ON TWO TASMANIAN CRANIA (IMMATURE).

By

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Plates XXVII.-XXIX.

INTRODUCTION.

In describing these two crania I am influenced by the comparative rarity of such specimens, and the opportunity, now offered, of comparison with the adult Crania in the large collection of the Tasmanian Museum.

There remain for description of this extinct race the Crania of only eight children (of which one is of doubtful authenticity), (1899, p. 191).

The Crania under consideration are as follows:—

A. Cranium of a child of about 6 years or a little more, with the Mandible *in situ*. This was found by Dr. Inglis Clark and myself about Christmas, 1908, at Oyster Cove. Here the last 30-40 of the now extinct race were interred in a small cemetery adjacent to the Government Station, in which they lived. Burial had taken place in a coffin of hardwood (Blue Gum) at least 60 years before. When found the coffin had been distorted by the pressure of the earth, and the Cranium and long bones infiltrated with a variety of Peaty root.

Berry and Robertson (1909) did not take a tracing of this specimen when they described the remainder of the Crania in my collection.

B. The Cranium of a child of 6-7 years discovered by Mrs. R. W. Legge, on the West Coast of Tasmania, in the summer of 1927.

This skull is in a very fine state of preservation, but the Mandible is wanting. When found it was lying on the clay pan of a large sand blow, and no trace was found of any other human bones.

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The Mandible very possibly may have been carried attached around the neck (1899, p. 64) or in a skin bag (1924) by one or other of the parents. On the other hand, the skull itself may have been carried about in the same manner. It was found lying on its side, on the slope of the "blow."

It will be of interest to see to what extent the features, that are regarded as typical of the Adult Tasmanian Cranium, are present in these immature types.

Topinard (1899, p. 197), in describing the specimens in the Paris collection, considers the following features to be typical of the Tasmanian type and of value in differentiating them from the Australian and other races.

These features are in order:

(1) The Globular Form.

(2) The Cranium is Sub-Dolichocephalic, without any notable transverse depression at the rise of the Forehead.

(3) The skull broadens rapidly from before backwards, with rounded sides and large Conical Parietal Bosses.

(4) The Carinate or Keeled appearance of the vault.

(5) A recession of the Posterior Parietal position of the skull.

It will be of interest to see to what degree these characteristics are found in the two skulls under consideration.

SKULL A.

Child 6-7 years of age, from its fragility, probably a Female. When found some of the short bronze-coloured rings of hair were still attached to the scalp.

The body seems to have been placed on its left side (my memory will not serve me in recalling the exact details), as the skull is flattened over the Fronto-Temporal regions with disintegration of the bone and replacement by fibrous root.

In spite of this, however, the skull retains sufficient of its characteristics to be of great interest.

Norma Facialis.—The left side of the face as a whole is flattened and displaced a little backward, with the Temporal Fossa, Orbit, Malar bone, and Superior Maxilla wanting or replaced by fibrous root.

The Glabella is not pronounced, nor is the Superciliary Ridge of the right side.

There is no typical transverse depression from which the forehead may arise. The nasal bones are wanting with consequent loss of definition of the nasal aperture.

The right side of the face is, however, fairly complete and the Orbit well defined except on the mesial surface.

It is of much interest to note that the Orbit is almost quadrilateral, with little difference between its height and breadth (exact measurements cannot be taken).

This is of marked contrast to the Orbit of the Adult Tasmanian, which is typically of markedly greater breadth than height (1899, p. 214). The index for 6 males being 76.6, and for 2 females 81.

Norma Lateralis (Plate XXVII.).—The most interesting aspect of this specimen. The Mandible is seen in position, and the teeth (the Dentine of which has split and exposed the pulp) are *in situ.*

The Molars and Premolars of the Upper and Lower Maxillæ are approximated, with a gap filled with root fibre showing where the Incisors are missing. The Inferior Maxilla has not been separated from the skull, and the roots replacing the soft tissues are holding it accurately in the position it would have occupied during life.

The whole lower portion of the face projects forward, and the impression given is one of marked Prognathism (see Plate XXVII.).

The Lateral aspect of the Temporal Region is rounded, and the Parietal Eminence is well marked. The Posterior Parietal Region also shows recession.

Norma Verticalis.—The R. and L. Half Sections, owing to pressure, are very dissimilar, and the former alone is taken into consideration.

Here following the rise of the forehead is a narrowing transversly, in marked contrast to the exceptional development of the Right Parietal area towards the Parietal Eminence.

The Median Groove is well marked, indeed, markedly so, between the two Parietal Eminences. A depression, or rather a flattening, may be seen between the latter point and the Median Line.

The skull could not be described as Carinate.

Teeth.—The 6 year Molar is erupted, and the 12 year Molars may be seen *in situ* in the Superior and Inferior Maxillæ of the Right side.

The 2 Premolars, although shattered, are present. The remainder of the Teeth have disintegrated or dropped out.

CRANIUM B.

(Plates XXVIII. and XXIX.).

