidigueiras was a group of three dolmens with a monolith occupying a central position among them. On the estate of Vidigueiras itself was another dolmen having a galería.

On the beautiful and far-famed Serra de Cintra, near Lisbon, is a well-known monument, now commonly called the Dolmen of Andrenunes (André Nunes). Signor Simoes found difficulty

[†] Vide supra, p. 650. On one of the side-stones of the galería of the Anta de Freixo a cross

[†] Vide supra, p. 650. On one of the state-stones of the sales also cut.

‡ "Ages Préhist.," figs. 248, 249.
§ Besides the names of antas which I have specially mentioned, I find the following: Anta de Pombaes, Antas de Milhar-do-Cabeço, Anta do Porto des Pinheiros, Anta da Torre-da-Contada d'Alcogulo, Anta de Corleiros, Anta da Casa-dos-Galhardos, Anta da Tapada de Pedro Alvaro, Anta da Tapada dos Olheiros, Anta da Varzea-dos-Mouroes, Anta do Fundo de Nave-do-Grou (at Sobral), Anta do Crato, Anta de Panasqueira, Anta d'Arrayolos (a fine specimen, of which an illustration is given by Mr. Kinsey in his "Portugal Illustrated"), Anta de Barrocal, Anta de Monte-do-Onteiro, Anta de Tisnada, Anta de Mont d'Esquerra, Anta de Guilhalfonso, Anta de Matança, Anta de Carapichana, Anta de Consinera, Anta de Serranheira, Anta de Monte Abrahaô, Anta de Lairinha, Anta de Valle de Moura, Anta do Aljaô, Anta do Carvalhal de Gouveias (these last two, together with Anta do Fontaô, figured by Signor Sarmento, in his account of the Expedition to the Serra da Estrella), and, lastly, the galería of Portimaô.

in classifying it. A picture of it will be found in the "Archivo Pittoresco." Signor Fuschini, the departmental engineer of Lisbon, considered it as a *galería*. He describes it as having parallel lateral walls, formed of great flagstones placed vertically, and covered with horizontal ones.

Popular superstition in Portugal attributes everything prehistoric and unexplained to the Moors, just as the Irish do to the Danes. A "Rocking Stone" in the Minho has a legend attached to it connecting it with Moorish enchantresses. Two great footprints sunk in the surface of one of the rock altars at Pannoyas are said to have been made respectively by a male and female Moor, supposed to have been magicians.

A monument attributed to a Jorgin, or Witch, in the Pyrenees would be attributed to a Moor, and especially to a Moorish woman in the west and south of the Peninsula, the idea, however, of enchantment being preserved. This name, in the form of *Moro*, does occur, as we have seen, on the French side of the mountains, as in the case of a dolmen in the department of the "Pyrenées Orientales," called the *Balma* (flagstone) *del Moro*. This gives rise to the doubt whether popular etymology has not gone astray, and interpreted, naturally enough, some name sounding like Moro, or Mora, by Moors.

I am the more inclined to think that this may be so by finding that in Corsica, where there are also dolmens, there is a curious female figure carved in stone, a monolith, in fact, which among the natives is called Idolo dei Mori.† Like the rude statues of females which are scattered over an area of 600,000 square miles of the Steppe country from the Crimea north-eastward beyond the Caspian, and which are set up on the sepulchral tumuli of the ancient inhabitants, and called Babas, meaning "old women," or "mothers," these Moris or Moras may have been the old deathdeities who were believed to haunt the tombs of the Iberes, or Ligures (for the latter inhabited Corsica), ages before a Moor ever entered the country. The mythology of the ancient Teutonic peoples,—and that of the Irish people, too, if a recent definition of the name of the Morrigan, who was the weird goddess of carnage, be right—offer us tempting comparisons of this name with that of the Mar, or evil female genius, whom folk-lore connects with the dark hours of night and with death.

^{† &}quot;Notes d'un Voyage en Corse," by M. Prosper Merimée.

Near the Rocking Stone on the Minho were, according to M. Schiappe,† two galerías formed of vertical stones which the natives called Furnas. They stood on a hilltop covered with oak near the mountain of Polvoreira, on the road from Guimaraes to Vizella. In the district of Braga were two alignments or avenues (alas) of stones, with a menhir between them, on the road from Cepaes to Tafe. In Castello de Paiva was another curious monument described as consisting of six pillars, each one composed of three stones set one above the other vertically. There were originally seven, but one had fallen. We have mentioned a monument, similarly described, at Esgos, in Galicia. I know not whether we may regard them as artificial, although they remind us of the stones which devotees turned on the Promontory of St. Vincent, which, according to Strabo, were placed in threes and fours, one set above the other,‡ and upon which pilgrims offered libations.

Near Villa-Velha-de-Rodaõ, M. Schiappe also noticed the



Fig. 597.—La Sépultura de Marcella, Algarve. From a sketch by Signor E. Da Veiga, in Cartailhac.

remains of a trilithon (dolmen?), and heard of like monuments at Fantel and Monte Fidalgo.

One of the most typical and interesting of the Portuguese series is that called the Sépultura de Marcella in Algarve, a plan

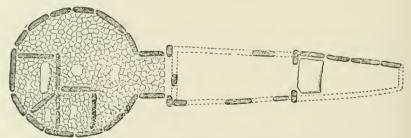


FIG. 598.—I'lan of La Sépultura de Marcella, Algarve.

and elevation of which M. Cartailhac has reproduced.§ A circle is formed by thirteen contiguous slabs set on edge, a space being

[†] Quoted by Signor Pereira da Costa. ‡ In the Latin translation, "Ternos vel quaternos lapides impositos," "Geogr.," edit. C. Müller-Paris, 1853, p. 114, l. 12. § "Ages préhist.," fig. 218; the originals are by Signor E. da Veiga.

left open for the entrance which is between two slabs. The floor of the circle is paved, and a portion of the area is divided off into two (or three) compartments or cists. From the outer ends of the slabs forming the entrance a long wedge-shaped galería is extended. This is divided into two sections by the jambs of a doorway which protrude transversely into the passage, while the stone that probably formed the lintel lies in the passage. A similarly formed doorway opened into the circular chamber, the

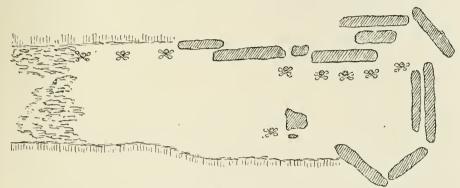


Fig. 599.—Plan of the chamber of Monte Abrahão, Portugal. From "Mat. pour l'Hist, de l'Homme."

whole arrangement recalling that of the chambered cairns of Scotland, and that at Annacloghmullin in Armagh (p. 303, supra.)

At Monte Abrahao was a dolmen formed of two rows of slabs

sloping inwards exactly in the fashion of that figured by Mr. Kinahan, near Louisburgh, in the County of Mayo (p. 124, supra.) The inner vault is of irregular form, and was perhaps provided with supplementary cells. A number of deposits (estimated at eighty) of human bones were found in this dolmen. Nine are shown

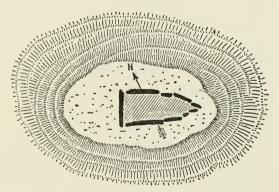


Fig. 600.—Plan of a megalithic tomb in a tumulus, Serro de Castello, Algarve. From Cartailhac.

in the ground-plan,† from the representations of which it appears that, as in one of the modes of burial in the Marne caves, the

^{† &}quot;Mat. pour l'Histoire de l'Homme," 1881, p. 462. The elevation given of this monument, which I have not added, is strikingly like that at Louisburgh, for which latter see p. 124.

skull surmounted in each case the other portions of the skeleton, but whether this was so here I am not certain. In addition to the human bones, numerous objects of stone and bone were discovered in this dolmen. The diameter of the vault was 3 m., and the passage or elongated narrow portion 8 m. long by 2 m. broad.

In the Province of Algarve and Serro de Castello, not far from Almada, is a dolmen of a type well known in Germany, the South of France, and Ireland. The ground-plan is that of a long isosceles triangle having its base at the W. end, and its apex at the E. The inner vault is formed of two side-slabs and the end one, and the remaining portion, which answers to the passage in other dolmens, of three smaller slabs on either side, culminating almost in a point. The interior measures 2.50 m. long by 1 m. broad and high. In one corner was a vessel of rough, ill-baked pottery, of a globular form narrowing at the mouth.

In Alemtejo, S. of Cape de Sines, are a number of these wedge-shaped tombs. They are, says M. Cartailhac, in the form of stone boxes made in this fashion, and measuring 2 m. in length. One end is always broader than the other. The human bones found in them are in a condition which shows they have been broken up (brisès), with the exception of the jaws† and teeth. Small portions of charcoal are found with them. This eminent French archæologist! attributes them, in common with many of the dolmens of the Cevennes, to a transition period between those of Stone and Bronze. It is noteworthy that copper objects are found not uncommonly in the dolmens and caves of the Peninsula, as they are also in those of the Cevennes. The Museum of the Royal Irish Academy in Dublin contains also a large number of copper celts found in Ireland. It will be observed that in form the wedge-shaped vaults of Alemtejo are, as it were, representations (on a less scale) of the dolmens of Clare.

The discoveries in the *antas* of Portugal are referable mainly to the Neolithic Period, but for the most part to that portion of it when copper implements and weapons begin to appear. Some of the flint arrow-heads, such as those from the dolmens of Portimao in the South of Portugal, explored by Signor Estacio de Veiga,

and of Freixo, display a beauty of workmanship not surpassed by those of Denmark, as figured in Madsen's work, and to which they have been compared. Other types closely resemble those of the Cevennes, and are comparable to Irish examples.† The dolmen at Mont Abrahao contained stone axes of trap and diorite, knives, scrapers, large and beautiful lance-heads, and arrow-heads of flint, bone objects sharpened to a point, bone buttons (precisely similar to ones previously referred to found in Cornwall with cinerary urns, vitrified beads, etc., and to others found in Ireland and elsewhere), I rouleaux of chalk, plagues of slate, beads of a green-stone (callaïs), and various other pendants, some bowl-shaped vessels entire, and a quantity of broken pottery. The human remains were covered with pebbles brought from a distance.

