A HUMAN SKULL FROM RUNHAM, NORFOLK

By CHARLES GREEN AND CALVIN WELLS

PART I. THE SITE. *By* CHARLES GREEN

IN the late spring of 1954, Mr. Barber, who occupies the marsh-pastures immediately adjoining the upland to the south of the Methodist Chapel, Runham, had cleaned his dykes, including the " Commissioners' Drain " which runs parallel to the " upland shore-line " at a distance from it of some 500 feet. The upcast clay was deposited along the dykeside and here, on 3 June, 1954, a schoolboy, Fred Turner, found a human skull embedded in the clay bank (Nat. Grid Ref.: 63/464107). The following day this skull was brought to the Castle Museum by the late Rev. S. L. Purches and, a few days later, the site was investigated by Mr. R. Rainbird Clarke and the writer.

As the exact position of the skull in the upcast was known, it was possible to estimate the approximate depth from which it had been dredged as 5—6 ft. (166—182 cm.) and to note that, mixed with the brownish-grey clay, there were clumps of peat. In the clay itself, the valves of oysters (*Ostrea edulis*) occurred occasionally.

Following this visit, Dr. J. M. Lambert and Miss Barbara Green made three borings on the north side of the drain, one approximately by the find-spot, one a little to the west and another a little to the east. These bores were most illuminating, particularly Bore A by the site of the skull. Here, to a depth of 171 cm. (5 ft. 7 in.) below marsh-level, the borer revealed an accumulation of clay of shades of brown and grey in colour. This clay contained traces of *Phragmites* peat, most of which was horizontal and, therefore, the remains of drifted vegetation. But between 171 and 179 cm. (5 ft. 7 in.—5 ft. 10 in.) below marsh-level there was a fairly sharp transition to a compact *Phragmites* peat resting in turn on a denser brushwood peat which continued to the grey coarse clayey sand of the valley floor at a depth of 530—533 cm. (17 ft. 5 in.). The more westerly bore (B) seemed to confirm the presence of a small freshwater stream from the upland at this point, as was suggested by the modern surface configuration, but the skull lay outside the area of direct influence of this stream. The most easterly bore showed a section similar to that of the first.

Following the analyses of the Broadland valley-fillings made in the last several years by Dr. J. M. Lambert and Mr. J. N. Jennings (most conveniently referred to in Lambert and Jennings, 1960 with bibliography), it is possible to interpret these findings with some precision. As the estimated depth of the skull and the condition of the upcast coincide so exactly with the transition from clay to peat, it is clear that the skull was resting in the basal estuarine clay on the underlying compacted peat. In view of the close proximity of the upland shore, it is clear also that this peat-surface was not covered by the estuarine

clay until the " Upper Clay Marine Transgression " was approaching or had reached its maximum. This, it has been inferred (Green and Hutchinson, 1960, 138) took place during the first century B.C. and it is possible to suggest that the skull was deposited during the early part of that century. It could not have found its way there much later. It probably belonged, therefore, to a member of the mixed population of the Iron Age " A " culture, and came to rest in the Runham shallows before any infiltration of Belgic elements took place from the south and at least a century before the first Roman visitors of the immediate post-conquest years reached East Anglia.

So far we know nothing of any Iron Age " A " occupation of Flegg, for of this no archæological trace has yet been recognized (ibid., Map, Fig. 3). This shows, at least, that there cannot have been a dense occupation in this period. But it is perhaps more probable that the skull reached its resting-place from the " mainland " whence the estuarine currents had carried it, as they had the overlying drifted reeds from higher up the Bure valley.

LITERATURE CITED

Lambert, J. M. and J. N. Jennings (1960). " Part I. Stratigraphical Evidence " in " The Making of the Broads." London : R.G.S. Research Series No. 3.

Green, Charles and J. N. Hutchinson (1960). " Part III. Archæological Evidence " in " The Making of the Broads."

