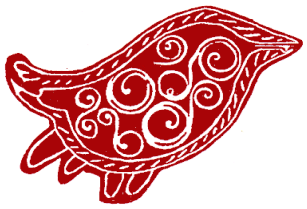
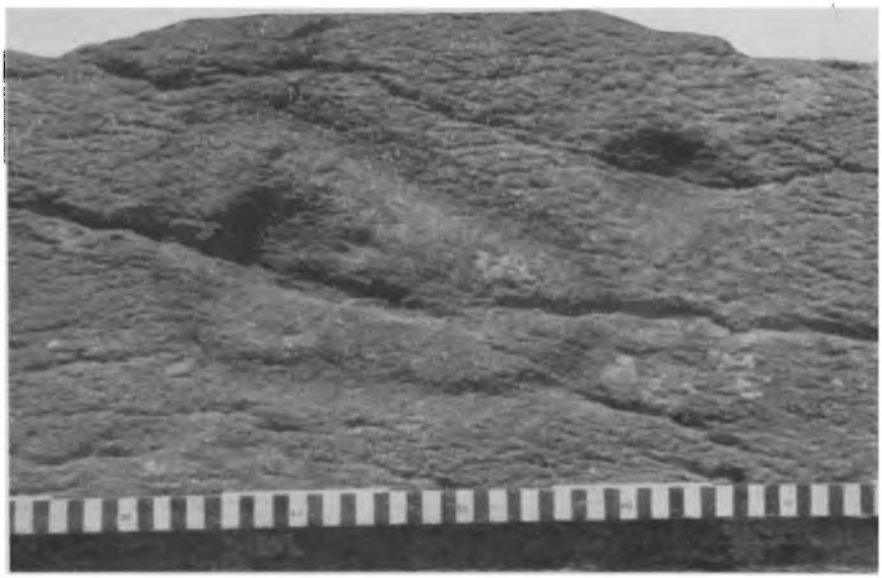


(a) Drombeg Recumbent-stone Circle before excavation. From the east



(b) Drombeg Recumbent-stone Circle. Carvings on the recumbent-stone

PART I—VOL. LXIV, No. 199 JANUARY-JUNE, 1959

Journal of the
Cork Historical and Archæological Society

(*Sixty-Seventh year of Issue*)

A Recumbent-stone Circle at Drombeg, Co. Cork

By E. M. FAHY, M.A.

The Drombeg stone circle, some two miles east of the village of Glandore in County Cork, has long been regarded as the exemplar of the recumbent-stone circles of the south-west of Ireland. The circle which is locally known as the 'Druids' Altar' was first brought to notice in this *Journal* fifty-six years ago when Franklin published a brief description of the site.[1] A few years later, Somerville became interested in the west Cork circles and theorised on their possible orientational significance; he surveyed a group of sites, including Drombeg, and published his findings in our *Journal*.[2] Since then, apart from one excavation[3] and intermittent surveys of individual monuments, the problem of the recumbent-stone circle in Ireland has received little attention. The Drombeg excavation was undertaken in an effort to throw some light on the date and purpose of one such monument.

Recumbent-stone Circles in County Cork

A preliminary distribution map based on the Ordnance Survey of County Cork and other sources[4] indicates that the circles occur in larger numbers and in more specific zones than has hitherto been suspected. The entire western strip of the county, from Clonakilty to Berehaven and northward to Mallow and Millstreet, appears to be particularly rich in circles—indeed, sixty would be a conservative estimate of their number. In addition, this region is dotted with wedge-shaped gallery graves, standing stones and stone alignments as well as several cup and ring marked boulders.

Broadly speaking the circles occur at intermediate levels and in well defined groups on the southern and south-western slopes and headstream areas of the sandstone hills. Where circles occur in scattered formations they are found to traverse the north-south gaps in the east-west ridges of the countryside, a fact which may suggest a movement of people inland from the coast.

[1] *J.C.H.A.S.*, IX (1903), 23, 24.

[2] *J.C.H.A.S.*, XV (1909), 105–108.

[3] *J.C.H.A.S.*, XLIV (1939), 46–49.

[4] Somerville, *J.C.H.A.S.*, XXXV (1930), 79–81; Gogan, *J.C.H.A.S.*, XXXVI (1931), 9. Borlase, *The Dolmens of Ireland*, Lond. (1897), Vol. I, pp. 8–45; Cremen, *J.C.H.A.S.*, XV (1909), 59; Surveys in the files of the Dept. of Archaeology, U.C.C., and personal observations in the field.

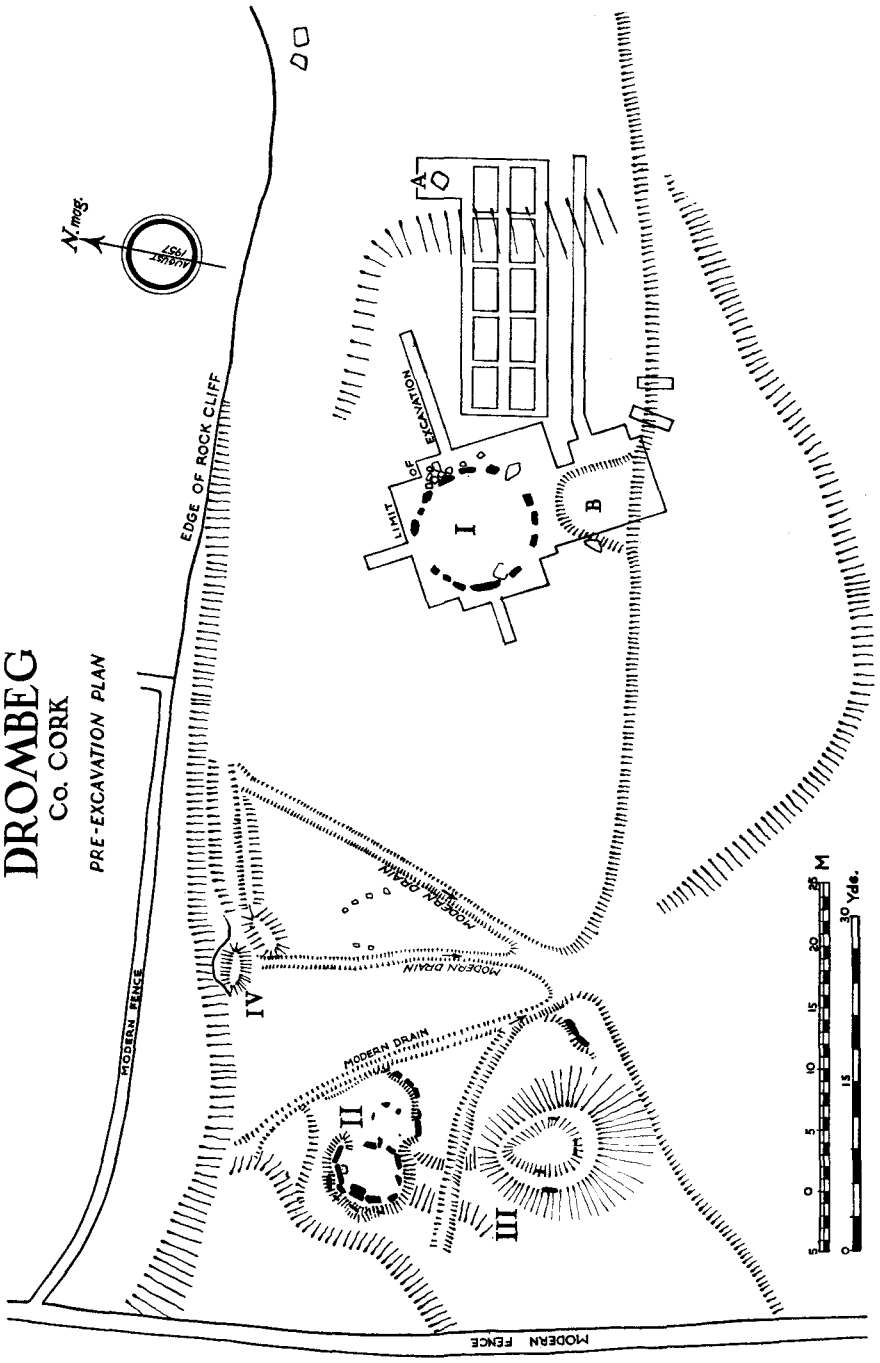


Fig. 1. The Drombeg terrace showing the stone circle (I), the supposed outlier (A), the 'cove' (B), the hut site (II) and the cooking place (III). The mound (IV) proved to be the retaining wall of a disused, modern pond.

It is a characteristic of those circles which have been surveyed that a recumbent slab or in some instances, a flat surfaced block-like boulder stands almost invariably in the western semicircle of the monument. Directly opposite the recumbent stone, in the eastern semicircle of the monument, stands a pair of portal stones which comprise the tallest stones of the circle, while the recumbent is usually the lowest stone of the group. The portals are usually set in the circumference of the circle, but some which we have seen[5] are set radially with their inner edges touching the circumference. In diameter the circles may vary from as little as 2.45m (8′) to 11m (36′) or more ; they are constructed of standing slabs or pillars or, less commonly, of boulders ; sometimes a central boulder occurs [6] and one or more of the circle stones may be cup-marked. The monuments do not enclose cairns or tumuli and are not visibly enfossed, though one such circle is known to us.[7]

The Drombeg Circle

The Drombeg circle occupies a commanding position on the southern slope of the hill forming Drombeg townland [8] and stands on a natural rock terrace just above 250′ O.D. It overlooks a well cultivated, bowl-shaped valley beyond which the Atlantic ocean is visible over a mile away to the south. To the south-east a sheltered creek, Tralong, gives access to the valley from the sea. To the south-west the entrance to Glandore Harbour may be seen, but rugged cliffs on the near side of the inlet render that harbour unsuitable for sea-borne entry to the Drombeg area. To the west, north and east the hills rise above the Drombeg terrace so that the circle lies hidden from an observer standing even a short distance away in those directions, but it is clearly visible from the floor and opposite slopes of the valley though lying well below the horizon when viewed from such positions. The terrace (fig. 1) on which the circle stands is over 30m (33yds) wide and 100m (108yds) long ; it is backed by a low rock cliff to the north and falls abruptly away to the south. There is a general ground slope from east to west so that the terrace, usually rather wet by reason of the drainage received from the high ground to the north, is very marshy at its western end.

Before excavation the monument consisted of fourteen free standing stones disposed in an almost perfectly circular formation averaging 9.30m (30′ 6″) in diameter. Luxuriant growths of ferns and thorn bushes surrounded the circle but did not grow within the enclosure where the green sward was

[5] Knocks, Co. Cork, Maulatanvalley, Co. Cork.

[6] Maulatanvalley, Co. Cork.

[7] Reanascreena, Co. Cork. A well-preserved recumbent-stone circle enclosed by a fosse or ditch in which rests a number of boulders. This henge-like monument is of interest in view of Atkinson's opinion that there is ' little contact between the henge monuments and stone circles' and 'that henges must be regarded as a purely British development'—*Actes* de la IIIe Session du Congrès Internationale des Sciences Prehistoriques et Protohistoriques Zurich, 1950, 227.