In the Anta d'Estria, which, like that of Abrahao, lay E. and W., and was open at the E. end, Signor Ribeiro found, besides flint implements and urns, an object of slate of peculiar form covered with diagonal scorings arranged in lines, like the ornamentation on sepulchral pottery, and having a hole pierced in one

end which was rounded; an adze-shaped implement of white marble, and a plaque of chalk perforated and shaped like a wristguard which M. Cartailhac compares with objects found in Skye and Ross-shire.

In the Anta de Bellas were found a cylindrical fragment of bone with carvings, part of a bone cup, and some plaques of slate scored

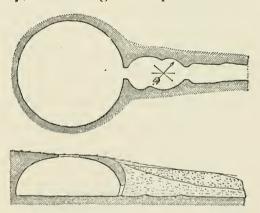


Fig. 601.—Plan and section of a cave at Palmella in Portugal.

over with a chevron pattern. Similar ones occurred in that of Pavia.

Portugal, like France, possesses sepulchral caverns both natural and artificial, to which I will very briefly refer. Of the former class those at Cesareda, called the Casa da Moura.

[†] For examples, see "Wilde's Catalogue of the R.I.A. Museum, Stone Mat.," p. 20; Cartailhac, "Ages Préhist.," p. 215, and fig. 85; and see figs. 634, 636, and 637, infra.

‡ See p. 164, supra.

§ Landais gives this as "pierre gemme fragile; turquoise verte."

[|] p. 677, infra; fig. 617.

and the Lapa-Furada, are specially noteworthy. Among the human remains in the first of these evidences of the practice of trepanning were found, to which allusion has been made.† The objects discovered were many of them identical with those found in the antas. The lance heads of flint were of exceedingly fine workmanship. Plaques of slate, scored over with chevron patterns like those on gold lunulæ and other ornaments, and on sepulchral pottery and of forms similar to those taken from antas, were found here also, a fact which connects the periods at which the respective interments were made.

Of the caves artificially hollowed out of the rock the ones that have afforded the most interesting results to the explorer are those at Palmella (Fig. 601). They are, as nearly as can be, identical in plan with those found in Sicily and the Ile Pianosa. The vault or chamber is circular, and it possesses an *anti-grotte* like those of the Marne. In one case, this vestibule is itself reached

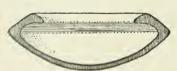


Fig. 602.—Section of a little urn from Palmella.

by a passage which narrows before expanding into it, just as the vestibule itself narrows at the entrance of the circular chamber, the ground-plan therefore corresponding with that of the Sepultura da Marcella, and the dolmens which

retain their passage in general. Sometimes the *anti-grotte* has a bell-shaped mouth, and its floor is on a slope descending to the level of the floor of the inner yault.

Of the boat-shaped caves of Minorca I shall speak later on.

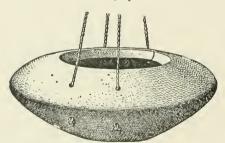


Fig. 603.—Little urn for suspension, from Ireland, in Mus. R.I.A.

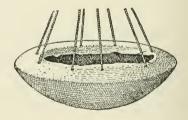


FIG. 604.—Little urn for suspension, from a sepulchral cave at Palmella, Portugal. From Cartailhac.

Among the sepulchral pottery found in the caves of Palmella, some specimens of which, both in symmetry and decoration, equal, if they do not surpass, any in Europe, was a little vessel pierced with

holes for suspension which is absolutely identical with examples found in Ireland, several of which are in the collections of the Royal Irish Academy, and the Royal Dublin Society in Dublin. This being so, it is remarkable that the correspondence between the objects found in these caves and in Ireland ceases. M. Cartailhac, who had noticed what he regarded as an affinity between the archæological remains of the Neolithic Period in Portugal, the Morbihan, and Ireland respectively, remarks on the fact that in the latter country not one single bead has been found, formed of a peculiar green-stone (callais), which material served for hundreds of beads found in the dolmens of Vannes, Ossun, Arles, and Lisbon (Palmella). The fact that these little articles of commerce are not found even in the islands off the coast of France points, perhaps, to trade having been carried on only overland.

That during the best portion of the Bronze Age,† Ireland and the west coasts of Britain were in communication with the



Fig. 605.—Bronze celt from West Buckland, Devon.



Fig. 606.—Bronze celt from Penvores, Cornwall.

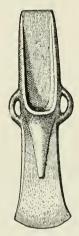


Fig. 607.—Bronze celt from Ireland. From Wilde's Catalogue.

west coast of the Peninsula there is good reason for knowing, since types of bronze implements not found elsewhere are common to these countries.

As examples, to render my meaning clear, I take the two-looped *paalstabs* of Portugal—those, for instance, found at Grandolo (Alemtejo), and at Crasto de Medeiro (Montalegre) (Figs. 608, 609), measuring respectively 95 and 8 inches long,‡ and compare

[†] See pp. 523, 524, supra.

† Those found at Ferreira d'Aves, in the Beira Atta, are still larger. Two, out of the find, are figured by J. P. da Silva in the Lisbon volume of the "Congrès Int. d'Anth. et d'Arch."

them with those from West Buckland in Devon, from Penvores

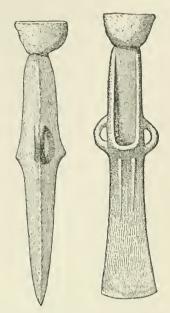


Fig. 608.—Bronze celt from Montalegre, Portugal. From Cartailhac.

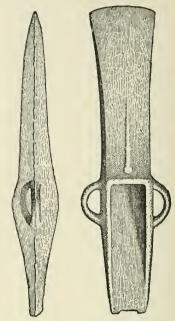


Fig. 609.—Bronze celt from Alemtejo. Cartailhac.

near Helston, Cornwall, and from Ireland (Figs. 605, 606, 607),



Fig. 610.—Bronze celt (1) from S.E. Spain. From Siret.

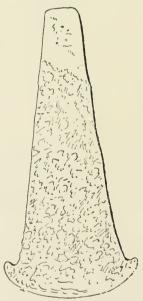


Fig. 611.—Bronze celt (2) from S.E. Spain. From Siret.

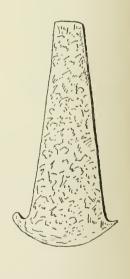


Fig. 612.—Bronze celt (3) from S.E. Spain. From Siret.

measuring respectively 61, 61, and 716 inches long, and, excepting

that the latter ones are slightly smaller, it will be seen that the specimens are identical.† In the Peninsula and the South of France, the type extends itself with variations and developments into Andalucía on the one hand, and Tarbes in the Hautes Pyrenées, and Langoiran in Gironde on the other.

Another type which finds its representatives both in Spain and in Ireland, is that of the *paalslab*, figured by Sir John Evans,‡ from Ireland, and by M. Cartailhac,§ from Granada.

The MM. Siret discovered in the tombs of El Algar, in South-

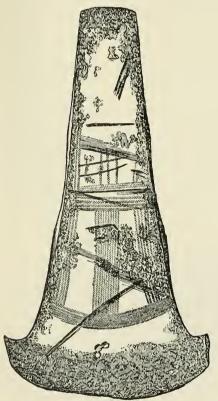


Fig. 613.—Bronze celt found in Yorkshire. In the Brit. Mus. From Evans's "Bronze Age."

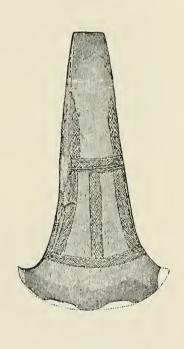


Fig. 614.—Bronze celt from Connor, Co. Antrim.

East Spain, many examples of the plain flat celt expanding towards the cutting edge, which is curved back at the extremities. This would be assignable, according to Montelius, to the first period of the Bronze Age in the North. For the sake of illustration, we take three examples from the work of the explorers just mentioned (Figs. 610–612), and compare them with one from Connor,

[†] Another Cornish example and another Irish one have been recorded. ‡ "Bronze Implements," fig. 108. § "Ages préhist.," fig. 329.

in Antrim (Fig. 614), and with an English example from Yorkshire (Fig. 613). This original type of bronze celt received great developments both in shape and decoration, the sides being raised and the stop-ridge inserted so as to form the *paalslab*, while the

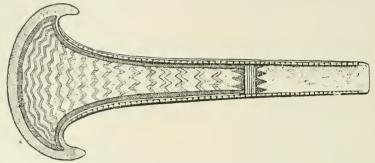


Fig. 615.—Bronze celt from the Museum of the Ecole de Sorèze, Dep. of Tarn, supposed by M. Cartailhac to be of Irish origin.

crescent-shaped blade retained its form. M. Cartailhac has figured a very elaborate one from the museum of the Ecole de Sorèze, in the department of Tarn, in the Pyrenees,† which he considers of Irish origin (Fig. 615). An intermediate example is in the Royal Irish Academy's collection, and is figured in Wilde's Catalogue,

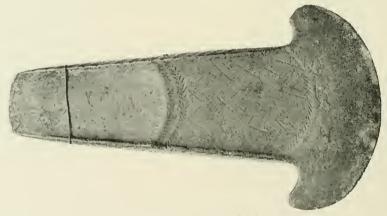


Fig. 616.—Bronze celt in the R.I.A. Museum.

the ornamentation on which has been very justly compared by Mr. Coffey with some of the carvings on the stones of New Grange.‡ I insert a photograph of another example, the ornamentation on which is singularly like that in the Ecole de Sorèze (Fig. 616). It is also in the Royal Irish Academy's museum.

[†] It measures 8½ inches long. ‡ For other English, Scotch, and Irish examples see Evans, "Bronze Implements," figs. 9, 13, 14, 21, 24, pp. 65 and 66, figs. 35, 37, 44, 46, 51.

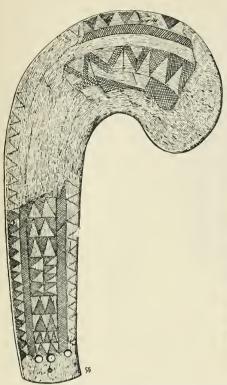


Fig. 617.—Ornamented plaque from the Anta d'Estria. After Cartailhac.

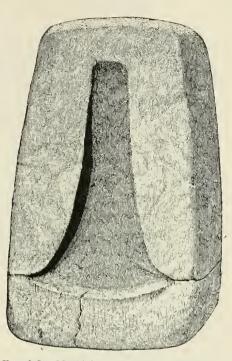


Fig. 618.—Mould for bronze celt from Ballymena. From Evans.