PART II. THE SKULL. *By* CALVIN WELLS

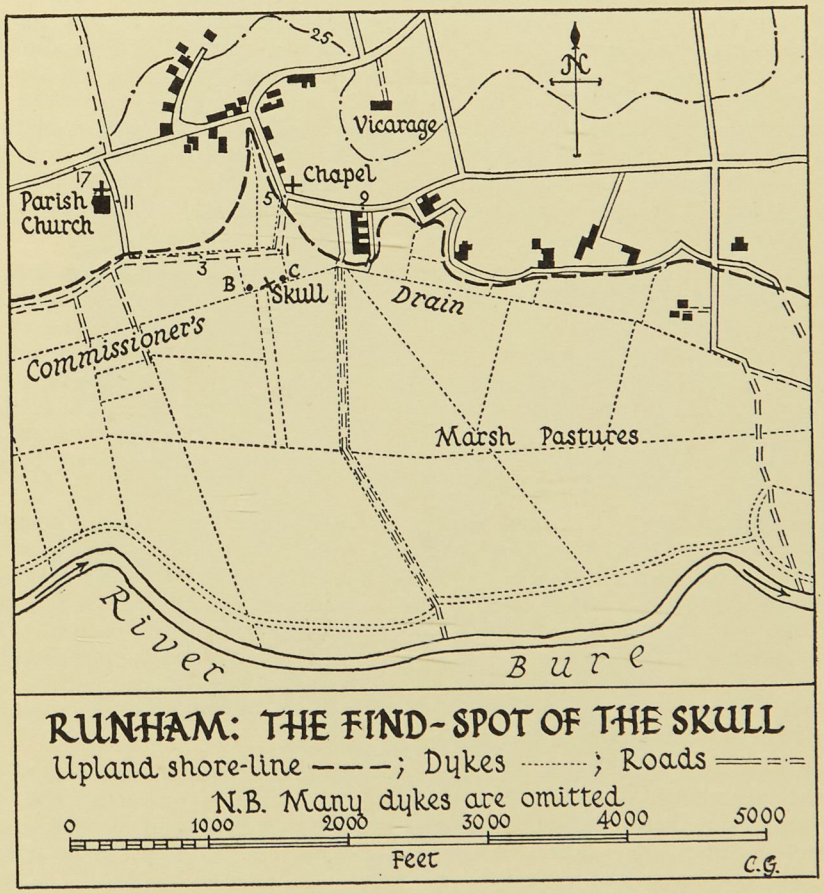
This is a brief description of a skull found at Runham (Map Reference : TG/464107) in blue clay at a depth of about six feet. It was presented to the Castle Museum, Norwich by Mr. F. Turner. (Accession Number : 148.954).

It is an excellently preserved male calvarium (skull complete except for the lower jaw) of uncertain period. Its general pattern suggests an Iron Age or Romano-British date and this would be compatible with its stratigraphic position. The probable age at death of this man was 30 to 35.

The chief interest of this skull lies in its unusual pathological features. A glance at the anterior aspect (Plate I) at once shows a marked degree of facial asymmetry, especially of the maxilla (upper jaw). This bone is considerably smaller on the right side than on the left. When accurately measured it is found to be several millimetres less than its fellow in height, breadth and antero-posterior depth. In Plate I this is most readily seen by the drawing up of the tooth level on the right, the diminished distance from the teeth to the lower margin of the eye-socket on that side and the greater depth of the left side of the nose. Other features, such as the more feeble muscle markings on the right of the face and skull, reinforce this evidence of unilateral atrophy.

In general it can be said that early facial skeletons tend to be more symmetrical than modern ones, presumably because their bony development is largely the product of vigorous activity in the muscles of mastication which pass from the skull to the mandible. In the Runham specimen not only is there abundant evidence that the left-sided muscles were more powerful than those

of the right but one of the consequences of this has been that the whole facial skeleton has been drawn over towards the left side. This can be seen in Plate II where the prolongation of the axis of the occiput and the foramen magnum to the front teeth reveals the lateral deviation of the palate and the shortened distance between the temporo-mandibular joint and the anterior end of the zygomatic arch on the left side. In Plate I it can be seen by observing the greater lateral protrusion of the outer margin of the left eye.