[8] Location : 6″ O.S. Sheet, Cork. No. 143, N. 19.7 ; E. 10.5cm. Td : Drombeg ; Ph : Kilfaughnabeg ; By : East Carbery.

springy underfoot. The recumbent stone, an impressive flat-topped slab, stood in the south-western arc of the circle while the portal stones averaging 2m high, 1.10m wide and 45cm thick (6′ 7″ by 3′ 7″ by 1′ 6″) stood on the north-eastern side of the monument. Three gaps wider than the average spaces between the orthostats occurred in the circle and it was later established that stones originally stood in these positions, so that when complete, the circle was composed of seventeen stones. Sixteen of them were orthostats arranged symmetrically, eight in each of the northern and southern semicircles of the monument, while the seventeenth stone, the recumbent, (fig. 2, stone no. 9) stood immediately opposite the portals (fig. 2 nos. 1 and 17) on the far side of the circle. According to Franklin[9] there was also a 'central stone, rather round, 3′ high and 22″ wide' in the centre of the circle, but such a stone does not appear on Somerville's survey[10] of only six years later, nor was a stone socket located during the excavation. It is possible, however, that the stone was an original feature but was not set in a socket.

The majority of the orthostats, all of local sandstone, had natural, sloping tops and had been set so that these features sloped upwards in the direction of the recumbent stone. This was particularly noticeable in the north-western arc of the circle where three stones of carefully graduated heights were set so that their sloping tops combined in a rising line beside the recumbent stone (pl. III, a, stones 10, 11, 12). Immediately outside the north-eastern arc of the circle was a dump of large boulders (fig. 1) which on examination was found to lie on the modern turf and may perhaps represent the shattered remains of the missing orthostats.

Apart from the orderly arrangement of their sloping tops the majority of the orthostats, all smooth surfaced pillar-like stones, call for no special mention.[11] Three stones, however, must be described in detail, these are the recumbent (no. 9) and nos. 14 and 15.

The Recumbent Stone (figs. 2, 3 and 4, stone no. 9)

The recumbent was a sizable stone 2.10m long, 45cm wide and 90cm high (7′ by 1′ 6″ by 3′) the flat table-like surface of which occupied an almost horizontal plane when viewed with the naked eye. On examination however, it was found to slope to the south by 5.5cm and to the east by 3.5cm, i.e., slopes of 1:30 and 1:14 respectively. The stone was almost exactly centred on the NE—SW axis of the circle which passed mid-way between the portal stones.

On the surface of the recumbent, a little north of its central point, a weathered, pecked and smoothed line-carving surrounding a circular cup mark was detected (pl. I). The carving measured 29.8cm (11¾″) long and attained its maximum width of 18.4cm (7¼″) near its southern end. The

[9] *J.C.H.A.S.*, IX (1903), pp, 23, 24.

[10] *J.C.H.A.S.*, XV (1909), pp. 105–108.

[11] Detailed measurements of all orthostats are given in Appendix I.

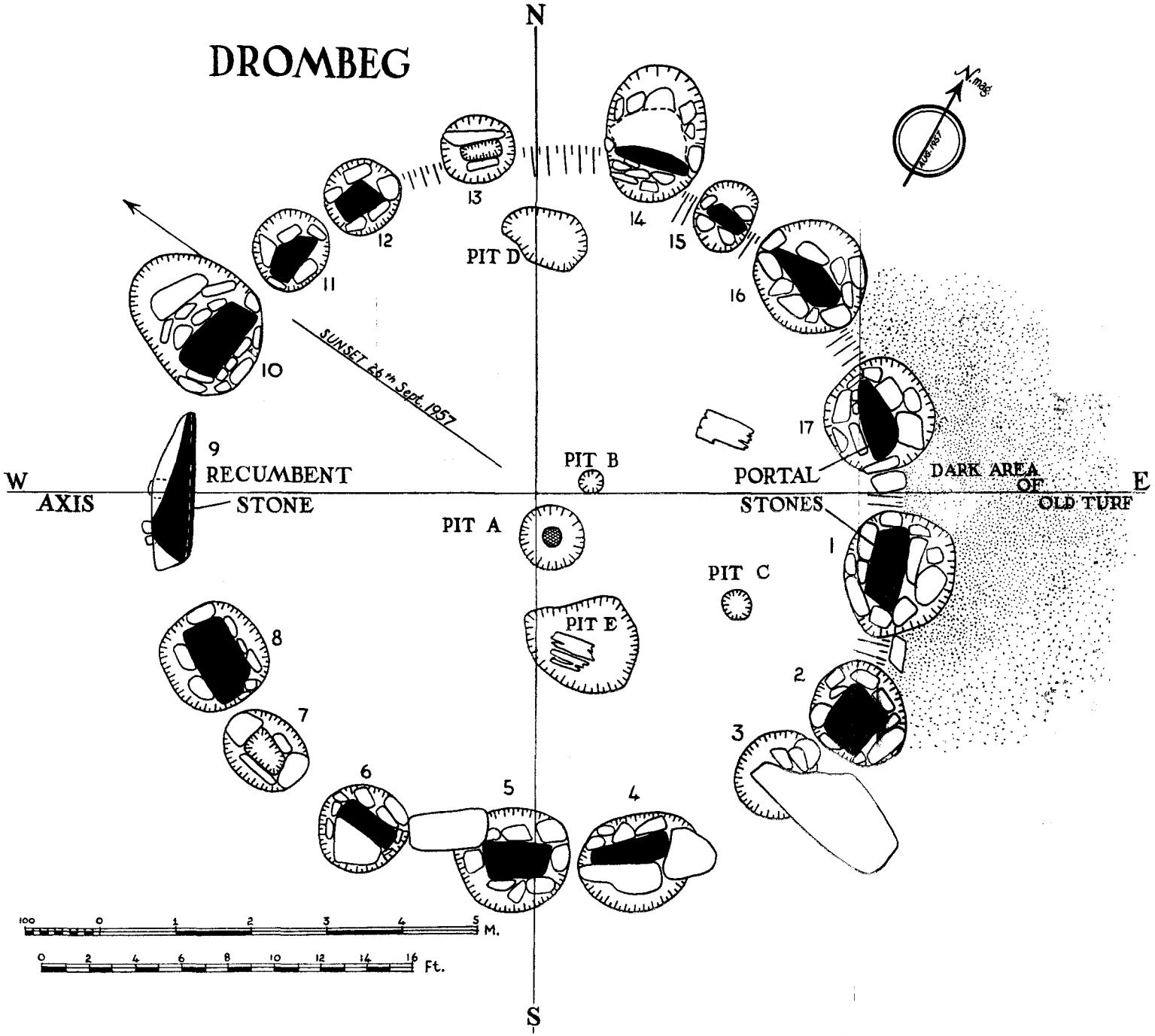


Fig. 2. Drombeg Recumbent-stone Circle fully excavated

grooved line varied in width from 2.7cm (1″) to 3.3cm (1⅓″) and in depth from 6 to 8mm (1/16″). In outline the carving can best be described as reminiscent of the shape of a stone axe. The enclosed cup-mark measured 7.7cm (3″) in diameter and 1.9cm (¾″) deep. A little distance from this carving was a clearly defined, egg-shaped cup-mark measuring 9.2cm long by 6.4cm wide by 1.6cm deep (3½″ by 2½″ by ⅝″).

Stone No. 14 (figs. 3, 4 and pl. 2,a)

Stone no. 14 was a large, lozenge-shaped boulder rather flat on its inner face but heavily bulbous on its outer or northern face. Three sides of the lozenge appeared to be natural edges but the upper right hand side had been produced by breaking the boulder along a joint plane. The boulder measured 1.43m high (from grass level), 1.35m wide and attained a maximum thickness of 70cm (4′ 8″ by 4′ 5″ by 2′ 3½″), being thus the widest and thickest orthostat in the circle.

Stone no. 15 (fig. 4 and pl. 2,a)

In contrast to stone no. 14 this was the smallest stone in the monument; its upper, left hand angle had been broken off in the remote past. In shape this stone differs from all surviving stones in the circle and though no tool marks are visible on its surface or angles its rather phallic outline can hardly have been an accidental occurrence. The stone measures 1.10m tall (from grass level), 48cm wide and 25cm thick (3′ 7″ by 19½″ by 9¾″).

Axial Orientation of the Circle (fig. 2)

As has been noted above the stone circles of the south-west of Ireland are distinguished by the presence in them of recumbent-stone and portals which usually lie on the extremities of a diameter of the circle. A positive axis is thus established in each monument. Somerville claimed, and rightly so, that the Drombeg axis was aligned on the mid-winter sunset. During the course of our investigation of the site Somerville's findings were carefully checked and the results are described below.

Purpose of Excavation

The excavation at Drombeg was undertaken in an effort to throw some light on the purpose and date of a type of monument about which our knowledge was extremely meagre. Only one circle of the group, that at Kealkil, near Bantry, had been excavated [12] and that with negative results. Hardly a dozen sites had been accurately surveyed and since Somerville's work on the orientational significance of the monuments, nothing, apart from the Kealkil excavation, had been done to bring the problem of the recumbent-stone circle of the south-west into scientific focus.

Method of Excavation

Before the excavation was undertaken all vegetation on the entire Drombeg terrace (fig. 1) was cut away to ground level. A second 'stone

[12] *J.C.H.A.S.*, XL (1939), pp. 46–49.

circle' noted by Somerville 50m (55yds) to the west (fig. 1, II) was thus shown to be a more extensive structure, which on excavation, proved to be a stone hut [13] and a hitherto unrecorded extensive mound was revealed a short distance south (fig. 1, III) of the hut site. This mound on excavation proved to be an elaborate cooking place [14] connected with the hut by a stone built causeway.

The entire terrace was surveyed and an area extending well outside the circle was selected for excavation (fig. 1). Base lines corresponding to the SW—NE and SE—NW axes of the circle were laid down in order to secure a sectional profile on the 'sunset' axis as well as a transverse profile to it. Bridges 50cm wide (1′ 8″) were maintained about a grid of 3m by 2.50m (9′ 10″ by 8′ 3″) excavation plots.

The Excavation

Excavation revealed an unbroken gravelled floor, in places 10cm thick (4″), lying immediately below the 10cm (4″) thick carpet of fibrous, soil free turf within the circle. The stones forming the floor were miscellaneous pebbles and flakes of slaty rock with an occasional lump of quartzite, the whole being closely compacted together to such an extent that ferns, thorn bushes and even briars had failed to establish themselves within the enclosure. Beneath the floor and almost in the centre of the circle two pits were discovered, the larger held an inurned cremation while the smaller contained a deposit of dark soil (fig. 2, pits A and B). A third, small pit contained silt and stones (fig. 2, pit C) and two other pits (fig. 2, D and E) were full of shattered rock fragments. A notable feature of the site was that no turf line or layer of humus existed below the gravelled floor and all of the above mentioned pits were dug directly into the subsoil. The surface backfill of the pits was of yellow subsoil.