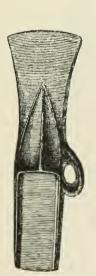


Fig. 619. — Bronze celt from the Serra de Estrella, Sarmento.

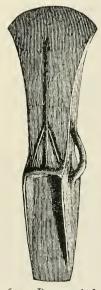


FIG. 620.—Bronze celt from Oldbury Hill, Hertfordshire. From Evans's "Bronze Implements."

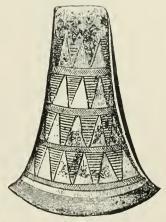


FIG. 621.—Bronze celt, Danish. From Engelhardt, Musée des Ant. du Nord a Copenhague, p. 14.

M. Cartailhac says: "L'ornementation de ces objets est composée de chevrons ou dents de loup, de bandes minces brisées en zigzag,

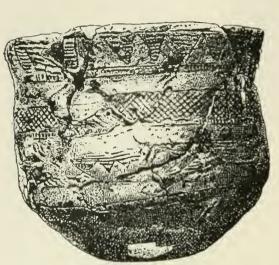


Fig. 622.—Urn from a stone cist in the Alps. From Cartailhac.

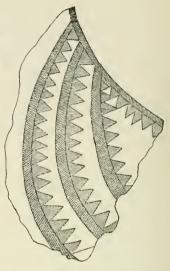


FIG. 623.—Bronze plaque from Switzerland. From Kruse's "Deutsche Alterthümer."

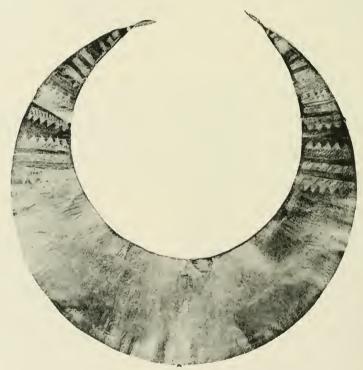


Fig. 624.—Lunula in the Museum R.I.A.

et appartiendrait plutôt à l'âge du bronze qu'à l'âge de la pierre."

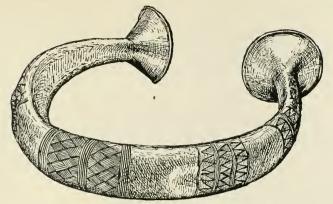


Fig. 625.—Gold armlet, West Cornwall. In Brit. Museum.

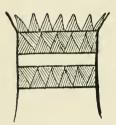


FIG. 626.—Detail of armlet from Cornwall.

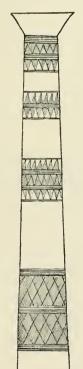


Fig. 628.—Details of gold armlet found in Cornwall.

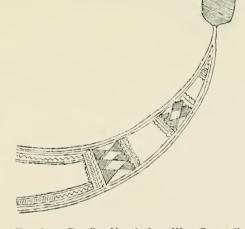


Fig. 627.—Details of lunula from West Cornwall.

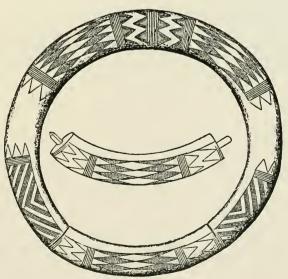


Fig. 629.—Gold ring from Penella, Estremadura.

From Cartailhac.

Decoration of precisely similar character occurs on the plaques found in the Casa da Moura and the Anta d'Estria (Fig. 617), on the gold lunulæ of the British Isles—Cornwall and Ireland especially (Figs. 624, 627)—on bronze plaques in Switzerland

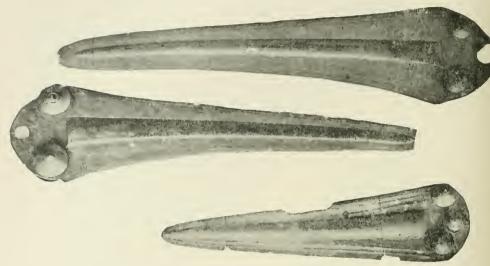


Fig. 630.—Irish halbert-blades in the Museum R.I.A.

(Fig. 623), on gold ornaments of more elaborate workmanship found alike in Spain † (Fig. 629), Brittany, Cornwall ‡ (Figs. 625, 626, 628), and Ireland; on rude sepulchral pottery from the Alps (Fig. 622); on a celt from Denmark (Fig. 621), etc., etc.

The common types of paalslab and flat celt, the latter



Fig. 631.—Halbert-blade from Slieve Kielta, Co. Wexford, in the Brit. Museum.

belonging to the first, the former to second periods of Montelius, are represented both in Spain and Ireland. A single-looped paalslab from Azevo (Fig. 619), in the Serra da Estrella, is as nearly similar as can be to one from Oldbury Hill (Fig. 620), in Herefordshire, figured by Evans (p. 90). Again, there is in the

[†] Cartailhac, "Ages préhist.," fig. 421. ‡ Gold armlets in the British Museum, found in the Land's End district. There were also among this find some plain gold specimens, which resemble those found in the Serra da Estrella, and figured by Signor Sarmento.

British Museum a mould for a flat celt from Spain which is identical with one from Ballymena† (Fig. 618, supra), and either of which would have produced an example of the same shape as that from Kilcrea Castle in the County of Cork,‡ or of a copper one from Portugal, slightly curved, figured by M. Cartailhac.§

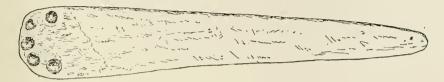


Fig. 632.—Halbert-blade from S.E. Spain. From Siret.

A pure copper one of this shape, 6 inches long, found in the county of Waterford, is figured by Wilde.

Bronze celts of the looped socketed type are found both in Portugal and Ireland, but with this difference, that in the examples from the former country they are provided with two loops, whereas in the latter and in Britain they are only provided with one. That the two-looped type was not only known in these islands, but actually manufactured there, is proved, however, by the discovery of a stone mould for them near Salisbury. Another

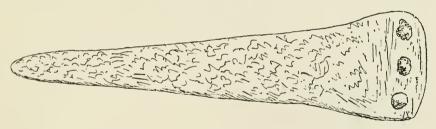


Fig. 633.—Riveted dagger-blade from S.E. Spain. From Siret.

has been found in Ireland. The two-looped type is also found in the Haute Garonne, in Alsace, in Sweden, and much further east. A specimen from Kertch is wonderfully like a Portuguese example. One of peculiarly large size, measuring 9½ inches long, found in Estremadura,¶ is, with the exception of its second loop, more like the British, and some few of the Irish examples. One found at Alfriston, in Sussex, and another found near Belfast, resemble it in form, though they fall far short of it in size. The squarish socket-hole which these three specimens possess is, however, less

common in Ireland, the general shape being oval or roundish, in which respect they agree more closely with an example from North Brabant, figured by Prosper Cuypers.† The type with the square socket is very common in North-Western France. A hoard of them was found at Moussaye, in the Côtes du Nord, which fact induces Sir John Evans to regard the type as Gaulish. A specimen found in Sardinia is figured by De la Marmora.

Another type of bronze weapon which is common to the Peninsula and to Ireland is what is termed the "halbert-blade." Of Irish examples I annex four illustrations (Figs. 630, 631). The MM. Siret discovered specimens of this type during their explorations in South-Eastern Spain (Fig. 632). Sir John Evans had also seen one found near Ciudad Real. He describes it as

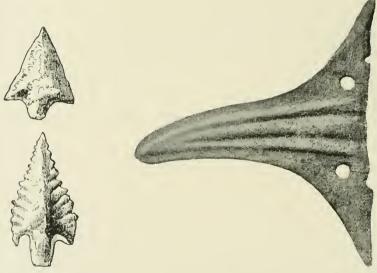


Fig. 634. — Flint arrow-heads from Ireland. From Wilde's Catalogue.

Fig. 635.—Irish halbert-blade in the Museum of the R.I.A.

"about 8½ inches long, and more **T**-shaped at the base than any British specimen, the blade suddenly expanding from 2 inches in width to 5 inches. In this expanded part are the usual rivets, each about 6 inches in length." He does not figure this Spanish halbert-blade, but from the description it would seem to resemble perfectly one which he does figure from the county of Cavan, and also one in the Museum of the Royal Irish Academy, an illustration of which I annex (Fig. 635).

The best examples of these weapons are said to occur in Ireland and Scotland, but they are also found in Scandinavia and North Germany. The author of the "Bronze Implements of Great Britain" makes the following interesting remark with regard to their presence in Spain:—"The discovery," he says, "of a weapon of this type in Spain seems to lend support to those who maintain that there was some connection between the Iberians and the early inhabitants of Ireland. The curious similarity," he adds, "of some of the Portuguese forms of flint arrow-heads and javelin-heads to those of Ireland is also worthy of notice." A similar likeness exists between these and those of the dolmens of



Fig. 636. — Flint arrow-head from the Casa de Moura.

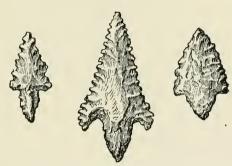


Fig. 637.—Flint arrow-heads from the dolmens in the Cevennes.

the Cevennes (Figs. 634, 636, 637). The jagged pattern is, however, rare in Ireland, but common in Scandinavia. Of the simple dagger-blades with rivets, and of the elongated type of halberthead, the MM. Siret found examples in South-East Spain which, though of plainer type, are comparable to Irish and West-British examples (Fig. 633).

One distinguishing characteristic of the bronze celts of the Peninsula is their great size, a feature occasionally reproduced in Irish examples, as in the case of a flat celt of a type already referred to, which is in the British Museum, and measured when perfect 7½ inches across the blade.

With respect to an elongated type of leaf-shaped spear-head, it appears that while in Ireland and Denmark it occurs in bronze, in the Peninsula it is reproduced in iron † (Figs. 638–640). Types of bronze daggers found in France and Ireland especially are also repeated in the Peninsula, and were also in some instances ‡

[†] See "Bronze Impl.," fig. 384; Madsen, "Atlas d'Archéol.," 1857, plates 1, 2, fig. 17; and "Ages préhist. de l'Espagne," figs. 361, 362.