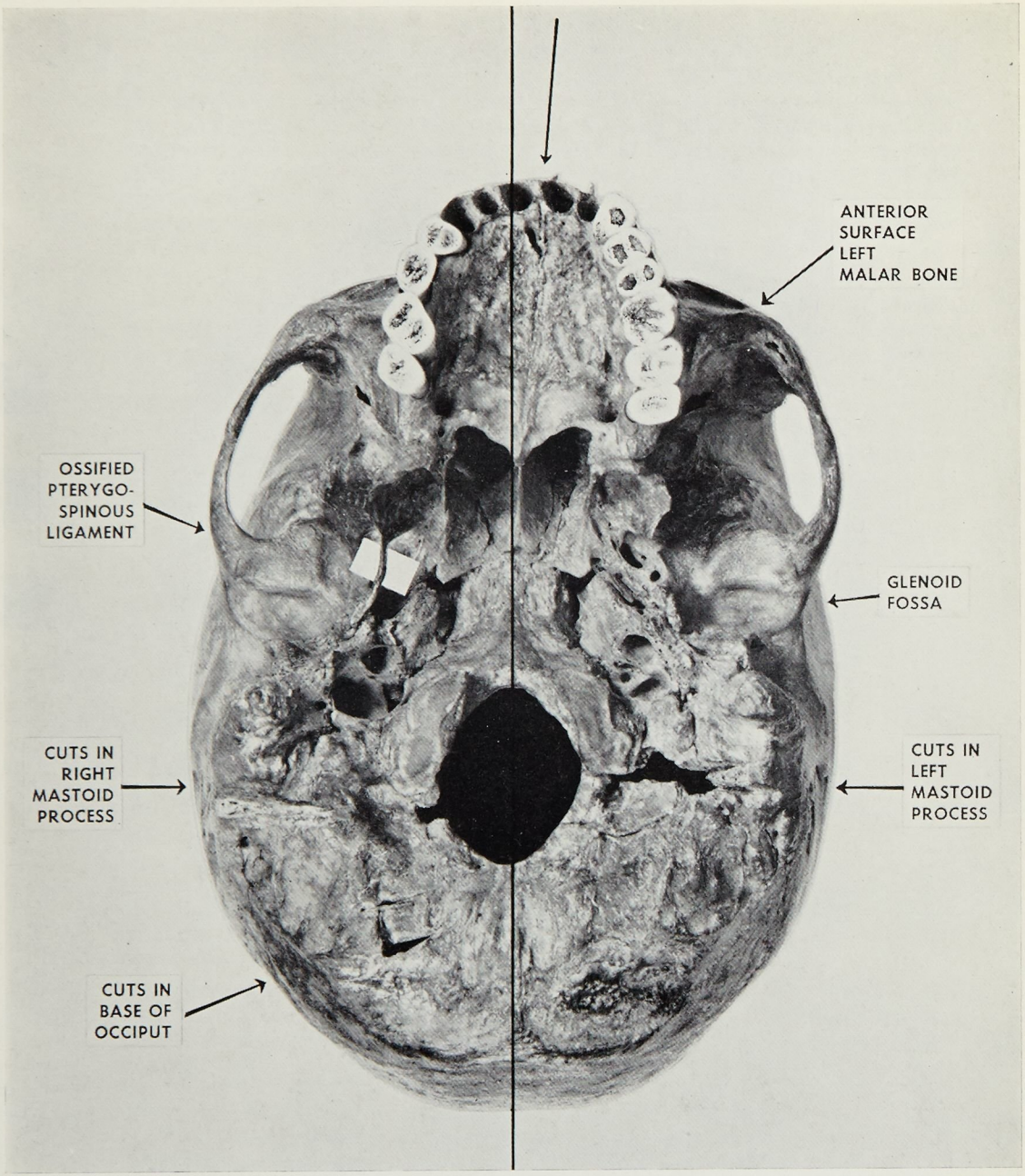
This is not the place to discuss anatomical minutiae but it is obvious that the facial skeleton must always be securely anchored to the base of the skull. If this were not so the girl in the circus would not be able to spin under the big top, hanging only by her mouth : the weight of her body would pull brain-case and jaws apart. Now, one of the structures that helps to attach the face to the skull on each side is the pterygo-spinous ligament and in the Runham skull the right one of these has ossified to become a stout bar of bone. We can, perhaps, interpret this as a functional adaptation designed to resist the pull towards the left to which the facial skeleton was subjected.