The sockets of all orthostats were fully excavated. A small, flint scraper (fig. 6, no. 1) was found in the top level of the fill of socket no. 10. A split flint pebble (fig. 6, no. 2) was found in a similar position in socket no. 15 and a small, flint scraper (fig. 6, no. 3) was found above socket no. 7, but otherwise the sockets of all stones were absolutely sterile. Excavation was carried outside the monument and extended by trial trenches outward along the main axes of the site (fig. 1) but no surrounding fosse, postholes or other features other than the old turf line, outside the eastern arc of the circle, were brought to light. A grid of trial trenches (fig. 1) was opened across the area east of the circle where the ground appeared as if artificially levelled, but nothing of significance was discovered. South of the site a hollow area (fig. 1, B), referred to by Somerville [15] as the 'cove' or 'chancel' was fully excavated. No finds were made but a drainage (?) trench full of stones was exposed. The stones had collapsed into it from a revetment on its eastern side. It was not possible to establish any connexion between this feature and the circle, nor was any dating evidence brought to light.

[13] Excavated 1958, report pending.
[14] Excavated 1958, report pending.
[15] *J.C.H.A.S.*, XV (1909), pp. 105–108.

(a) Drombeg Recumbent-stone Circle. Orthostats 14, 15 and 16 in the north-eastern arc

(M. J. O'Kelly)

(b) Drombeg Recumbent-stone Circle. Gravelled pavement n the south-western quadrant

Certain small heaps of boulders lying below the southern edge of the terrace and recorded by Somerville as 'cairns and a circle' were also investigated and were found to be of no archaeological significance. An 'outlier' (fig. 1, A) lying 24m (78′ 9″) east of the circle was found to be a natural boulder and had no connexion with the site. As already indicated a further 'stone circle' at the western end of the terrace proved to be the ruins of a stone hut which, together with the hitherto unrecorded cooking place nearby and a small ring fort some distance to the east of the circle [16] completed the complex of monuments on and near the Drombeg terrace.

The Floor or Pavement

In places the pavement did not exceed a single layer of stones but towards the western side of the site it attained a thickness of 10cm (4″) and apart from an occasional flag-like piece of slate the stones were hand-sized, natural fragments such as occur in the surrounding area. The bottom layer of the pavement contained many small pebbles which had been introduced with the larger stones and which had filtered downwards through the pavement in the course of time.

There can be little doubt that the pavement was a primary feature of the monument as it lay in direct contact with the subsoil, without any intermediate layer of humus and it sealed down both the pits within the circle and the inner portions of the orthostat sockets. The absence of soil from the pavement itself and from the overlying carpet of fibrous turf clearly shows that the pavement had not sunk downwards through the modern turf and in any event, as can be seen from the sectional profile of the site (fig. 3), the area within the circle had been carefully levelled in antiquity. The abrupt termination of the old turf line between stones 1 and 17 and the hollow(fig. 3) outside the recumbent (stone no. 9), as well as further evidence to be discussed below, fully establish the levelling of the site and satisfactorily explain the absence of the turf line within the enclosure.

The Eastern Arc (figs. 2 and 3)

Of the entire area within or about the circle only one zone, that outside the eastern arc, revealed any indications of an old turf layer. This area, extending from stone 16 to stone 2, and eastwards for a distance of almost three metres (10′), was characterised by a dark, 10cm (4″) thick layer of humus which covered the outer portions of the stone sockets, tailed off to the east and terminated in an abrupt, sloping edge between the orthostats. It is notable that this dark area of old turf, which, however, failed to produce any finds, was centred about the portal stones (nos. 1 and 17).

The Stone Sockets (fig. 4)

The sockets of the orthostats were surprisingly shallow, never exceeding one third and frequently only one quarter the total height of the stone.

[16] Location: Not marked on O.S., it lies within a sharp bend of the road 160 yds. north-east of the Stone Circle.

The deepest sockets (58 to 70cm ; 23 to 27½") were those for the principal orthostats, the portals nos 1 and 17 and the stones flanking the recumbent (nos 8 and 10). The majority of the sockets were oval in plan and evidently were dug individually to suit the particular orthostat selected for each position ; nos 10, 11, 12, 14 and 15 are especially notable in this respect.

We have already pointed out the use made of the natural sloping tops of the orthostats and the careful positioning of those flanking the recumbent to give a rising line ; it is of additional interest then to note the graduated depths of the sockets for stones 10, 11 and 12 which establish beyond all doubt the planned deliberation of their erection. The shape of socket no. 10 suggests that the stone was slid into it from the northern side.

Stone no. 14, the lozenge shaped boulder, was inserted into a socket which closely conformed to the frontal shape of its lower end but opened widely beyond the back of the stone, a fact which suggests that the boulder was slid into the socket from the outside and subsequently levered into an upright position. The excavation of the socket also revealed that the stone stood on its *narrow* end (figs. 3 and 4) so that from every point of view it was in fact, upside down, the great bulk of its weight being uppermost. The socket of stone no. 15 exemplified a characteristic of several of its fellows—closely fitting at the sides but rather broad from front to back. The recumbent was not set into a socket but stood on edge, propped with boulders beneath its bulging outer face and resting on the subsoil.

The packing of the sockets followed a fairly regular plan—closely rammed soil in the lower levels and boulders in the upper level. Notable exceptions, however, were stones nos. 10 and 14 whose sockets contained many more stones than the others. In the case of no. 10 the stones were beneath, as well as around and above, as if to raise the sloping top of the stone into line with those of stones nos. 11 and 12. The additional packing stones behind stone no. 14 were necessary to prop its ungainly form and unbalanced weight ; indeed, it was evident that no small amount of ingenuity was called for in setting this stone in position.

Where orthostats had sloping bases a pad stone had been inserted beneath them to position them properly, e.g., nos 2, 10, 16 and 12 (fig. 4), and in the case of the latter which had a very angular base, the floor of its socket had been given a compensating slope. It was a general feature of almost all sockets that suitable packing stones had been wedged between the flanks of the orthostats and the solid sides of the sockets, so that maximum stability was established against sideslip with a minimum of trouble. Finally, the general level of the socket fill coincided with the levelled surface of the sub-soil within the monument and the gravelled floor or pavement lay in intimate contact with the surface of the sockets.

Apart from the three flints mentioned above (p. 6) the stone sockets were absolutely sterile ; the back-filled soil contained not even one fleck of charcoal and showed no trace of intermixed surface soil. Iron-pan occurred in the bottom levels of many sockets. Sockets for two missing stones, nos. 7 and 13, and of one fallen stone, no. 3, were uncovered by the excavation. Detailed measurements of all sockets are given in Appendix I.

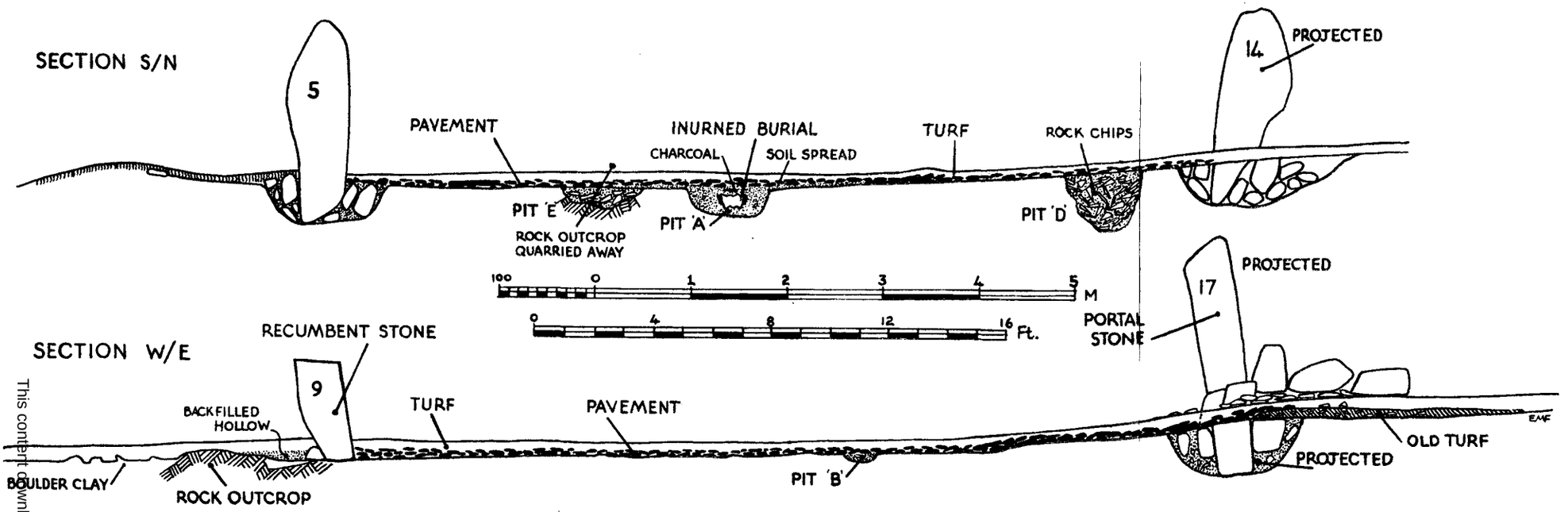


Fig. 3. Drombeg Recumbent-stone Circle, sectional profiles

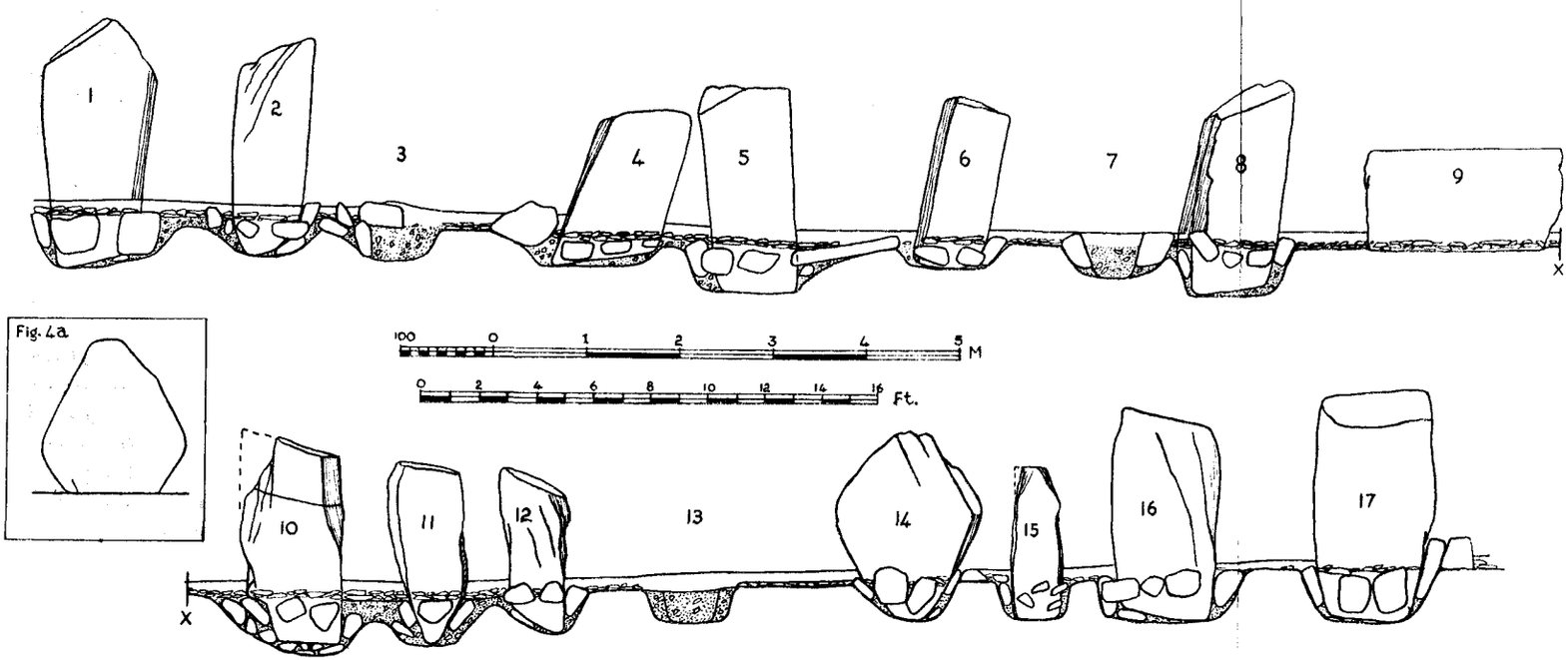


Fig. 4. Drombeg Recumbent-stone Circle expanded elevation of monument with sectional profiles of sockets