† "Ages préhist.," fig. 357.

found in iron. Of the distribution of bronze swords in Europe this is not the place to speak at length. It will be sufficient to say that in respect both of hilts and blades, examples are found

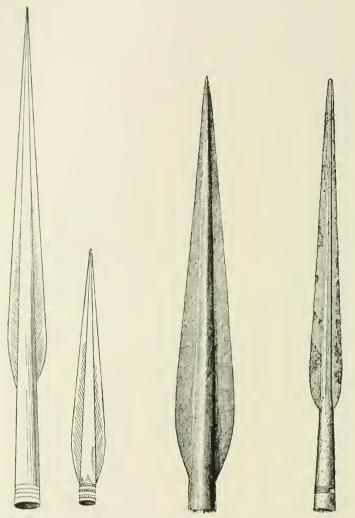


Fig. 638.—Bronze lance-heads. From Madsen's Atlas d'Archéologie de Nord, Copenhagen, 1837.

Fig. 639. — Bronze Fig. 640.—Iron spear-head, N. of Ireland. From Ireland. From Evans's "Bronze Age."

head, in form like the bronze ones, from Almedinilla. Cartailhac.

in Portugal and Spain corresponding as closely as do the Irish ones to those found in France, Denmark, Germany, and Britain.

With the exception of an occasional dagger-blade of the plain riveted type, it has been rarely in Britain or Ireland that a bronze weapon or implement has been found in association with the dead; and where this has been the case, it has been with cinerary urns in cisted tumuli, and not in dolmens that they have been found. Still in some districts most certainly the practice of dolmen building survived in and through the Bronze Age, so that the absence of these objects must be attributed

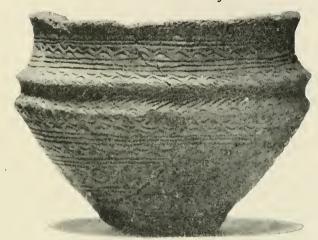


Fig. 641.—Irish urn in the British Museum.

to the fact that it was not customary to throw into the vault, and thus lose for ever, articles of such practical use and value.

The pottery from the caves and dolmens of the Peninsula,



FIG. 642.—Spanish urn in the British Museum, from a drawing by Mrs. Furnivall.

so far as I am acquainted with it, does not bear so close a resemblance to that found in Ireland as might have been expected. The decoration on that from the Palmella caves affords points for comparison; but the form of the vessels, not bulging, but depressed in the centre, resembles more closely specimens from the Hautes Pyrenées, Sicily, Arles, and Brittany.

and through them seems to be related to the type so common in England, but so very rare in Ireland, known as the "Drinking Cup." One little Spanish urn in the British Museum forms, perhaps, an exception to this rule, although a difference in workmanship may be detected (Fig. 642). In the case of Irish pottery, the finest examples are also the earliest, such as that found in a cist near the dolmen of Loughry in Tyrone † (Fig. 199), and the covered urns found in the chambers in Cairn Thierna and at Danesfort (Figs. 9 and 545). The pottery in cists with unburnt bodies is of better quality than that in those where cremation had been employed, in which latter it is often extremely coarse. The majority of the examples are, as can be shown by the patterns upon them, contemporaneous with the decorated bronze paalslabs.‡

Enough will have been said to show that Ireland and the Peninsula were brought into relation in the Bronze Age, as they had been in the Neolithic; the evidence of the former fact resting on the similarity of implements and weapons, and that of the latter on the similarity of detail in the construction of the dolmens. How far such intercourse was in either case direct, or how far it may have been opened up, in the case of the bronze implements especially, through the media of the populations of other districts, or of independent traffic, are questions which must remain unsolved.

Between the dolmens of Andalucía and those of Portugal and the north-west of the Peninsula, Signor Simoës remarks a distinction. The Andalucían structures are, he says, formed of stones not so rough nor so irregular as those in the Portuguese examples. Indeed, some of them seem to have been formed in part of cut stones (see Fig. 644, p. 688, infra), if we may judge from a drawing of one in the Cañada del Herradero given by Signor Manuel de Góngora y Martinez, but which (in common with his other examples) is represented in a very rude style. The Portuguese ones, again, have, generally speaking, circular or oval chambers unpaved, while those of Andalucía are quadrangular and paved throughout with large stones. In common with the dolmens of Portugal, however, those of Andalucía have covered passages, or galerias, as an essential part of the structure.

[†] I have been recently informed that this urn was not found in the dolmen itself as before stated.

‡ Of this fact I have given some few indications in this work, but I hope more fully to demonstrate its truth on a future occasion in another work on the Bronze Age in Ireland, for which ample materials exist which cannot be included here.

The principal authority for the megalithic remains of this Province is the writer I have just quoted.† They were attributed, he tells us, by the common people to the agency of giants and to enchantment. At Dílar, near Granada, there was formerly a dolmen of large proportions (Fig. 643). It was enclosed in a tumulus measuring 23 m. in diameter, surrounded by a circle of stones set up on end, each stone measuring about 80 cm. high. The vault itself was 9 m. long. From a drawing made of the structure, when the mound had been only partially removed from

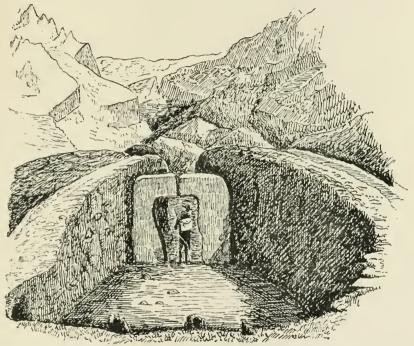


Fig. 643.—Dolmen at Dílar. From an engraving in "Antigüedades Prehistóricas de Andalucía," by Sr. Góngora y Martinez.

it, it appears that either at the entrance or at some point further inside the passage, was a kind of door-case, formed of two stones set upright on their edges side by side, from each of which a portion having been cut away, an aperture was formed circular at the top, and expanding at the bottom, something in the manner of a rude Moorish archway, and similar in construction to the apertures we have noticed in the dolmen-chambers of Rodmarton, Kerlescant, Des Manduits, Saker Planina in Bulgaria, and elsewhere.

[†] Author of "Antigüedades Prehistóricas de Andalucía."

At a distance of 50 m. to the S.E. was another similar tumulus measuring 15.60 m. in diameter; and again, 60 m. beyond this, was a third, both surrounded by stone-circles like the first.

Near Illora, on the road to Alcalá la Real, is a group of megalithic remains occupying an area of more than three kilométres. In the Cañada del Hoyon is the dolmen of that

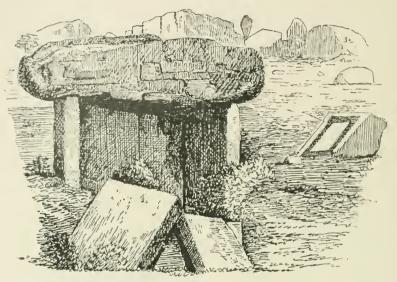


Fig. 644.—Dolmen de la Cañada del Herradero. From Sr. Góngora y Martinez.

name, a squarely built vault. A second, very similarly constructed, stands at no great distance in the Majadas (sheep-folds) del Herradero (Fig. 644). A third is at the end of the Cañada. There is also a megalithic enclosure, the diameter of which is from 1770 to 12 m.

In this part of the Peninsula, natural rocks of peculiar form are regarded with reverence. One such is the *Mortero Cortado*, a curious mass supported on a narrow base. There is also the Rocking-Stone of *Luque*, on the top of a rocky eminence, and the *Roca del Enjambre*, signifying the "Stone of the Multitude," or "Assembly."

On the farm of Las Virgenes, between Baena and Bujalance, is a famous menhir of that name. It is 12 feet high, and is the object of much superstitious veneration.†

[†] A stanza is repeated with regard to it:—
"Jilica jilando,
puso aqui este tango,
y Menga Mengal
lo volvió á quitar."

[&]quot;Jilica Jilando
Put this stone here,
And sent Menga Mengal
To take it away."

In the Province of Jaen is a fine monolith to which numerous traditions attach. It is called the *Piedra de los Enamorados*, a name which connects it with erotic superstitions, such as in Brittany attach to certain menhirs, and in some parts of Ireland to dolmens.

Near Fonelas, in the same Province, is a dolmen consisting of eleven stones, three on either side, two at the E. end, one at the W. end, and two covering-stones. At Toyo de las Viñas is another and very similar one. It is also covered in by two large flags, one of which has a groove in it, in which the stone which

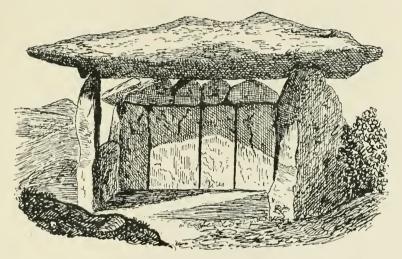


FIG. 645.—Dolmen de la Cruz del tio Cogollero. From Sr. Góngora y Martinez.

closes the entrance rests. At 30 m. distant is another buried in a mound. In the same vicinity is a dolmen of oblong form, its longer axis being E. and W. It is situated in a plot of ground called *Cruz del tio Cogollero*. The sides are formed of eleven stones arranged in two rows, one above the other, in order to bring the height up to the level of the tops of two high pillars (one of which measures 3.40 m.), which support the roof.

Near Tajo de los Castillones is the plain of Los Eriales which is described as "a vast necropolis of the ancient race." In five dolmens which were opened by labourers copper arrow-heads and pottery were found. The stone vaults were oblong, having two stones at either end, and two or three on either side. The whole country near Las Majadas del Conejo is stated to be covered with dolmens. One is called the Dolmen "de las hazas de la Coscoja."