The cause of this man's deformity is open to some conjecture. There is no doubt, however, that it originated in very early life and by far the likeliest possibility is a birth injury. An intracranial haemorrhage at birth producing a form of hemiplegia or " stroke " with subsequent partial paralysis and atrophy is a common enough event in the absence of skilled obstetric supervision. If this was the cause of his deformity it is also possible, to the extent of being probable, that the Runham man may have been mentally abnormal as well as having an odd or unpleasant appearance. He may have been the lopsided, leering village simpleton ; perhaps lacking self-control and a nuisance to his neighbours.

On this we can only speculate in vain, but some such explanation may lie behind the undoubted fact that for some reason or other he was decapitated. Plate II shows that at least two blows—probably three—across the base of the skull have cut into and truncated the posterior border of the mastoid processes. This is clearly seen on the right side and in addition on the left the base of the skull is perforated between the foramen magnum and the mastoid. One of these blows also damaged the right margin of the foramen. Two further cuts into the occipital bone posterior and to the right of this foramen are also present, though less obvious in the Plate.

The normal method of decapitating a body—assuming that " normal " is *le mot juste*—is by a cut or blow delivered from behind approximately in the plane of the foramen magnum and usually at the level of the third, fourth or fifth cervical vertebra. If the blow is at a higher level it is still in the same plane and may damage the mastoid processes or the base of the occiput. But the mastoids will then show wounding or truncation in a horizontal direction and the occipital wound, although somewhat variable in inclination, still similarly approximates to the horizontal and shows clearly that the direction of the blow was from behind forwards.

A curious feature of the Runham skull, however, is that the wounds of the mastoids are almost vertical and were inflicted from below upwards : the occipital wounds are distinguished by having been inflicted by a front to back stroke. Without doubt a single powerful axe stroke could cut through the neck from front to back, vertebrae included, and injure the occipital bone. The head might then fall or be thrust back and being, perhaps, still attached to the body by the posterior muscles of the neck further hacking would be inspired and could well produce the vertical upward cuts present on these mastoids.



[*Photo : by Hallam Ashley, F.R.P.S.*

Plate II. Runham skull : Basal view.
(The ossified pterygo-spinous ligament has been emphasised by painting round it).

I do not think it is possible to say with absolute confidence whether these wounds were produced during the course of a mortal beheading or whether the fresh corpse was decapitated. In the latter case the appearances we have noted could be produced if the cadaver had been lying on its back, the head being grasped by the hair and dragged upwards and forwards, raising the shoulders slightly. The posterior neck muscles and vertebrae having been slashed through, the shoulders would slump back and the head pivot forwards, face down, attached to the body by the anterior cervical tissues. At this stage the base of the skull is in a roughly vertical plane and continued horizontal hacking will cut into it from below upwards producing injuries of the type confronting us.

Although it is impossible to be dogmatic in solving the problems presented by this skull, the remarkable combination of hemiplegia from infancy together with a series of primary and secondary anatomical abnormalities and final decapitation is sufficiently unusual to justify putting it on record.

My thanks are due to Mr. R. Rainbird Clarke, Curator, Norwich Museums for permission to publish this skull.