The Pit Burial (figs. 2, 3 and 7)

After the gravelled pavement, except for a 'reference' area near the portals, and all bridges had been excavated the interior of the circle presented an unbroken and to all appearances undisturbed, expanse of boulder clay. The area was lightly worked over and repeatedly brushed for two days after which a slight scatter of charcoal dust was observed in an area measuring 8 by 10cm (3″ by 4″) almost in the centre of the circle. When this was removed the ground again appeared as if undisturbed and a further 5cm (2″) of pure subsoil was removed before a dark, circular patch more than 25cm (10″) in diameter came to light. A few centimetres of the deposit were carefully removed and found to contain minute crumbs of cremated bone, a few pebbles and a small fragment of pottery. Towards the fringe of the deposit what appeared to be large potsherds standing on edge were exposed and these eventually were shown to be the jagged, rimless edge of a broken pottery vessel in which the burial deposit was contained. The contents of the pot were removed layer by layer and in the process a rim sherd and more than forty small pieces of pottery, as well as a number of burnt pebbles and three pieces of burnt, broken shale were discovered intimately mixed with cremated bone, charcoal and powdery soil within the pot.

At a depth of 10cm (4″) the rather thick, homogeneous mixture described above gave way to a layer of cremated bone (the fragments of which were larger than those found in the upper level), containing charcoal, a few pebbles, small fragments of pottery and some powdery soil. This lower layer on excavation was stored separately to the upper layer, a precaution which on subsequent analysis of the pot contents proved to be of value in reconstructing the method of burial. At a depth of 15cm (6″) a horizon of pure subsoil appeared within the pot. Removal of this showed that the base as well as the rim of the pot was missing. No trace of the base, disintegrated or otherwise came to light either beneath the pot or amongst the fragments of pottery found intermixed with the burial.

Since the surviving portion of the pot was badly cracked from the pressure of the surrounding soil and the action of grass roots, and evidently would not survive intact on removal from the soil, a plaster cast and basic measurements of the pot were taken *in situ*. It was thus evident that, though broken when placed in the ground, the pot had been set in a correctly upright position. Its maximum internal diameter (it had been distorted into an oval shape) was 23cm (9″) while near its fractured 'base' it measured 17 to 18 cm (7″) in diameter; the maximum surviving height of the pot wall was 18cm (over 7″).

A band, or collar, of dark charcoal-rich material containing flecks of cremated bone but no potsherds surrounded the wall of the pot but did not occur beneath it. Such a layer in this position might readily be regarded as a fortuituous occurrence but it is our contention that it has especial significance in this instance (see below, p. 18).

The burial pit when fully excavated was found to extend to a depth of 7cm (3″) below the 'bottom' of the pot so that it is clear that a quantity of

loose soil was back filled into the pit before the burial was deposited therein (fig. 7). The pit measured 82cm (2′ 8″) wide and 28cm (11″) deep.

Pit B (fig. 2)

This small, shallow pit was centred 1m (39″) from the burial pit and lay almost astride the central axis of the monument. It was securely stratified beneath the gravelled pavement and contained dark soil in which were a few flecks of charcoal and cremated bone (?). It measured 32cm wide and 8cm deep (12″ by 3″).

Pit C (fig. 2 and pl. III, c)

This small pit was full of stones which appeared to have been deliberately laid into it. It measured 40cm wide and 10cm deep (16″ by 4″).

Pit D (fig. 2)

This was a large, irregular pit full of rock chips over which soil had been spread. It was sealed down by the gravelled pavement and measured 1.12m long, 75cm wide and 60cm deep (3′ 8″ by 2′ 6″ by 2′).

Pit E (fig. 2)

This pit, again containing rock chips, occurred where efforts had been made to uproot some outcropping rock in the mistaken idea that it was a boulder. The bedrock within the pit was cracked and broken. The pit was covered by soil and was overlain by the gravelled pavement.

THE FINDS

Pottery (fig. 5)

Fabric : Where best preserved the pottery has a medium brown coloured surface with a hard, somewhat gritty finish. In places where the surface of the vessel had been eroded away by action of groundwater and grass roots, the exposed, angular grits are seen to be a mixture of crushed sandstone slaty shale and quartz ; the latter, however, is of infrequent occurence in the fabric. The wall of the vessel is bi-zonal in colour ; from the outer surface to mid-way in the thickness of the wall the colour is medium brown and in places whitish brown, but the inner zone of the wall, including the grits, is almost jet black. The inner surface of the vessel is well smoothed and shows fine striae imparted to it by long upward strokes of a fine pad. Patches of carbonised soot adhere to the inner surface of the ware.

The wall of the pot varies in thickness from 6mm ($\frac{1}{4}$″) where the outer surface has been eroded away to 8mm ($\frac{11}{32}$″) in the better preserved sherds, most of which came from the fill of the pot where they were protected from excessive waterlogging by the open nature of the basal layer of the deposit. The rim of the vessel is 9mm ($\frac{3}{8}$″) thick, has a steep internal bevel and a rounded lip. The upper 2cm ($\frac{13}{16}$″) of the rim consisted of an applied ring two fragments of which together with three fragments of false rim with external bevel, were found intermixed with the burial deposit.

In general it may be said that the aggregate, containing a very high proportion of grits, was well controlled by the potter to produce a vessel which is thin walled in relation to its size and which is closely related to the finer examples of the Lough Gur Class II ware.

Reconstruction (fig. 5)

It was impossible to remove the surviving portion of the vessel from the ground in one piece as it had been badly cracked by the pressure of the surrounding soil. The reconstruction of the vessel (fig. 5) is based on measurements taken while the pot was *in situ*, on curvatures taken from surviving sherds and on the evidence supplied by the plaster cast taken before the vessel was disturbed.

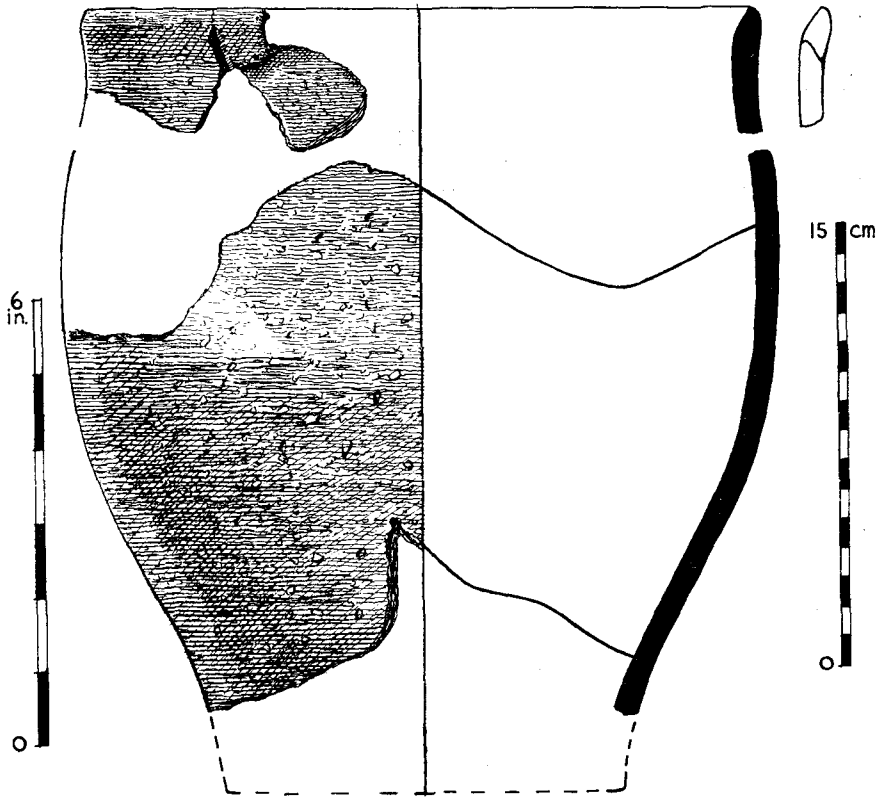


Fig. 5

None of the rim fragments found in the fill of the pot can be securely fitted to any of the wall sherds, though they do unquestionably belong to the pot. No fragment of the base was found, but one wall sherd exists to the foot of the vessel so that there can be no doubt that the vessel had a flat base. No trace of a shoulder survives nor does any sherd indicate that a pronounced shoulder could possibly have existed. The vessel is of simple

profile, swelling outward from a well-defined foot to a rather globular body with an everted rim. The base was flat.

As reconstructed, the vessel measures 26.5cm ($10\frac{7}{16}''$) high, 22.5cm ($8\frac{7}{8}''$) in diameter at the rim and 13.4cm ($5\frac{1}{4}''$) in diameter at the base. The diameters and height of the body of the vessel are based on measurements taken while the pot was *in situ*, with some allowance for distortion of the vessel. The rough, gritty surface of the body of the vessel as illustrated is not the true, original finish, but the rough wall of the pot from which the slurried surface had been removed by the action of ground water and grass roots. Contrast this with the rim-sherds which, being contained in the fill of the vessel, retained their true outer surface. The jagged upper edge of the body of the pot as illustrated belongs to the more damaged side of the vessel, elsewhere it survived to a fairly even upper edge.

Flint (fig. 6)

No. 1. Small scraper measuring 14mm by 5mm made from a flint pebble. Only the core of the implement is flint, the rest being cortex. Some fine, steep, secondary chipping occurs.

No. 2. Longitudinal section of a small flint pebble from which a microlithic flake appears to have been struck.

No. 3. Portion of a flint pebble with rough secondary chipping to produce a sharp edged scraper.

No. 4. A split flint pebble with white patination. May have been used as a borer.

Nos. 5, 6 and 7. Three split flint pebbles displaying no significant features.

The paucity of flint at Drombeg is surprising since numerous flint nodules are to be found free-lying amongst the gravel spreads in the estuary of the Roury River less than two miles south-east of the site. (See Appendix III). Some of the nodules weigh as much as 5 lbs (2,270 grammes).