"Stone graves" containing human remains are found among the Peñas de los Castillejos to the W. of the Barranco de los Pilones. About three leagues from Los Olivares is a place called Hoyo de las Cuevas del Conquil, where there are several dolmens called

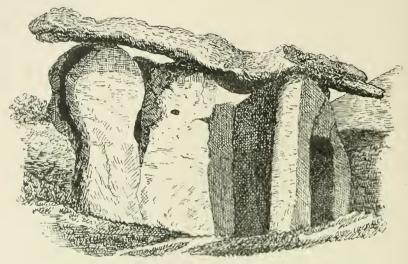


Fig. 646.—Dolmen de las Ascencias. From Sr. Góngora y Martinez.

locally Sepulturas de los Gentiles. One called the "Dolmen de las Ascensias" (Fig. 646) stands on steeply sloping ground.†

A second at the same place is called La Sepultura Grande. In its present condition it affords an excellent example of those monuments, such as that at Brenanstown (County of Dublin), to which I have so often referred as illustrating the fact that no distinction can be drawn between the square dolmen vaults and the passage-dolmens, allées couvertes, galerías, or gång-grifter, the former being merely the megalithic inner portions shorn of their approaches. In this example the side walls of the lower portion still remain, the covering-stones having been removed. The dolmen is a fine one, one of the side-stones measuring 3.80 m. long, a second 2.20 m., and a third 1.70 m. The roofing-stone measures 3.80 m. long on each of its four sides. Inside the vault a well-chipped flint arrow head was found of the tanged type common to Spain, Cornwall, and Ireland.

Another dolmen of this group is called Llano de Gorafe.

[†] The peasants repeat the following stanza about it :—
"Entre yo y mi hermano Lucas" Between

arrimamos este canto; y no lo arrimé yo solo por esta un poco manco."

[&]quot;Between us I and my brother Lucas
Turned this stone aside;
And I did not do it alone
Because I am slightly maimed in the hand."

Signor Simoës has remarked that the dolmens of Andalucía share with the Portuguese examples the characteristic of being provided with approaches consisting of narrow passages formed of large flag-stones. The name applied to dolmens both here and in Estremadura is simply garitas (sentry-boxes).

Two very important monuments, both in Andalucía, now deserve notice. They are the *Cueva de Castillejo de Guzman*, also called the *Cueva de la Pastora*, on the Guadalquiber, and the *Cueva de Menga*,† near Antequera, in the Province of Malaga.

Of the former Signor Simoes quotes an account by Signor F. M. Tubino, and it has also been described by Signor Manuel de Góngora y Martinez, by Lord Talbot de Malahide, and by M. Cartailhac. The English archæologist likens it to New Grange, only in miniature, a comparison which holds good both in regard to the passage-way by which the chamber is approached, and to the construction of the roof. The structural portion is buried in a tumulus, and was only discovered, in planting a vine, in 1868. A galería, measuring 27 m. long, 1 m. broad, and 2 m. high, leads to the central vault. At a distance of 11 m. from the entrance a trilithon is encountered forming a doorway into the second compartment of the passage which is continued in a straight line through another antechamber or vestibule 16 m. long, to a second trilithon which forms the entrance to the innermost chamber. This latter is semicircular in form, and the level of its floor is lower than that of the passage. It measures 2.60 m. in diameter, and 3 m. high. On the upper edges of the slabs which form the sides other stones are placed in such a manner as to overlap and form a cornice-like projection on which rests the roofing-stone which consists of one single immense slab. Thirty bronze arrowheads were found in the earth which was removed in order to effect an entrance.

Signor Simoes compares this "galería" with the so-called Furnas, of which we have spoken, at the Monte da Polvoreira, in Portugal. He also expresses his opinion that in the structural features of this chamber and its approach there are traces of a fusion of the cyclopean architecture, such as is found in the lower portions of the walls of Tarragona (Fig. 647), the Castello de Ibros, the Corralejos (stone enclosures in Andalucía), and the *talayots*

[†] Compare Mengue, "the Devil" (as perhaps in the verses in the note, p. 687), "Dict. Acad. Esp.," in voc.

and mapalias or magalias of the Balearic Isles, with the rude style of building employed by the dolmen-builders. Consequently

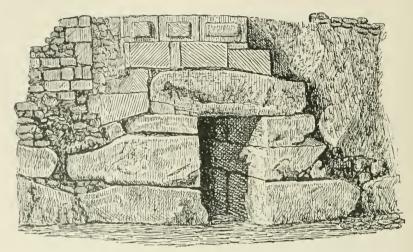


Fig. 647.—La Portella Rosario, Tarragona. From Bunnell Lewis's " Antiquities of Tarragona."

he concludes that, in prehistoric times, two distinct races existed side by side in the Peninsula, whose meeting-ground was that portion of the country in which remains such as this *cueva* occur. Certainly a problem here exists very similar to that presented



Fig. 648.—Section of the dolmen of Antequera. From Cartailhac.

by the two classes of megalithic structures in Ireland—the slightly covered dolmen on the one hand, and mound-entombed chamber of New Grange on the other. The passage-dolmen at Annaclochmullin (Co. Armagh) affords an example of fusion in structural detail similar to that noticed in the *Cueva de la Pastora*.

The grandest of all the megalithic remains of the Peninsula, as, indeed, it is also of Europe, is the *Cueva de Menga* (Cave of the Devil?), near Antequera. It has been described by Signor Raphael Mitjana in a monograph devoted to it, by Signor Manuel

de Assas in a communication to the Seminario Pintoresco Español, as well as by Signor Simoes, Lord Talbot de Malahide, and M. Cartailhac. It is as truly representative of the class of long dolmens only slightly covered, as the cueva on the Guadalquiber, just described, is of that of the chambers embedded in the larger

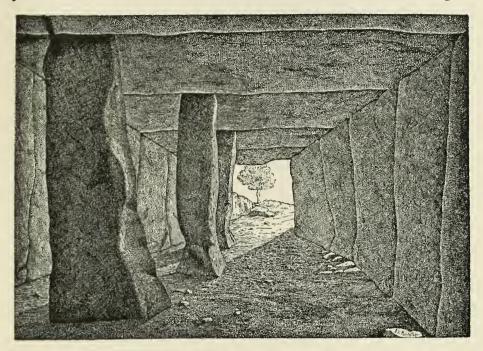


Fig. 649.-Interior of the dolmen of Antequera, Andalucía. From Cartailhac.

mounds—the former corresponding in Ireland to the Labba Callighe, the latter to New Grange.

It consists of a vast megalithic vault formed of immense slabs

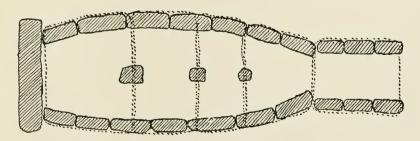


Fig. 650.—Ground-plan of the dolmen of Antequera, Andalucía. After Lord Talbot de Malahide.

enveloped in a thin covering of earth. Internally it measures $86\frac{1}{2}$ feet (Spanish) in length, with a maximum width of 22 feet, and a height of 10 feet $10\frac{1}{2}$ ins. Its long axis is E. and W. Five

"colossal" slabs suffice to roof it in. The largest of them measures 23 feet wide, 27 feet long, and 4½ feet thick, representing 2794 cubic feet of stone. The material is undressed limestone. Three upright blocks in the centre divide the area into chambers or cells -an arrangement, says Lord Talbot de Malahide, similar to that found in megalithic structures in Brittany and Touraine. No mortar has been used in the structure. The walls are formed by monoliths, ten on either side, and a single one of immense proportions forms the inner end. Through the centre of this terminal stone, as shown in a section, a large hole has been pierced. The ground-plan shows that the monument consists of two portions, the vault proper, and a narrow passage, which forms the entrance, at the end opposite the terminal stone. On a stone near the entrance three crosses, one of them being of peculiar form, have been cut. The pillars, which are arranged in line down the centre of the main chamber, do not appear to reach the roofing-stones.

The shape of the monument, looked at in ground-plan, resembles in some points that of a ship, which, considering that in the Balearic Isles, both artificial caves, and stone buildings called naus and navitas, were formed on the plan of vessels, it is not improbable was intentional on the part of the constructors. Signor Rafael Mitjana regarded the Cueva de Menga as a temple, which, combining an original sepulchral purpose, it may well have been.

Before we quit the subject of the prehistoric antiquities of the Iberian Peninsula it will be well to notice some points of folk-lore and superstition which offer comparisons with those found in Ireland.

In Portugal Saint John's Eve is the occasion for boisterous mirth. Young fellows play practical jokes. The spirits of the dead are supposed to be abroad, and to be wandering about their ancient haunts. Every year, says Signor Joaquin Costa,† were celebrated with great solemnity the rites connected with the summer solstice. The ceremonies which were supposed to point to purification by fire were still kept up, the fires being lighted on the tops of the mountains.

The last day of April was also a time set apart for the cultus of the dead. At a short distance to the eastward of the entrance

^{† &}quot;Organ. prolít. de los Celtiberos," p. 16.

into the passage at the dolmen of Eguilaz, the ground shows signs of having been subjected to the action of fires. This fact is accounted for, says Signor Antonio Pirala,† in the locality, by the bonfires which used to be lighted on the last day of April at the tombs in honour of the dead.

We have noticed the prohibition of the worship of certain goddesses in the Diocese of Conserans, and the belief in nightriding by witches in Ireland which is akin to it. There can be no question that a similar superstition existed in the western portions of the Peninsula.

A most terrible female supernatural being among the Portuguese was the Bruxa, or Bruja (pronounced Broocha). "No one," says Mr. Kingston, "knows who are Bruxas and who are not. She may be like any other woman. They keep it secret. They are a Heaven-accursed sisterhood—their souls pledged to the Prince of Darkness, a compact renewed every night. Sometimes their daughters become Bruxas. From sunset to sunrise the demoniacal power possesses them. When darkness has overspread the world, they rise from their couches and fly to their demon paramours." They are transformed into "noxious birds of night—owls and bats of immense size." I

That birds were actually in ancient times regarded as divinities, whence auguries were taken from their flight, is shown in a document which Count Berenguer, of Barcelona, addressed to the Cid: Videmus etiam et cognoscimus quia montes et corvi et corvelæ et nisi et aquilæ et fere omne genus avium sunt dii tui, quia plus confidis in auguriis ecrum quam in Deo.§

With these we naturally compare the Irish Macha, daughter of Ernmas, whose name means the scald-crow, and whose characteristic it was to "rejoice in rending the slain." "The Bruxas," continues Mr. Kingston, "allure poor wretches away. They enter cottages and deprive sleeping infants of life. They are devoutly believed in and dreaded."

There is another class—the Lobishome—a person born under an ill-star. "By day they are free from the spell, but wear sad faces. They sit by themselves without speaking. These are

^{† &}quot;España, Prov. Vasc.," 1885, Barcelona, p. 51.