The skull is that of a child of 7-10 years of age, probably a male. The R. aspect of this Cranium shows some loss of the outer Table of the Parietal Bone and is lightly scorched by fire about the Parieto-Occipital Area, the Temporal Fossa, and above and below the Orbit.

This is due, I think, to a grass fire rather than any attempt at Incineration.

Norma Facialis (Plate XXIX.).—Little or no protuberance of the Glabella or Superciliary Ridges are to be made out. The Supra-Orbital Notch is wide and shallow.

The Nasal Bones are not projected forward and upward to the extent that is seen in the adult. The Nasal Spine is well marked, no Metopism. The Orbits are of great interest, their measurements being:—

Right Orbit.	Left Orbit.
Breadth 3.3= cm.	Breadth 3.3= c.m.
Height 3.4=	Height 3.3=

This Cranium is therefore in agreement with Specimen A., in that instead of the preponderance of Orbital Breadth over Height of the Typical Adult, we have in both cases the Orbital Height almost equal to its Breadth.

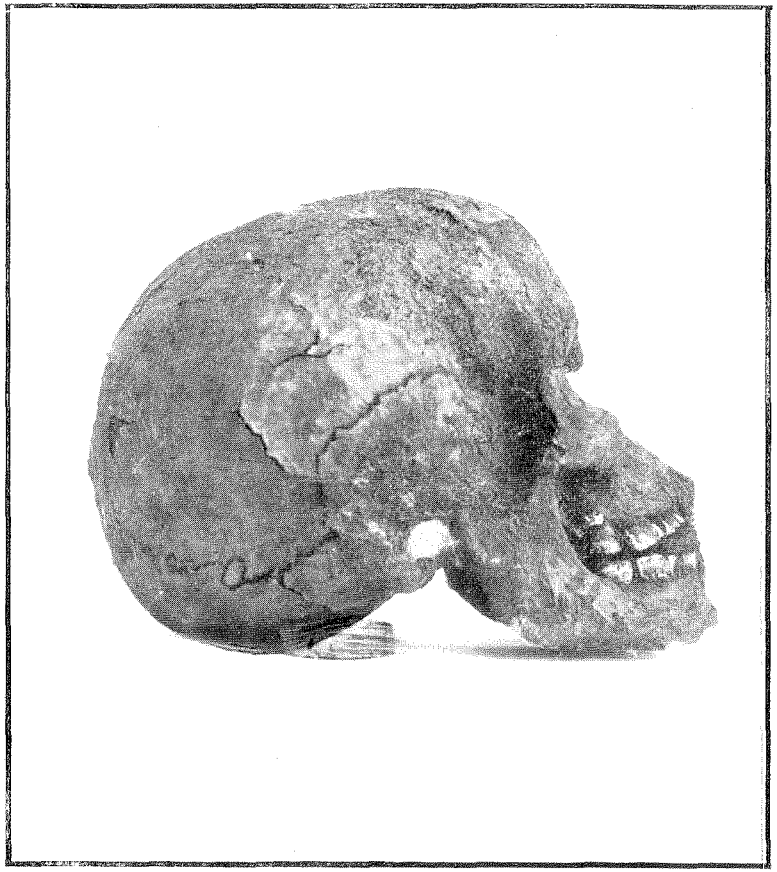
In this Area there is no suggestion of the massive overhanging eyebrows of the Adult.

The face, as a whole, does not appear to be as Prognathous as it is in Specimen A.

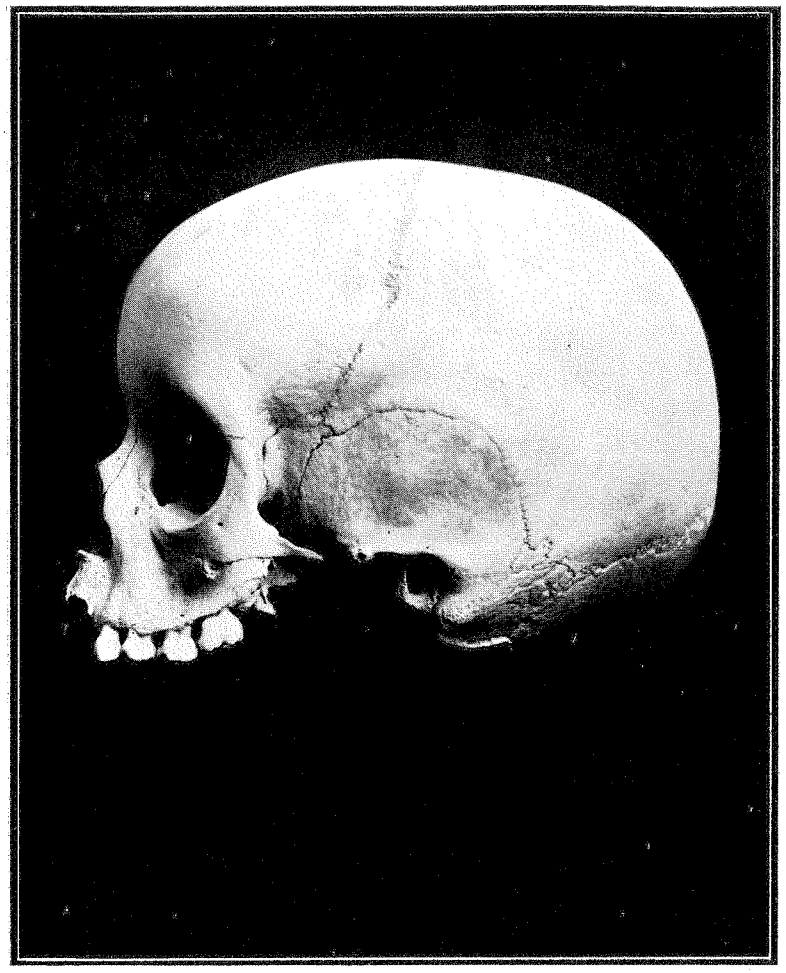
Norma Lateralis (Plate XXVII.).—The Temporal Region shows some rounding, and on each side a well-marked Lower Temporal Ridge.