Shale Fragments from Burial (fig. 6)

Four fragments of sandstone shale, all of which showed evidence of burning, were found intermixed with the burial deposit. Three of the fragments fit accurately together to form a rather wedge-shaped, flat sliver of stone 1cm thick and 27cm ($10\frac{1}{2}''$) long(fig. 6). The fourth fragment does not fit to any of the other pieces of shale and since it is of equal thickness and similar type to the others it would seem that all belonged to a larger plate-like sliver of stone. It is clear from the broken pieces of shale that they were subjected to burning while the shale was in one complete piece.

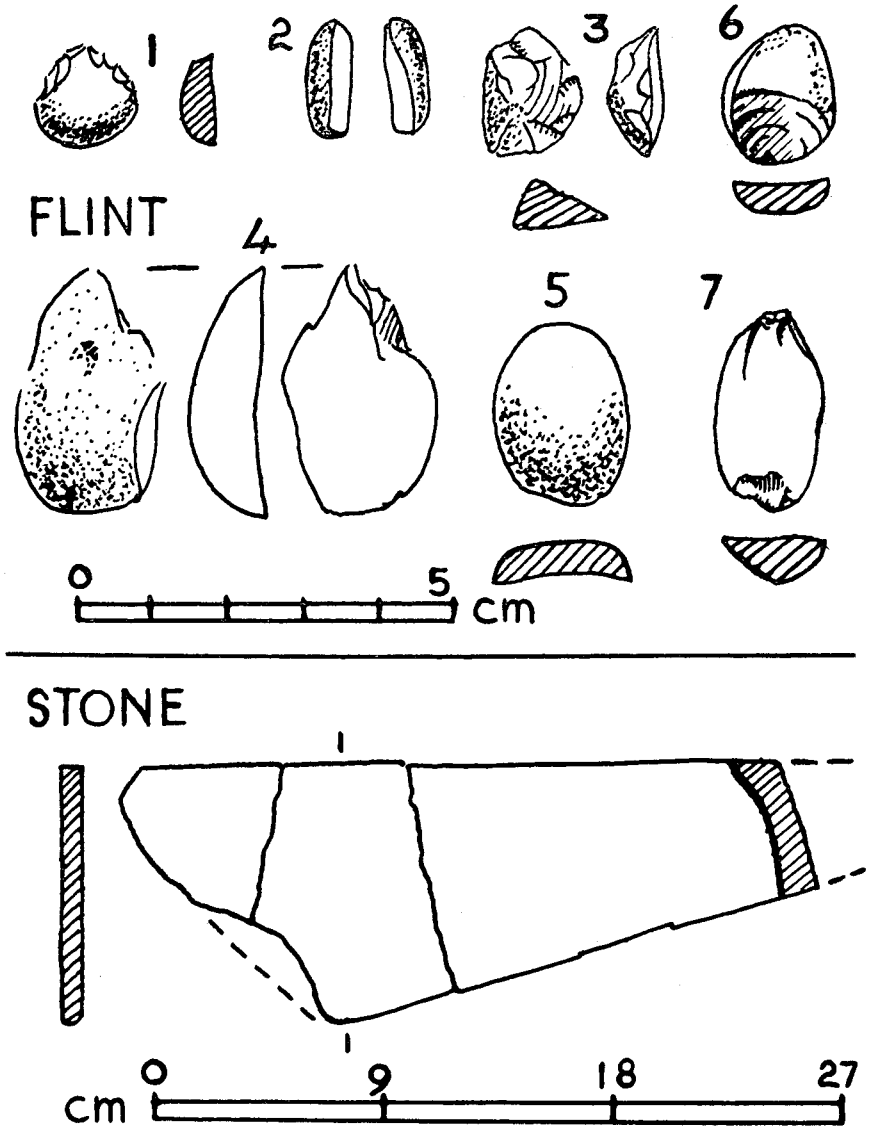


Fig. 6

ANALYSIS OF BURIAL DEPOSIT

On excavation the upper and lower levels of the burial deposit, clearly of different character (fig. 7), were stored separately and subsequently examined by passing through a number of sieves after some forty potsherds, four pieces of shale and a number of pebbles had first been removed by hand.

Upper Layer (2,000cc)

a. Fine greyish brown dust (burnt soil ?), crumbs of bone and charcoal	= 65%
b. Pottery (pellet sized), fragments of cremated bone, pebbles	= 16%
c. Charcoal	= 0.5%
d. Pebbles	= 3.5%
e. Cremated bone (small fragments)	= 10%
f. Pottery (small fragments)	= 5%
Total	100%

Lower Layer (555cc)

a. Fine greyish brown dust (burnt soil ?), particles of bone and charcoal	= 15%
b. Pottery (pellet sized), fragments of cremated bone, charcoal and small pebbles	= 15%
c. Cremated bone (largest fragment 6 by 2cm.)	= 70%
Total	100%

Axial Orientation of Circle (fig. 2 and pls. I,a and V,b.)

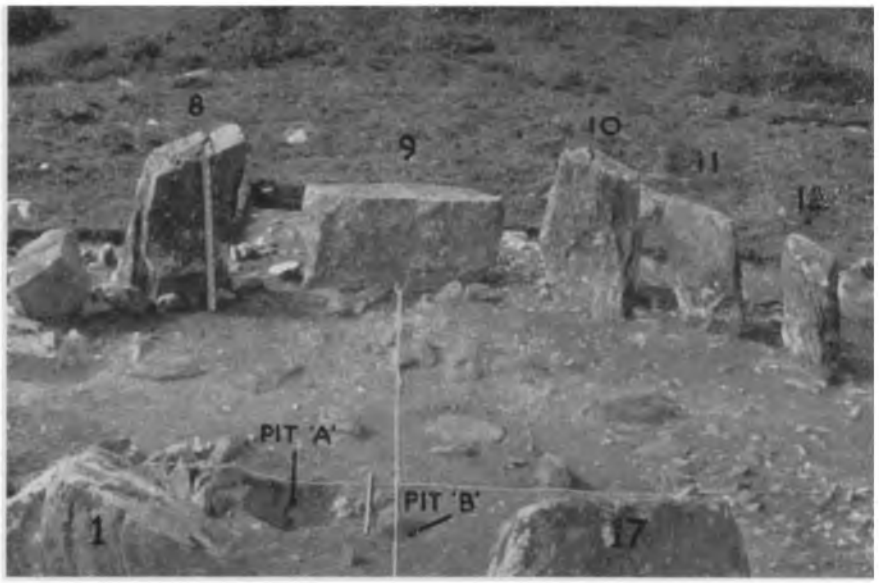
Somerville[17] was the first to draw attention to the orientational significance of the Drombeg axis. In doing so, however, he attached undue significance to several bearings taken on various sunrises and sunsets and related them to certain features of the site which in reality had no connexion whatever with the circle. His findings thus fell into disrepute. We do not know whether Somerville actually observed the mid-winter sunset at Drombeg or based his findings solely on surveyed data and calculations, but be that as it may, we have established by actual observations at the site that in the main Somerville's findings regarding the mid-winter sunset at Drombeg are quite correct.

As already indicated, a line joining the centre of the portal gap (between stones no. 1 and 17) and the centre of the circle passes mid way through the recumbent stone. During the excavation vertical rods were set up at these points and photographed from a point on a projection of that line to the east. During mid-winter, 24 December 1957 and again on 23 December 1958, the setting sun was photographed[18] by an independent observer, standing to the east outside the portal stones, and was found to lie slightly south of the point previously established as the axial intersection with the horizon, i.e., a point south of the V-gap in the horizon (pl. I, a); not in the gap as Somerville suggested.

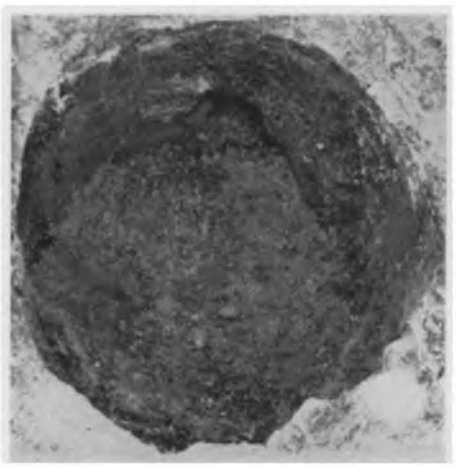
It may be argued that the presence of trees on the horizon would in former times have altered the observed setting point of the sun, that is to say that the sun would have set in a slightly more southerly position than

[17] *J.C.H.A.S.*, XV (1909), pp. 105–108.

[18] I am deeply indebted to Mr John Emmet O'Donovan, N.T., Union Hall, Co. Cork, for the photographs of the sun-set at Drombeg.

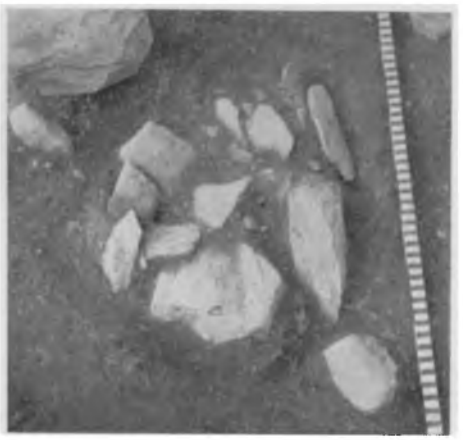


(a) Drombeg Recumbent-stone Circle. Tapes mark central axes of the circle. The tips of the portals (1 and 17) show towards bottom of the illustration. Note the rising line formed by the tips of stones 10, 11 and 12 flanking the recumbent (9)



(P. O'Keeffe)

(b) Broken pottery vessel *in situ*



(c) Pit C, containing stones (scale in cm)

it does at present. Indeed, if this were the case the Drombeg sunset point would become slightly less significant, but in any event would still lie over the recumbent stone. Had trees not been present on the horizon, the present setting position of the sun, slightly south of the axis, may be due to precessional movement.

DISCUSSION

The Drombeg circle is a monument of great precision and refinement exhibiting the careful thought and planning which its builders put into its erection. The stones are placed in an almost perfectly circular formation and are disposed equally between the northern and southern semi-circles of the monument with the odd stone, the recumbent, astride the central axis or diameter of the circle, which in turn, passes between the burial pit and pit B (situated almost in the centre of the monument) and lies mid way between the portal stones.

The recumbent, a massive, bench-like slab is carefully set so that its upper surface is almost level, and was probably dead level when one allows for slight settlement in the course of time. The sockets for all orthostats were individually dug even to the extent of graduating the depths of nos. 10, 11 and 12 so that the sloping tops of the stones formed a rising line beside the recumbent stone (fig. 4). In addition the sloping tops of the other orthostats, where they existed, were also turned upwards in the direction of the recumbent stone to give the entire monument a most uniform and pleasing appearance. A further stone, noted by Franklin,[19] which stood in the centre of the circle, but for which a socket was not found during the excavation, may have marked the burial pit and if such were the case a socket would *not* have been dug into the grave.

The precise area on which the circle was to be built was stripped of turf and carefully levelled even to the extent of digging out some protruding boulders and backfilling the resultant pits.