‡ See note, p. 689.

§ "Gesta Roderici," por Risco, xxxvi. See also "Hist. Compost.," lib. i., cap. 64:—
"Auguriis confidens et divinationibus corvos et cornices posse nocere irrationliter arbitratus."

transformed into horses, rushing over hill and dale. If wounded in the chest, while in mad career, they are cured. Like the Bruxas, they return home in the morning." In these equine affinities of the Bruxa and the Lobishome, we have reason to trace a resemblance to the goddesses whose cult was forbidden by the Bishop of Conserans, to the Irish Macha, who outran the horses of Cormac, to the Water-Horses in the folk-lore of the islands of Harris and Lewis, and to the poor wretched woman, who after having been brutally burnt to death only last year, was believed to be riding around a rath on a hill in Tipperary.

In Portugal, in addition to the Bruxas, are female sooth-sayers, called Feiticiras. Like the former, they belong to sisterhoods, and are believed to have sold their souls to the Devil—the compact having been signed by a drop of blood drawn from the little finger. The male Feiticiro is a different class of being—a sort of hobgoblin—a little old man with apish, mischievous propensities, who sits in a tree by the roadside at night and throws stones at those who pass below.

The Feiticira aids the peasant to recover stolen property; she assists lovers; and effects cures in cattle by her incantations; or, if the owners are her enemies, afflicts their beasts with murrain. She possesses a magical ball of thread, and is, Mr. Kingston† thinks, "a mixture of the Roman Sibyl and the more fantastical Witch of the North."

It is interesting to notice that the pre-Christian custom called the *dessil*, or circuit, around a venerated spot, which is practised in Ireland in the case of one dolmen at least,‡ as well as at wells and churches innumerable, is found also in Portugal. Cattle, in order that they may escape the murrain, are taken *round* some favourite shrine. The peasantry, too, in performing their penances, make a progress *round* a church, and go barefooted to the shrine. Farmers offer, by way of penance, their own weight in corn or wax. Sailors carry their sail with them to the church, and, having done penance, reclaim it after Mass. Merchants insure their ships at the shrine of Matozinhos. "Each saint," says Mr. Kingston, "has a cure for something. The religion of the people is pure saintism."

In the Asturias there is a current superstition that the

^{† &}quot;Lusitanian Sketches," pp. 348-350.

‡ Maulnaholtora in Kerry, described at p. 3, supra, and to the superstition practised at which reference will be made in Part III., infra.

waters of certain wells are inhabited by white ladies, who are called Xanas.† Evidences of the worship of wells in the

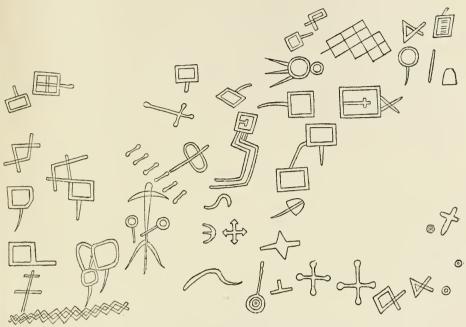


Fig. 651.—Rock sculptures in Galicia. From Signor Murguia's "Hist. of Galicia" (with others not given).

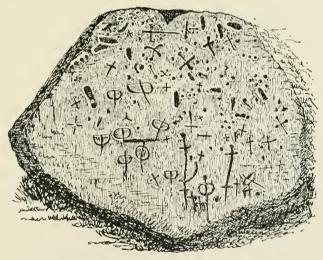


FIG. 652.—"The Horseman's Stone" (Clonmacnoise). From drawing by the Rev. Jas. Graves.

Roman period are found in inscriptions, as, for example, Fons Amewenia, Fons Saginæ, and others. Pliny mentions a well

^{† &}quot;Hist. de Galicia," por Manuel Morguia, vol. i. p. 535.

at Gades † which had the miraculous property of rising and falling with the tide.

Lastly, it may be mentioned that some of the rock sculpturings which have been found in the Spanish peninsula, resemble a certain class of markings which occur in Ireland. In Signor Murguia's "History of Galicia," a group is given (Fig. 651), some of the figures in which closely resemble those on the Horseman's Stone near Clonmacnoise (Fig. 652), while others, again, appear to be equally like some of the carvings on a stone from the tumulus of Renougat in Finisterre (Fig. 536).

ISLANDS OF THE WESTERN MEDITERRANEAN.

From the coast of Spain we pass naturally to the Islands of the Mediterranean, and first to the Balearic group, and here too we find caves artificially hollowed out of the rock, as in Sicily, the Ile Pianosa, and at Palmella, near Lisbon. We are at once reminded of the passage in "Diodoms Siculus," twhere

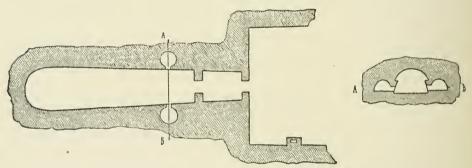


Fig. 653.—Plan and section of an artificial cave at Saint Vincent, Island of Minorca. From Cartailhac.

it is said of the Balearic people that "they live in caves hewn in the rocks, and spend all their days in these holes dug up and down in the steepest parts of the stony mountains, by which means they provide for themselves both shelter and security." That some of those which have been discovered may have served this purpose is likely enough. In the case of others, however, investigation has placed beyond question their sepulchral origin. M. Cartailhac notices that similar ones exist in

Barcelona, 1879, p. 221.

^{† &}quot;Nat. Hist.," ii. 100: Gadibus qui delubro Herculis proximus, fons inclusus ad putei modum, alias simul cum Oceano augetur minuiturque, alias vero utrumque contrariis temporibus. Sce also "Strabo," iii. 5, 7: There was a well with similar properties in Perigord, as see Delph. not. on Pliny, loc. cit. I have found a like superstition both in Cornwall and Ireland.

‡ Lib. v. c. 1. See also Signor Francisco Martorell y Pena, "Apuntes arqueologicas,"

the vicinity of Alcudia, and he compares them in respect of their structural details with the partly natural, partly artificial, "allées couvertes," in the hills at Arles.

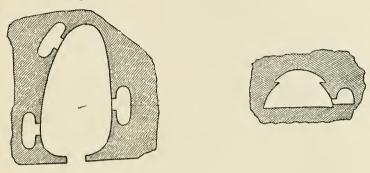


Fig. 654.—Plan of one cave and section of another at Saint Vincente.

Near San Vicente, in Minorca, is a group of forty of these caves. Some are provided with "anti-grottes," or vestibules, and some open directly on the hillside. A characteristic feature is that they possess little oval side-chambers, which gives them, in their ground-plan, a resemblance to the "burghs"

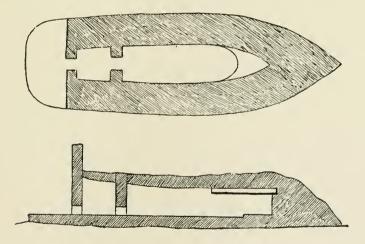


Fig. 655.—The "Nao dels Tudons" (ground-plan and section). From Cartailhac.

of Scotland. Most remarkable among them are those which are in the form of a ship. One such, having a double vestibule and two small circular side-chambers, is noticed by M. Cartailhac. A striking development of this form is found in certain primitive buildings, constructed on the surface, and called *Naos*, *Naus*,† or *Navetas*, that is, "ships." The ground-plans of some of these

are identical with those of the ship-caves, but their shape varies in different districts.

The most striking of these structures is situated in the northern part of Minorca, not far from Cuitadela, in the

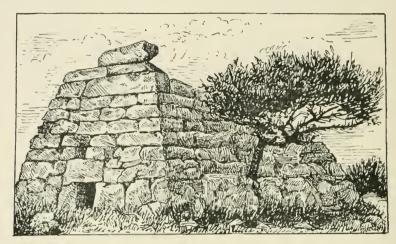


Fig. 656.—The "Nao dels Tudons." After Cartailhac.

district "dels Tudons," whence the building is called the *Nao dels Tudons*. Externally its form is that of a somewhat deep-keeled vessel, lying bottom-upward, square at the stern, where the entrance is, and pointed at the bow. The masonry is cyclopean, and there is no trace of cement. Nine courses of stones, with one block resting on the top, form the stern, whence the structure diminishes in height to six courses at the bow. As the upper portion, however, is broken down, it is difficult to say how far this was intentional in the original design.

The interior measures 10.50 m. long, and is divided into a vestibule and a principal chamber, the inner end of which latter has a sort of daïs, or raised portion of the floor, about 4 feet broad. This portion is roofed, according to the section, by a single slab about 11 feet long.† A low, cyclopean doorway gives ingress to the vestibule from without, and one of similar height forms the means of communication between it and the main chamber.

The outer doorway measures 0.57 m. wide, and 0.75 m. high. The vestibule is the "castle," puppis, or $\pi\rho \nu \mu\nu a$ of the ship, and the doorway communicating from it into the other portion

[†] Compare section of Mané Lud., p. 612, supra.

‡ It was the highest portion of the vessel. Abschylus uses the term πρὲμνο πόλεος metaphorically for the Acropolis at Athens.

may be seen in terra-cotta models of ships found in Cyprus, several of which are in the British Museum. The great height of this "castle" or stern is also seen in these models. If we compare this structure to a Greek or Roman temple, the vestibule would answer to the $\pi\epsilon\rho\iota\sigma\tau\acute{a}\delta\epsilon$ s, or $ant\alpha$, and the body of the building to the $\nu a\acute{o}$ s, or cella.

In Minorca, although there are *navetas* of ruder form with central supports representing masts, there seems to be no intermediate form between the cave hollowed out like a ship, and the well-built *naveta* which shows considerable architectural knowledge. In Sardinia, however, where neither ship-cave nor *naveta* are found, we have in the "Tombes des Géants" a type of structure to which we might assign a middle place, as we shall presently see.†

It is, however, strange to say, in the rude dolmens of Ireland, that what seems to me to be the closest approach to the design of the navetas is to be found. I take as examples two of the best-preserved and most typical structures, namely, the Labbacalle, near Fermoy (Cork), ‡ and the largest of the monuments at Burren, near Blacklion (Cavan). In the ground-plan of the former the ship-shape is very noticeable. In the latter, the feature of the vestibule is distinctly present, with a creep beneath the partitional stone communicating with the main inner chamber. In both these monuments, and in the dolmens of Ireland generally, one end is higher than the other, and that end is also, in cases where there is a partition forming the vestibule, the end where the entrance is found. Not only is that end higher, but it is broader than the rest of the structure, which is almost invariably wedge-shaped, and sometimes narrows off to a point at the further end, which, if the analogy holds good, would represent the bow of the vessel.