The burial was carried out with great care and the sweepings of the cremation fire, which included burnt surface soil, pebbles and a burnt and broken flat piece of shale, with an admixture of broken and crushed pottery from the burial urn, were packed into the previously broken pot and concealed from view by meticulously spreading clean subsoil over the burial pit. A pinch of charcoal was then dropped on the grave and a further spread of soil scattered over it. Pit B which contained some dark soil, a few flecks of charcoal and of cremated bone (?) was also covered by a slight spread of soil. Hand picked stones were then collected together and thrown on the area enclosed by the circle to form a floor or pavement within the monument. Subsequently the area within the circle was maintained in a clean condition; apart from a few flints not even a piece of charcoal was found in or beneath the gravel floor. The slight scatter of charcoal found over the burial pit was the only charcoal, apart from that actually in the burial deposit and flecks in the old turf outside the eastern arc found anywhere on the site.

[19] *J.C.H.A.S.*, IX (1903), pp. 23, 24.

The ritual nature of stone circles has long been recognised, but in Ireland at any rate, has rarely been proved with certainty. In discussing the evidence for ritual at the Grange Stone Circle [20] Ó Ríordáin said that the impetus to build it must have been 'part of a widely distributed Western European cult, which led to the construction and use of ritual circles which differed in character in various areas or even in a single area.' The evidence of ritual from Grange consisted of quantities of broken pottery lying near the orthostats and perhaps derived from a ceremony which involved the ritual breaking of the pots. Ó Ríordáin suggested that the absence of habitation refuse and of burials at Grange should be taken as 'negative evidence' in support of its use as a ritual site and cites the complete absence of finds at Muisire Beg, [21] Kealkil [22] and Circle ' O ' at Lough Gur [23] in support of this thesis.

If the presence of a burial within a stone circle is to be regarded as contrary to its use as a ritual site the Drombeg circle should be classed as a sepulchral monument. But we must bear in mind that almost 40% of the area within the Grange Circle remains unexcavated and that a trial trench only was dug across the Muisire Beg Circle [24] so that at those sites complete excavation might well have altered the excavators' findings. We cannot therefore say that the presence or absence of a burial within a circle can be taken as evidence of its use or non use as a ritual site.

The Drombeg Evidence

Owing to the open nature of the recumbent-stone circles of the south-west of Ireland, they enclose neither cairn nor tumulus, we must anticipate certain difficulties in establishing the relationship between primary and secondry burials if and when they occur in association with the monuments. At Drombeg, however, we are fortunate in having a clear, unbroken horizon—the gravelled pavement—lying directly upon the infilled stone-sockets and the levelled subsoil, and are thereby enabled to establish with a tolerable degree of certainty that the burial was a primary feature of the site.

What then was the purpose of the Drombeg burial ? We believe that the evidence obtained from the burial deposit establishes that it was of a dedicatory nature and that the carrying out of the burial itself was accompanied by certain ceremonies of a ritual nature.

The analysis of the material contained in the pottery vessel provides us with significant data. The major portion of the upper layer (fig. 8, e) consisted of fine greyish-brown dust containing many tiny particles of cremated bone and charcoal. This dust (not silt), we suggest, is burnt soil and when taken in conjunction with the pebbles, all of which are burnt, the fragments

[20] Ó Ríordáin, *P.R.I.A.*, LIV, C, (1951), 37–54.

[21] Gogan, *J.C.H.A.S.*, XXXVI (1931), 9–19. Excavation report and theoretical dissertation.

[22] Ó Ríordáin, *J.C.H.A.S.*, XLIV (1939), 46–49.

[23] See Ó Ríordáin, *P.R.I.A.*, LIV, C, (1951), 72 and 73 for reference to this site.

[24] Gogan. ibid., p. 19.

Drombeg Recumbent-stone Circle during excavation. Note central position of the burial pit

of shale, also burnt, the charcoal and the tiny flecks of cremated bone, we must conclude that the upper 2,000cc of the burial deposit represents the sweepings of the cremation pyre.

The lower layer of the burial deposit, containing 70% cremated bone, shows a marked contrast to the small percentage of bone in the upper level. The remaining 30% of the lower layer consisted of dust, bits of pottery, pebbles, charcoal and minute fragments of bone, all of which had evidently percolated into it from the upper level.

A further notable feature of the burial deposit was that it produced more than eighty fragments of pottery ranging in size from mere crumbs to a rim sherd measuring 4cm by 5cm ($1\frac{7}{8}$" by 2"). Owing to the densely packed nature of the burial deposit it is inconceivable that these fragments could have fallen into it while it lay in the ground, nor indeed, could they have succeeded in intermixing themselves so thoroughly with the deposit without human agency. It must be concluded then, and indeed there is no room for speculation in the matter, that the pottery fragments were introduced into the burial as part of the intimate mixture of materials which constituted the upper layer of the deposit.

We have already indicated that both the rim and base of the pottery vessel were broken off before the vessel was placed in the ground. This can be seen in pl. III, b where the upper and lower edges of the vessel are visible, and while a few small rim sherds were found in the burial deposit no recognisable fragment of base existed, either attached to the pot or intermixed with the deposit. In addition it is also evident that the rescued sherds cannot possibly make up the entire pot so that, unless portions of the pot utterly disintegrated and vanished without trace in the ground, we must conclude that apart from the evidence already to hand, the pot was placed in the ground in an incomplete condition.

It may be suggested that the base of the vessel decayed and disintegrated due to waterlogging while it lay in the ground. This hypothesis cannot be upheld in face of the excavated evidence; firstly the existing lower edge of the vessel shows a sharp, firm, *fractured* edge; secondly this fractured edge was encased in pure, yellow soil which was cemented to it by a deposition of iron pan and finally, while the clay bond of the vessel might readily dissolve out of the fabric, the grits would not, and would clearly be recognisable in the ground if they were present.

Broken pottery is of common occurrence in prehistoric tombs and has been found in large quantities in the Grange Stone Circle, but it is of interest to quote a recent discovery at Audleystown Cairn of which the excavator says 'At least four vessels were represented, of these, only [two], from the disposition of their sherds have been deposited in the chamber as more or less complete, though *already broken* pots.'[25] What is of interest at Drombeg is that some of the fragments of the previously broken pot were, it would seem, further broken and judging by the minuteness of many pieces, even

[25] Collins, A.E.P., *U.J.A.*, 17 (1954), p. 17 (our italics).

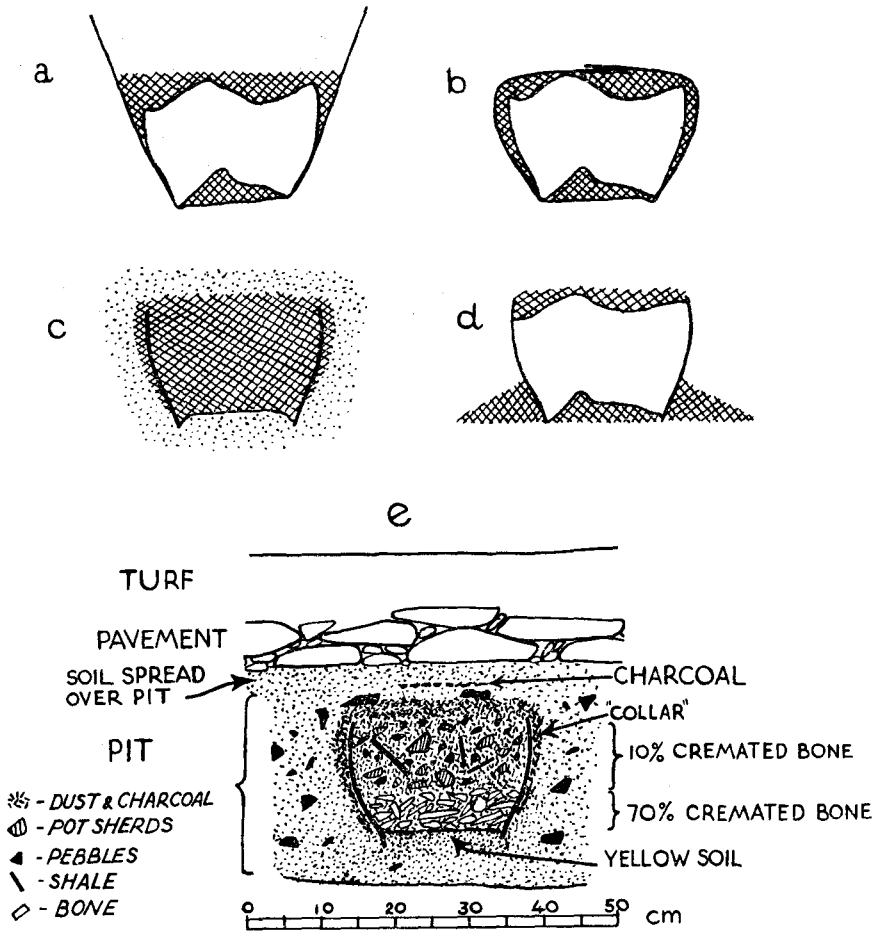


Fig. 7

pulverised, probably by design rather than accident and included with the sweepings of the cremation pyre in the burial deposit. It is notable too that the cremated bone also appears to have been broken up before burial. (See Appendix II).

The final features of the burial were the collar of dark, charcoal-rich material adhering to the outer surface of the broken pot, the pinch of charcoal over the burial pit and the care with which the burial was finally concealed. The collar of material sandwiched between the side of the pottery vessel and the clean soil-fill of the pit calls for comment since it could not under normal circumstances come to rest in such a position (fig. 7, e). A possible explanation which immediately suggests itself is that the burial deposit was wrapped in some organic material when placed in the ground and that our dark layer of material represents, not the decayed organic material, but the overspill of the burial deposit which became trapped

between the wrapper and the side of the pot (fig. 7, a). As already remarked the dark material did not occur beneath the pot. If we allow for the possibility of the above deduction the absence of the black layer from beneath the pot is readily explained. The broken pot, we could suggest, was first placed in the wrapper held suspended from the hands (fig. 7, a); the larger fragments of cremated bone, raked from the ashes of the cremation pyre, were then placed within the vessel; the sweepings of the fire (burnt soil, pebbles, broken pieces of shale, small fragments of bone and charcoal), with an admixture of potsherds, were scooped up and deposited within the pot, the overspill becoming trapped between the wrapper and the wall of the pot, fig. 7, b); the burial deposit was then placed in the pit, on the floor of which 7cm of loose soil had been thrown (see page 7), pressed into position (fig. 7, c) and covered up. The initial downward pressure exerted on the pot, or subsequent settlement of the vessel in the soft fill of the pit, must be responsible for the few centimetres of pure soil within the 'bottom' of the vessel (fig. 7, c).

Had the broken pot been placed in the pit without a wrapper we should expect to find an out-spill of material through the jagged 'base' of the vessel (fig. 7, d). Such was not present. Had the over-spill of the vessel occurred under similar circumstances we should expect to find it deposited on the floor of the pit (fig. 7, d). Such was not the case, and since the broken vessel containing the burial deposit could not have been transported to the burial pit without some form of wrapper, we suggest, and the excavated evidence tends to confirm, that the pot and its contents were enclosed in a wrapper when placed in the burial pit.

The pinch of charcoal which occurred directly above the centre of the burial pit (fig. 7, e) cannot be regarded as an accidental feature of the burial. No charcoal was found anywhere else outside of the pit itself and we are tempted to regard this curious pinch of charcoal as being analogous to the 'ritual scattering of wood ash' detected by Fox [26] at one of a group of barrows in Glamorgan. Fox instances a practice, surviving in parts of England, of throwing a pinch of humus on the coffin before back-filling a grave.[27] In addition we may cite the occurrence of a pit full of stones and charcoal in a stone circle at Castle Mahon, Co. Down, where a cremated child burial was also discovered [28] in an associated cist.

The skill with which the burial pit was finally concealed beneath a spread of clean subsoil is worthy of comment and again may be paralelled in Wales where Fox [29] detected the cremated remains of a child buried in a pit which 'had been sealed with clay making the ground look as undisturbed.' At Island an unmarked pit containing cremated bone was discovered by O'Kelly [30] beneath the floor of a megalithic tomb and again at Shanbally-

[26] "Burial Ritual and Custom in the Bronze Age." *Early Cultures of north-west Europe*. (Chadwick Memorial Studies), Cambridge, 1950; p. 59.

[27] ibid., 56.

[28] Collins, A.E.P., *U.J.A.*, XIX (1956), 1–10.

[29] Fox: ibid., 59.

[30] *J.R.S.A.I.*, LXXXVIII (1958), 7 and 17.

edmond [31] the same excavator discovered the cremated remains of a young person concealed beneath the paving of a court cairn. It is notable that the floor and sides of the pit had been reddened by fire which 'it must be assumed had to do with a purificatory ritual.' At Fourknocks, Hartnett discovered a child and adult burial concealed beneath the paving [32] and suggested that the flags were intended to 'protect and seal off the burial' which he considered to be 'possibly' of a dedicatory nature. Fox too considered the child burial at Pond Cairn, Glamorgan [33] to be part of the dedicatory ritual.

Dedicatory burials are then attested on three types of Irish monument (and maybe more)—Fourknocks Passage Grave, Island Gallery Grave and Shanballyedmond Court Cairn. The Drombeg burial was also of a dedicatory nature.

Ritual floors have been claimed for and argued against on archaeological sites. At Drombeg we have unequivocal evidence for a floor or pavement on a ritual site. Was it then a ritual floor? We do not think so and would equate it with the pavements found at Fourknocks, Shanballyedmond and other sites. The Drombeg pavement served a functional purpose in sealing down and protecting the dedicatory burial and in providing a firm, dry area within the monument.

If we were to advance any suggestion regarding a ritual floor at Drombeg we would suggest, as Fox has done elsewhere [34], that the removal of the turf and humus from the site constituted part of the ritual and argue that the 'uncontaminated' subsoil was the floor of the monument. In fact, however, we have clear evidence that the turf was removed in the course of levelling the interior of the circle and having regard to that fact must preclude the possibility of classifying the subsoil horizon as a ritual floor.

Apart from the dedicatory nature of the Drombeg burial and the clear evidence of ritual provided by the broken pottery vessel, the admixture of finely fragmented pottery with the sweepings of the cremation pyre, and the inclusion of all within the pot; the superimposed pinch of charcoal; the careful concealment of the burial; the orientation of the axis and the positioning of the burial and pit B in relation to that axis (fig. 2), it is possible that stones 14 and 15 and the carvings on the recumbent may have had further significance for the builders of the stone circle.

Stone no. 14 as we have seen was erected in an 'upside-down' position which called for extra care and attention by the circle builders; it was unlike the other stones in the monument in being a lozenge shaped boulder rather than a pillar-stone or slab and was juxtaposed to a second unusual stone, no. 15, which seems to have been fashioned into its present shape in antiquity. Lozenge shaped boulders associated with pillar stones have been

[31] *J.C.H.A.S.*, LXIII (1958), 46 and 55.

[32] *P.R.I.A.*, LVIII, C, (1957), 205.

[33] ibid., 59.

[34] ibid., p. 68.

recognised at Avebury [35] and are taken to represent or to be symbolical of the male and female sexes and to be connected with a fertility cult. There can be no doubt that the inclusion of the lozenge shaped boulder, with its roughly bulbous outer face, in the Drombeg circle while plentiful supplies of pillar stones were freely available about the site, was a well considered act by the circle builders. Its erection in an 'upside-down' position, i.e., heaviest part uppermost, may seem an unneccessary complication, yet had it been erected 'correctly' it would appear, not as a lozenge shaped boulder, but as an almost triangular one (fig. 4, a) ; was it then that its lozenge shape was considered as essential ? It would appear that it was, hence its 'upside-down' position and its elaborate propping from beneath (page 8).

Stone no. 15, whether by design or by accident, presents a curiously phallic outline which, taken in conjunction with the lozenge shaped boulder, and the Avebury analogy, as well as the phallic shaped pit discovered by Fox beneath a barrow in Glamorgan,[36] tends to suggest that at Drombeg we are dealing with another instance of symbolism which by its nature ought to be connected with a fertility cult.

Dating

The Drombeg coarse ware is allied to, or descended from, the Lough Gur class II family of wares. At Lough Gur the class II ware has been found in association with Neolithic A ware in pre-beaker contexts and again, in other horizons, in association with Beaker.[37]

At Carrigillihy [38] class II ware was again found in association with Neolithic A ware, and it occurs with Neolithic A, beaker and food vessels at the Grange Stone Circle. The Drombeg ware shows close affinities with sherds from Carrigillihy and site C, Lough Gur [39] and on these grounds could tentatively be assigned to the Early or Middle Bronze Age. Charcoal from the burial deposit has, however, been dated by the radio-carbon method (See Appendix IV), to B.C. 13 ± 140 with a possible maximum extension, depending on the degree of contamination of the specimen, to a date of 500 B.C.

Acceptance of the radio-carbon date would mean that class II pottery, or a closely allied form thereof, continued into Late Bronze Age—Early Iron Age times and that the entire Drombeg monument belongs to that late period. Alternatively, the stone circle was erected in an earlier period and subsequently re-used by having the enclosed area stripped of turf and humus, the burial inserted and the gravelled pavement laid down. If such an elaborate secondary use of the site had taken place it is possible that datable evidence of the primary period would have been swept away during

[35] Childe, *Prehistoric Communities of the British Isles* (Lond. 1952), 102: 'They are clearly male and female symbols.'

[36] ibid., 59.

[37] Ó Ríordáin, S.P., *P.R.I.A.*, LVI, C, (1954), 451.

[38] O'Kelly, M. J., *J.C.H.A.S.*, LVI (1951), 69–86.

[39] Ó Ríordáin, S.P., *P.R.I.A.*, LVI, C, (1954), 326–384.

the stripping of the enclosure. Under the circumstances it is regrettable that the sockets of the orthostats failed to produce datable evidence and were barren of charcoal which would have provided a useful comparison for the radio-carbon date of the burial.

Experiments in Re-erecting Orthostats

Orthostat no. 3 was found lying partly buried by turf beside its infilled socket. It had been broken by stone robbers and while it existed almost to its full height, one corner and one surface lamina had been broken off so that it was reduced considerably in bulk. It was re-erected in its socket by the use of two ten foot wooden levers combined with underpacking with boulders and when it had achieved an angle of about 70 degrees, was pushed into an upright position by five men, a procedure which proved extremely laborious.

Stone no. 16 fell during the excavation of its socket when a pad-stone became accidentally dislodged from beneath its base. The stone measured 2.25m high, 1.17m wide and 42cm thick (7′ 5″ by 3′ 10″ by 1′ 4½″) when fully exposed in its socket. It was decided, with the experience gained in erecting stone no. 3, to re-erect this sizeable stone without the aid of block and tackle. The stone was first moved clear of its socket by the application of wooden levers to its long sides (fig. 8, a). Thus, by obtaining purchase forward of the centre of gravity of the slab and pivoting the levers in the direction of the socket it was possible to move the stone away from the socket by a few feet at a time until the foot of the stone was well clear of the socket, which was then cleaned out. The process of leverage was then reversed until the foot of the stone overhung the side of the socket. Next, the stone was levered upwards at its outer end by two men using 10′ levers one at each side of the stone (fig. 8, b). The stone was underpinned with boulders, the fulcra were then raised and each capped with a 2″ thick wooden peg lying transversely to the superimposed lever. The pegs were found greatly to improve the movement of the levers which previously moved erratically owing to the uneven surfaces of the fulcra and it may be noted that despite the considerable weight of the stone and the pressure exerted on the levers that the pegs, which were of oak, suffered not the slightest damage during the entire operation.

When the stone had been raised by successive adjustments of the fulcra and continued underpinning with boulders, to an angle of 35 degrees it slid forward into the socket. A large boulder was then dropped into the socket (fig. 8, c) to act as a wedge between the side of the socket and the back of the stone. As the stone was further raised, to an angle of 45 degrees, this wedge automatically maintained its position as it settled deeper into the socket. With the stone resting at 50 to 60 degrees we found that direct leverage could no longer be applied to its face, either from the side or the front, as the ends of the levers could not obtain sufficient holding purchase on the smooth surface of the slab.

[to face p. 22

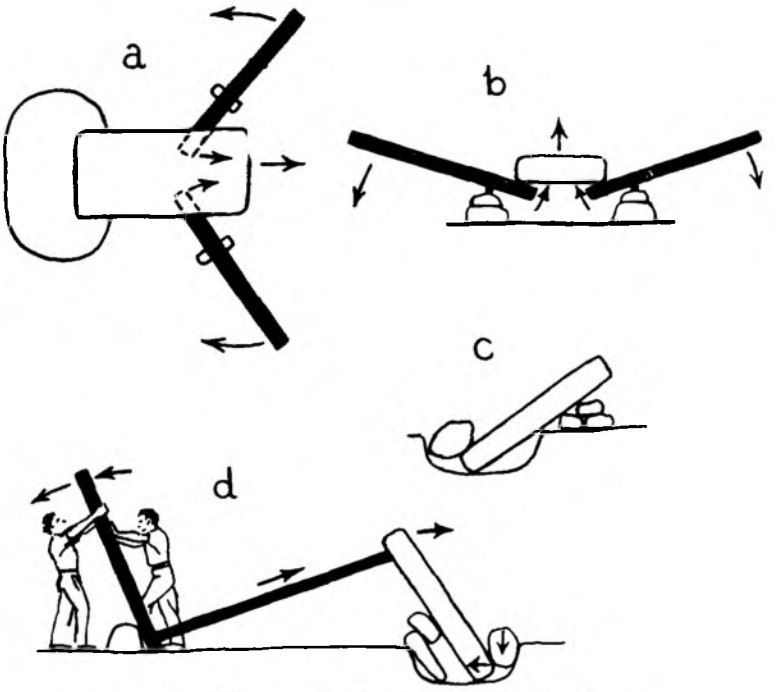


Fig. 8. Re-erection of stone no. 16

Fig. 9. Drombeg Recumbent-stone Circle, looking south. Note the valley to the south and the ocean to the south-east and south-west

After much experiment the solution finally arrived at was to introduce a system of secondary leverage whereby the movement of one simple lever was transferred to the face of the stone through a ten foot plank used as a prop against the stone (fig. 8, d). Two men operating the simple lever moved the stone into a fully upright position in the space of a few minutes. The total time involved in the experiment was 4½ hours, but had we possessed the requisite knowledge at the outset, two hours would have been ample time for the erection of the stone. The entire operation was carried out by three men, two working the levers and one engaged in underpinning the stone as it rose.