But in connection with Irish antiquities, I have a second, and even still more curious comparison to make. No structure known to architecture resembles so precisely in external form, in the laying of the courses of its masonry, and in other details of its construction, the little boat-shaped stone structures found on the

[†] See "Ant. Celt. de la Isla de Minorca," por el Dr. Dn. Juan Ramis y Ramis, Malion, 1818, p. 136; "Voyage en Sardaigne," par M. le Cte G. A. Ferrero della Marmora, 2, edit., Paris, 1839, p. 542, and pl. xxxix.; "Apuntes arqueol," Signor Francisco Martorell y Pena, p. 221; "Ages préhist. de l'Espagne," M. E. Cartailhac, pp. 142, 143.

^{\$} p. 204, supra. To these add that at Gortakeeran in Sligo, p. 180, supra. \$\frac{1}{2}\$ Compare the dolmen called "La Pierre Turquaise," pp. 627, 639.

south-western coasts of Ireland, and traditionally attributed to Christian hermits, whose tombs they were in some cases said to contain, as does this *Nao dels Tudons*. I adduce three examples, the first from Mr. Wilkinson's work on Irish architecture (Fig. 658), the second Kilmalkedar, on the coast of Kerry (Fig. 659), and the third the interior of the structure at Gallerus (Fig. 660),†



FIG. 657.—The "Nao dels Tudons." From Cartailhac.

the exterior of which is, by the way, as nearly identical as can be with the Nao dels Tudons, as shown in the above photograph. That the Irish structures are cemented, and that their interior



Fig. 658.—Boat-shaped building, such as are found on the coasts of Cork, Kerry, and Clare. An example from G. Wilkinson.

chamber is oblong, are merely details of development. The inverted boat-shape is retained, and in some cases there are traces that a vestibule once existed. To the feature of the presence of anta

in some of them, such as in the Leaba Mologa, I have already called attention.‡ This very word *Leaba*, or "Bed" (of the dead),

[†] The photograph of the structure at Gallerus in Lord Dunraven's "Notes of Irish Eccl. Architecture," edit. Miss M. Stokes, is even more like the Nao dels Tudons than is either of the little buildings here represented.

‡ See plan, p. 638.

they share to this day with the dolmens in Ireland, of which they are the extant representatives as surely as the present Bedawin tombs of the Jaulân are, as Dr. Schumacher† has pointed out, the representatives of the dolmens of that district (see Fig. 661,

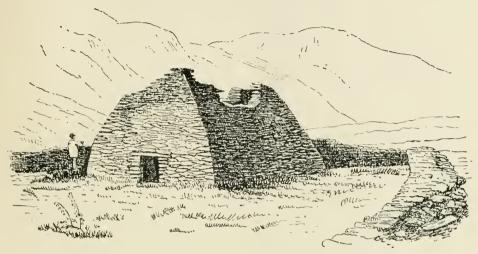
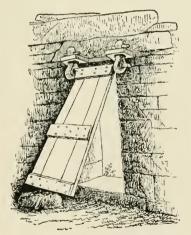


Fig. 659.—Kilmalkedar, Co. Kerry. From a sketch by Petrie.

infra, p. 704). In either case, the structure was formed for the cultus of the dead, whether the development of that cultus was to be continued under Pagan auspices, or under Mahommedan or



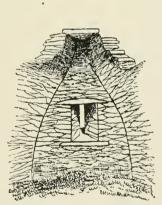


Fig. 660.—View of the interior, and of the arrangement for door in the structure at Gallerus, Co. Kerry. After Petrie.

Christian, and in either case its type was to be traced back to that which had been adopted in Pagan times for the ancestral tombs.

I may say that, long before the caves and navetas of Minorca

^{† &}quot;The Jaulân," 1888, p. 129.

were known to me, I had formed the opinion that what I have so frequently spoken of as the "wedge-shape," observable so universally in the ground-plans of dolmens, was due to an original conception of a ship. From sepulchral tumuli in Scandinavia, as we know, actual vessels have on several occasions been disinterred. In cemeteries of the Iron Age, in the same country, as well as on the more southern Baltic coasts, the ship was a recognized form of sepulchral enclosure.†

Of another class of monument found in the Balearic Isles, and

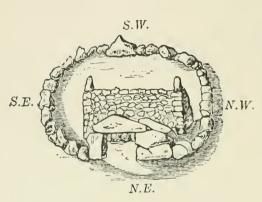


Fig. 661.—Bedawin tomb Külât el-Husn. From Schumacher.

called Talayots, a diminutive, it is said, from Atalaya, meaning the "Giant's Burrow," ‡ it is not necessary to speak at length, since they offer no points of comparison with existing monuments in the north. They probably belong to the Bronze Age, and a onelooped bronze celt, with square socket, was found in one of them.§

We take next in order the megalithic remains of Sardinia. Of the so-called "Giant's Graves" of that island, Mr. Thomas Forester speaks thus: "The structures to which the popular traditions ascribe the name of the Sepolture de is Gigantes, the 'Tombs of the Giants,' may be described as series of large stones placed together, without any cement, inclosing a foss, or hollow, from 15 feet to 36 feet long, and from 3 feet to 6 feet wide, and the same in depth, with immense flat stones resting on them as a covering. Though the latter are not always found, it is evident by a comparison with the more perfect Sepolture, that they have once existed, and have been destroyed or removed. The foss invariably runs N.W. and S.E., and at the latter point there is a large upright headstone, averaging from 10 feet to 15 feet high,

[†] Dwellings formed like inverted ships in use in Africa, are mentioned by Sallust (c.viii. x. edit. Nisard, Paris, 1861): "Ceterum adhuc ædificia Numidarum agrestium, quæ Mapalia illi vocant, oblonga, in curvis lateribus texta, quæ navium carinæ sunt." The tents of the Arabs in Western Barbary are described in Sir John Drummond Hay's work (p. 25) as resembling boats with their keels upward. Some gipsies form very similar temporary structures. See also Ducange, "Gloss. Lat." in voc. navis.

‡ "Rambles in Corsica and Sardinia," by Thomas Forester, London, 1858, p. 384.
§ "Voyage en Sardaigne," Della Marmora, pl. xxxix.

varying in its form from the square elliptical and conical to that of three-fourths of an egg, and having in many instances an aperture of about 18 inches at its base.

"On each side of this *stele*, or headstone, commences a series of separate stones, irregular in size and shape, but forming an arc, the chord of which varies from 20 feet to 26 feet, so that the whole figure somewhat resembles the bow and shank of a spur."

An excellent and tolerably perfect example of one of these monuments is that at Abbasante. An oval enclosure, or peristyle, comprising forty stones on edge, surrounds a long passage-vault, which does not, however, extend the entire length of its long diameter. This vault is composed of thirteen stones on edge, on the one side, and eleven on the other. Each end is closed by a large stone, and that at the outer end is the centre stone of a semicircle formed of five stones which form, as it were, a pair of horns thrown out from the end of the structure. Ten slabs



Fig. 662.—Elevation of one of the "Tombes des Géants" at Abbasante, Sardinia.

compose the roof of the vault, which slightly expands in the usual wedge-shape towards its inner end. The writer who describes

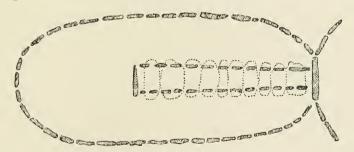


Fig. 663.—Plan of one of the "Tombes des Géants" at Abbasante, Sardinia. From "Mat. pour l'Hist. de l'Homme."

it expresses his opinion that the outer environment of stones formed at one time the base of a mound which covered the whole.†

^{† &}quot;Mat. pour l'Histoire de l'Homme," 1884, pp. 200, 201.

Another typical example is at Pauli-Latino (Fig. 664). In this case the chamber is covered by five flagstones. The inner end is semicircular. The vault appears to be incased in a low wall, or walls of dry masonry laid in three ranges contiguously. The feature of the semicircle outside the end of the vault is very marked. These horns are here formed not of single blocks, but of courses of stones.†

The Count Ferrero Della Marmora gives ‡ an excellent idea of one of these semicircles with its central pillar, and aperture from a *Tombe des Géants*, at Borore (Fig. 665), near the *nuragh*

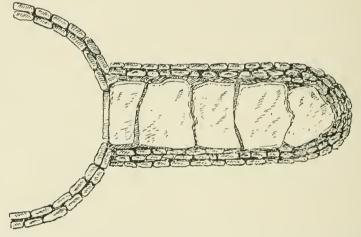


Fig. 664.—"The Giant's Grave" at Pauli-Latino, Sardinia. From De la Marmora.

Imberti. The monolith, as will be seen, is carved into the shape described as truncated ovate, and exhibits two sunk panels above the orifice. It stands at the N.W. end of the vault. Such examples have been justly compared to a monument in Alsace, the antiquities of which district have in a more general way been compared to those of Sardinia.§

It will have been observed how exactly the structure at Abbasante corresponds to Danish *Jættestue*, and to those of North Germany, which have oval peristyles. With British Long Barrows the similarity is no less striking. In Ireland an almost exact counterpart may be said to exist in the case of the entombed

[†] General le Compte Della Marmora, in "Bull, dell' Inst.," 1833, p. 121; copied also by Abeken.

^{† 1}d. anct., "Voyage en Sardaigne," pl. iv., and "Antiqq.," p. 23.
§ 1d. p. 32; and "Recherches Archéologiques," par M. Baulieu, p. 289. For other notices of the "Sepolturas of Sardinia," see Antonio Bresciani, "Dei Costumi dell' isola di Sardegna comparati cogli antichissimi popoli orientali," Napoli, 1850; also J. W. Tyndale, "The Island of Sardinia" (London, 1849), vol. i. pp. 109, 140, 141; vol. ii. pp. 61, 62.

chamber at Annacloghmullen, in Armagh (p. 303, supra). There is, it is true, in that case, no central pillar-stone with an orifice, but there is a small low opening into the vault in the middle of the arc of a semicircle, on each side of which, corresponding to the so-called custodes of the German Hünenbedden, stood a tall pillar-stone (Figs. 276, 278, supra, and p. 528).