SUMMARY AND CONCLUSIONS

The Drombeg excavation has considerably increased our knowledge of a type of monument which is widespread in the western, south-western and northern areas of County Cork and in adjoining areas of County Kerry. Though no complete field survey has been carried out preliminary distribution maps which we have prepared from all available sources of information indicate that as many as seventy recumbent-stone circles, thirty of which have either been surveyed or at least noted by various workers from time to time, exist in counties Cork and Kerry. Of these only two, Drombeg and Kealkil have been excavated, while a third, Muisire Beg, was partly dug 'by three men in one day.'

Ritual Use

Though, strictly speaking, nothing was known of the recumbent-stone circle in this region Ó Ríordáin said that ' The use of stone circles as observatories or as centres of sun-worship has frequently been discussed and we must allow for this being the purpose of certain examples, especially those which have outliers and recumbent stones . . . even if we stress their ritual character in their developed form we are far from being able to say of what the ritual consisted' [40].

At Drombeg there is ample evidence that the sun or at least the mid-winter season played a major part in the religious life of the local community and if we admit the possibility of sex symbolism which stones 14 and 15 appear to embody, we can further allow for the possibility that a fertility cult was an integral part of the beliefs of the circle builders. We cannot say what were the precise ritual ceremonies at Drombeg, but the absence of scattered potsherds, broken implements or successive burials seems to indicate that once the initial dedication had taken place, the community, secure in the knowledge that the mortal remains of the cremated person were present within the circle, proceeded with their further ceremonies in such a manner that no material evidence of them was left in the soil.

[40] *Antiquities of the Irish Countryside*, (Cork, 1943), 50.

Dedication Ritual

The Drombeg burial reveals much of the ritual connected with the dedication of the site. The bones surviving from the cremation of a young adolescent were it would seem deliberately broken up before burial. (See Appendix II). The pottery vessel, in which the cremated remains were to be buried, was also broken, both its rim and base being detached. Portions of the broken pot were then crushed into fragments and mixed with the sweepings of the cremation pyre (the pottery fragments show no sign of burning on their fractured edges so cannot have been through the cremation fire). The intact belly of the pot was apparently placed in some form of wrapper and held suspended while the larger fragments of cremated bone were placed within; the sweepings of the pyre were then added and the complete burial deposit, laid on a soft pad of loose soil in the bottom of the burial pit, was carefully covered over with pure subsoil so that the ground appeared as if undisturbed. A pinch of charcoal was dropped upon the centre of the burial area and a further scatter of soil was thrown upon the ground.

Nearby, a small, shallow pit (Pit B) containing a dark deposit, lightly flecked with bone and charcoal was also carefully covered over and finally a gravelled pavement, concealing and protecting the burial from disturbance and providing a firm dry floor within the circle, was laid down.

Little can be said of the carvings on the recumbent stone. Cup-marks have been noted by Somerville on a dolmen at Bohonagh,[41] stone circles at Dunbeacon [42] and at Harbour View, Berehaven.[43] They also occur on gallery graves [44] within the area under discussion as well as on rock outcrop [45] and on standing stones.[46]

Frequency of Ceremonies

Little evidence can be adduced in support of successive ceremonies at the Drombeg Circle nor can we determine the duration of its active use for such ceremonies. It is possible, however, to advance positive evidence in support of the connection between the mid-winter sun-set and the axial orientation of the site.

As can be seen from figs 2 and 3 the only old turf line detected in the vicinity of the monument occurred immediately outside the orthostats on

[41] *J.C.H.A.S.*, XXXV (1930), 74, 75.

[42] Survey by Somerville in U.C.C. files.

[43] Survey by Somerville in U.C.C. files.

[44] On the capstones of the following gallery graves:
Keamcoravooly, Co. Cork—Borlase: *Dolmens of Ireland*, I (1897), 23.
Derryvacoreen, Co. Cork—Borlase: *Dolmens of Ireland*, I (1897), 25.
Altar, Co. Cork—Borlase: *Dolmens of Ireland*, I (1897), 44.
Ardudlough, Co. Cork—Borlase: *Dolmens of Ireland*, I (1897), 45.
Ballyvoyle Beg, Co. Cork—U.C.C. files, Survey by Ó Ríordáin.
Derrygortnacloghy, Co. Cork—U.C.C. files, Survey by Professor M. J. O'Kelly.

[45] Knockdrum near Castletownshend, Co. Cork.

[46] Webster: *J.C.H.A.S.*, XXXV (1932), 97—Burgatia, Co. Cork.

(a) Re-erection of stone no. 16. Note wooden pegs beneath the levers and packing stones underpinning the slab

(b) Mid-winter sunset at Drombeg (J. E. O'Donovan)

the eastern side of the monument, that is, the side from which observations of the mid-winter sunset would have been carried out. The dark area of old turf, containing little flecks of charcoal and in-trampled pebbles, must then be due to activity which was concentrated about the 'observation point' during ceremonies which were conducted at the site. The extent and density of the discoloured area suggests that the site was used for ceremonial purposes on more than one occasion.

Conclusions

The occurrence of coarse ware of the Lough Gur class II type or closely related ware at Drombeg suggests that the monument was erected in Early or Middle Bronze Age times. The radio-carbon date, providing the degree of contamination has not been under-estimated, points to a Late Bronze Age—Early Iron Age date for the monument. While the stratification of the site is such that it virtually precludes the possibility of its being a two period monument, we may, until comparative evidence is procured from other circles of the west Cork group, allow for the slight possibility that the circle pre-dates the burial and pavement.

In the present state of our knowledge of class II and related ware and of the archaeology of the region in which the stone circles occur, the Drombeg pottery of itself cannot be utilised as a dating factor. In view of the radio-carbon date (500 B.C.—127 A.D.) the possibility of class II or closely related ware occurring in a late context must be noted.

The axial orientation of the circle confirms that the mid-winter sunset played a major role in the religious practices of its builders who, if we admit the proffered interpretation of stones no. 14 and 15 as male and female symbols, would appear to have practised a fertility cult.

The results of the Drombeg excavation, apart from any suggestions which we have advanced above, indicate that further investigation of this type of monument ought to be undertaken to establish whether the occurrence of class II or closely related ware at Drombeg is an isolated phenomenon or a usual feature of the monuments, to establish the frequency of primary burials on the sites and to increase our knowledge of a remarkable concentration of monuments about which very little is known.

CONSERVATION

Orthostats 4 and 6, which had long since tilted out of position, were re-set correctly in their sockets. No. 3, which was found prostrate, was re-erected and marker boulders were set in sockets no. 7 and 13.

The gravelled pavement which had been dumped separately during the excavation was replaced within the circle and marker slabs were laid over the burial pit and pit B. The turf was relaid about the outside of the circle but not within. Since the south-western area of the pavement, lying slightly below the turf level of the outer area, was prone to waterlogging during heavy rain a French drain was constructed outside the monument to the south-west. Finally the area within the circle was treated with sodium chlorate to inhibit the growth of vegetation.

ACKNOWLEDGEMENTS

The writer wishes to record his thanks to the following : Mr B. Whelton, the landowner, who facilitated the work in every way ; Professor M. A. McConaill, U.C.C., Dr W. E. Nevill, U.C.C., W. A. Watts, M.A. and I. R. McAulay, B.A., T.C.D., for specialist reports ; Professor M. J. O'Kelly, U.C.C., for generous assistance ; Mr M. Flahavan, N.T., Leap, for many kindnesses, for assistance on the excavation and for drawing attention to the Roury flint ; Mr G. Eogan for assistance on the site ; Messrs J. E. O'Donovan, N.T., Union Hall, P. O'Keeffe, Bantry and Messrs J. Bambury and M Ó hEochaidhe, M.A., of the National Monuments Section of the Office of Public Works, for photographs of the excavation.

The excavation was financed by means of a Government grant (administered through the Royal Irish Academy and the Special Employment Schemes Office), and the conservation of the site, which is a National Monument, was financed by the National Monuments Section of the Board of Works. Substantial material assistance was provided by the Department of Archaeology, University College, Cork and by the Cork Public Museum.

APPENDIX I

Stone Number	Height *above subsoil*	Width	Thickness	Depth of of Socket
1	2.05m (6'10")	1.10m (3' 7")	45 cm (1' 6")	56 cm (1' 10")
2	1.90m (6' 3")	75cm (2' 5½")	65cm (2' 2")	40cm (1' 4")
3 (Fallen)	1.75m (5' 9")	Broken	Broken	35cm (1' 2")
4	1.65m (5' 5")	1.05m (3' 5")	32cm (1' 0½")	38cm (1' 3")
5	1.72m (5' 7½")	90 cm (2' 11½")	50cm (1' 8")	52cm (1' 7½")
6	1.55m (5' 1")	80cm (2' 7½")	25cm (10")	26cm (10")
7 (Socket)	..	60cm (1' 11½")	35cm (1' 2")	34cm (1' 1½")
8	1.70m (5' 7")	1.10m (3' 7")	58cm (1' 11")	48cm (1' 7")
9	1.10m (3' 7")	8.05m (6' 9")	45cm (1' 6")	None
10	1.70m (5' 7")	1.02m (3' 4")	54cm (1' 9½")	60cm (2' 0")
11	1.40m (4' 7")	70cm (2' 3½")	36cm (1' 2")	50cm (1' 7½")
12	1.32m (4' 4")	60cm (1' 11½")	40cm (1' 4")	42cm (1' 4½")
13 (Socket)....	..	55cm (1' 10")	22cm (8½")	38cm (1' 3")
14	1.58m (5' 2")	1.05m (3' 5")	80cm (2' 7½")	40cm (1' 4")
15	1.20m (3' 11")	48cm (1' 7")	24cm (9½")	42cm (1' 4½")
16	1.76m (5' 9")	1.05m (3' 5")	42cm (1' 4½")	50cm (1' 7½")
17	1.90m (6' 3")	1.10m (3' 7")	46cm (1' 6")	55cm (1' 9½")

APPENDIX II

Report on the bones supplied by M. A. MacConaill, D.Sc., Professor of Anatomy, University College, Cork :

The bones are in a very fragmentary condition which suggests that they may have been broken up after cremation. Numerous skull fragments are present including one small portion of the occipital bone. The general appearance of the fragments is consistent with the hypothesis that the body was that of an adolescent male or of a slightly older adolescent female. The specific sex cannot be determined.

APPENDIX III

Report on geological specimens from the estuary of the Roury River, Co. Cork, supplied by Dr W. E. Nevill, Lecturer in Geology, University College, Cork.

The large and small nodules submitted for examination are of cretaceous flint.

APPENDIX IV

Trinity College,
Dublin.

Radio-carbon date from Drombeg Stone Circle
T.C.D. 38 B.C. 13 ± 140.

The sample submitted was of charcoal. It was examined with a low-power binocular microscope for traces of contamination by modern rootlets. These were absent and the charcoal appeared very clean. As the sample was small no pretreatment was used. There is, therefore, the possibility that some contamination of the charcoal by modern humus occurred and the date quoted is too young.

In our opinion the degree of contamination cannot have been very great, and, at the most, cannot have depressed the age by more than three or four hundred years ; we cannot conceive the charcoal as older than 500 B.C.

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