Fig. 665.—N.W. end of "Giant's Grave," near Borore in Sardinia. After De la Marmora.

With equal distinctness we have the characteristic feature of the semicircle before the entrance, marked in the plan of the structure near Newbliss in Monaghan (Fig. 269). The cairn at Doohat in Fermanagh (Fig. 219) presents a similar feature at each end, as do also several Scottish examples of chambered tumuli. That called the Cairn of Get, near Garrywhin, in Caithness (Fig. 429), is an instance in point, as is that also at Yarhouse, in the same district (Fig. 428). In these two latter, and in that near

Newbliss, the semicircle, as at Pauli-Latino, is formed of courses of stone, and not of single blocks.

We have seen that the terminal stone with its orifice, which is a characteristic of the Sardinian structures, has been compared to a type found in Alsace. I am inclined to think that it may be compared also to a celebrated stone in Portugal, which has

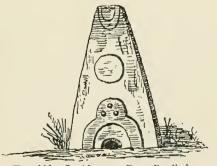


Fig. 666.—In Alsace. From Baulieu's "Recherches Archéologiques."

hitherto been a puzzle to archæologists. This is the "Piedra

Formosa" in the Citania of Briteiros, in the province of the Minho. It is an elaborately sculptured block, rough at the upper edges, as if once built into a wall or tumulus, perhaps. At the bottom, in the centre, is a semicircular orifice † corresponding to those in the

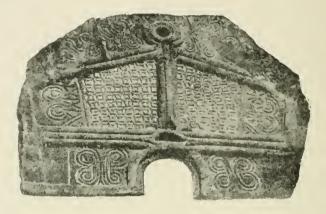


Fig. 667.—The "Piedra Formosa" at Briteiros. From Sarmento.

Pauli-Latino and Alsatian stones, and (to carry the comparison further) to those in the dolmens of Dílar in Andalucía (Fig. 639), of Gramont in Hérault (Fig. 557), of the Sâkar Planina in Bulgaria (Fig. 484), of Tzarskaya in the Caucasus (Fig. 668), of Karlsgården (Fig. 463) in Vestergötlande, of Burren in Cavan (p. 205), of Cartronplank in Sligo (Fig. 133), all of which are

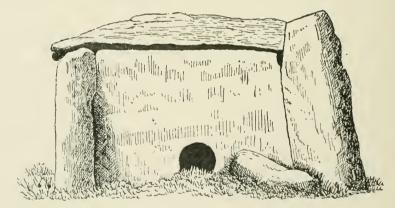


Fig. 668.—Dolmen of Tzarskaya (Caucasus). From "Mat. pour l'Hist. de l'Homme."

examples of artificially formed semicircular apertures at the bases of the terminal stones of the respective tombs, not to mention the

[†] In addition to the orifice at the bottom there is a V-shaped channel cut out in the interior of the stone. One of the elaborately carved stones in the chamber at Gavr-Inis in Brittany has channels similarly hollowed out in it. See M. Alex. Bertrand, "Diet. Archéol.," in voc., and Fig. 544 (centre in lower row), supra.

innumerable instances of holed dolmens, or dolmens with some aperture, however rudely formed, which afford means of access to the inner vault, in whatsoever countries structures of this class are found.

Perhaps the little aperture formed in the end of the structure known as the tomb of the founder of the Church of Boveragh in Londonderry, and which is late medieval, is referable to the survival of a custom begun in the dolmen days (Fig. 669).

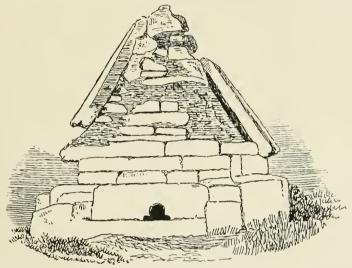


Fig. 669.—Tomb of the reputed founder of the church of Boveragh, Co. Londonderry.

After Petrie.

It is beyond a doubt that the purpose of the semicircle at the end of the tomb was to afford means for those devotees who came to worship the spirit of the dead either to enter the tomb-temple, if the aperture was large enough, or to insert offerings and await responses, perhaps, if it were not.

The Irish peasants in the early part of this century, and still perhaps in some places, crawl on their hands and knees into the little shrines, such as that of Saint Declan, and after having lain on the bare ground, carry away some of the "blessed clay" which is supposed to contain the relics of the dead. †

In the neighbourhood of Canton I have seen very similar semicircular arrangements, some of them of quite recent date, though constructed in obedience to ancient custom, made at the

[†] The Lapp wizards used the clay in cemeteries for necromantic purposes. Herodotus speaks of an African tribe, the Nasamonians, who for divination, betook themselves to the tombs of their ancestors, and, after praying, lay down to sleep by their graves (Lib. iv., cap. 73).

entrances to the caves in the hillsides which served as the tombs of the Mongols. The semicircle was sometimes constructed of slabs on edge, and was paved—the little doorway into the vault occupying the centre of the arc. On this platform devotions were paid to the dead ancestors within.

Sardinia also possesses monoliths called *Pietra* or *Perda-Fitta* and *Perda Lunga*. Sometimes these are unhewn, but are "generally rounded by the hammer, but irregularly, in a conical form tapering to the top, but with a gradual swell in the middle. Their height varies from 6 to 18 feet. Often there are three together, two lesser ones and a long one." †

Father Bresciani † mentions some exceedingly curious customs in existence in this island, in connection with the summer solstice. A great fire is lighted on the piazza, around which young men and maidens dance. Of these one couple have previously agreed together to act the parts of godfather and godmother of St. John. They had made, early in April, a little pot out of cork-bark in which they had grown a plant of corn. This vase with its contents was called Su Nennere, \$ and on St. John's Eve, decorated with ribbons, it was placed on a balcony, hung round with wreaths and flags. In old times, a little doll (corresponding apparently to the sitsa of the Basques), dressed as a female, or sometimes phallic emblems moulded in clay, were placed on the corn plant, but the priests denounced this practice, and it was discontinued. Over the fire above mentioned, the curious compact between godfather and godmother was completed. The man stood on one side of the fire, and the woman on the other. They held a stick at opposite ends, and, stretching it over the embers, passed it rapidly to and fro; this was repeated three times, so that the hand of each passed three times through the fire. In some places the couple went in procession to a church; here they dashed the pot of corn against the door and broke it. The company then sat in a circle on the greensward, and feasted on eggs, while gay tunes were played on a pipe; a cup of wine was passed round, and, forming a circle, they danced for hours.

[†] Thomas Forester, "Rambles in Corsica and Sardinia," p. 389. Compare that at Odry, fig. 481, supra.

[†] Op. cit.
§ Father Bresciani says that the name of Hermes is also given to this. He compares these vases to the "gardens of Adonis" in Phoenician mythology. With the fire, compare the Nedfri of the Germans, see Lindenbrog, Gloss. in Cart. Reg. Franc. in voc.

Of the *nuraghes* of Sardinia, akin probably to the *talayots* of the Balearic Isles, though differing from them in details of construction, there is no occasion here to speak, since they seem to bear no relation to dolmens. There are, however, some three thousand examples of them in the island;—truncated cyclopean structures of from 30 to 60 feet in height, and from 100 to 300 feet in circumference at the base. One which Mr. Forester has described seems to have resembled very closely Maiden Castle in Cumberland, as described by Leland.

We have seen that Sardinia has its Sepolturas de is Gigantes, and Minorca its Navetas, each allied more or less closely to the dolmens of other countries. We have now to notice that Corsica has her dolmens too. M. Merimée describes one of these, situated in the Vallée de Cauria, or Gavuria.† The vault measures internally 3.15 m. by 2.05 m. The height under the cap-stone is 1.65 m.

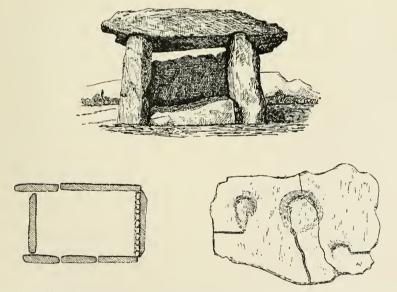


Fig. 670.—Elevation, plan, and top of covering-stone of the dolmen de la Vallée de Cauria (Corsica). After Merimée.

The cap-stone itself measures 3.50 m. by 2.30 m. On its upper surface, near the centre, is a shallow cavity from which a trench runs to the edge of the stone, "evidently," says M. Merimée, "the work of man." On the S.E. side of the stone is a second trench; quite straight, leading into an elliptical cavity, and on the opposite

^{† &}quot;Notes d'un Voyage en Corse," by M. Prosper Merimée, Inspector of the Historical Monuments of France, pl. facing p. 26.

side is a third. With these cavities and trenches in the coveringstone of a dolmen may be compared many other examples, whether natural or artificial. I have noticed those on the dolmen of Haroldstown in Carlow, i and have stated my belief that, where not wholly or partially artificial, rocks containing such cavities were purposely chosen by those engaged in rearing the monument. One remarkable example which I may mention here is that of the covering-stone of a cist, 1.30 m. in diameter, and containing a cinerary urn, in a tumulus at Tréogat in Finisterre, ‡ another is the covering-stone of a cist at Bakerhill in Ross-shire. The vault in this Corsican dolmen is composed of three slabs on one side, two on the other, and one at either end. Neither of the terminal slabs reaches the roof, one of them having space enough between it and the upper stone to thrust in an arm, and the other being a mere threshold stone, the structure having probably extended further in that direction.

M. Merimée speaks of another dolmen at Tavaro, in a ruinous condition. Several menhirs are also mentioned, sometimes placed singly, sometimes in pairs, and there is also the singular statue of a female (2·12 m. in height) called the *Idolo dei Mori*, and to which I have already alluded.

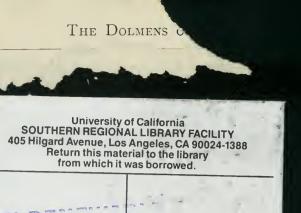


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[§] See fig. 438, *supra*. ¶ See p. 666.



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