The Zygomatic Arch of the Left side is missing. The Post-Parietal Area of each side recedes typically.

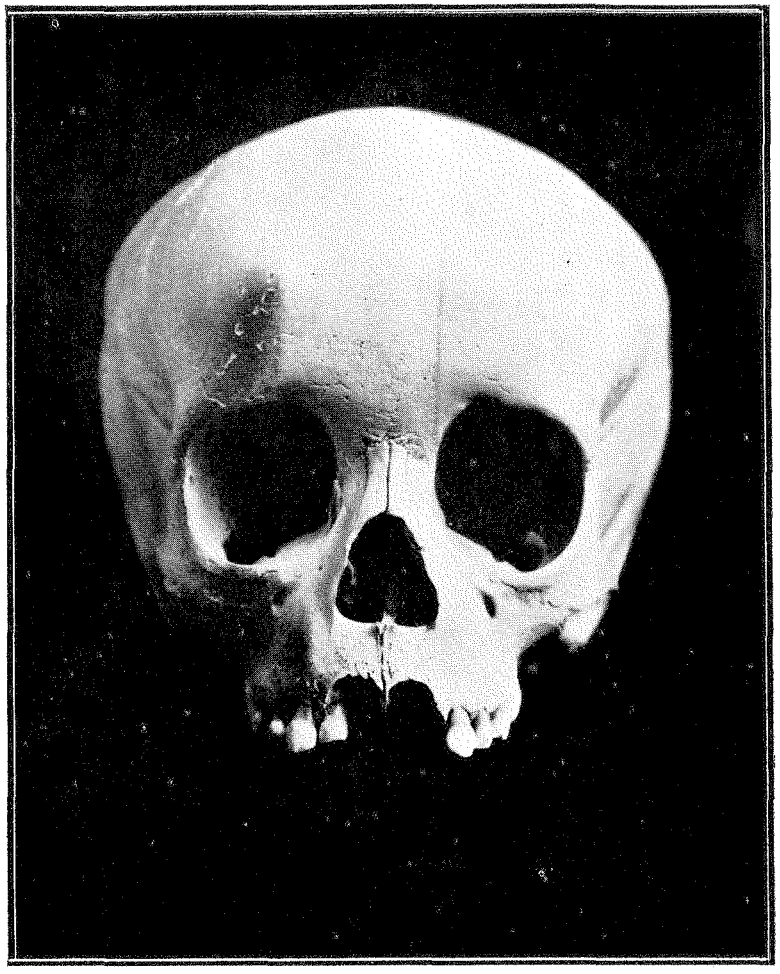
Norma Verticalis.—The Forehead is broad and with very little narrowing posterior to the external Angular processes of the Frontal Bones.



CRANIUM A.
Tasmanian Child, 6-7 years.



CRANIUM B.
Tasmanain Child, 7-10 years.



CRANIUM B.
Tasmanian Child, 7-10 years.

The shape is typically Pentagonal with marked development of the Parietal Eminences.

The vault as a whole appears to be flattened rather than of the typically Carinate Form.

Teeth.—On both sides the First Incisor is missing. On the right side the Second Incisor of the Primary Dentition is still *in situ*. The Canines with First and Second Premolars remain, and show a considerable amount of even wear. The First Molars are fully erupted, show four Cusps, and have been little used; the Second Molars are in position unerupted.

The Palate is deep, and the Antero Posterior length greater than the Transverse. The general configuration of the Palatal Area is oblong rather than horseshoe-shaped, as remarked by Scott and McClinton in the examples they describe (1925, p. 96).

Conclusion.—Generally, it may be said that in their Physical Characters both these immature Crania conform to the Adult types of their race, and could be distinguished by their Tasmanian characteristics. Neither, however, shows the very typical carination of the Vault of the Cranium. The Facial Features are worthy of detailed attention, in a larger series of skulls; as it seems that in early life a marked width of the face at the expense of its Height is not pronounced.

It appears, too, that the Orbit and Nasal Apertures (possibly, too, the Palatal Area) as a result of growth and mastication tend to expand laterally, and with the normal heavy development of the Glabella and Supra-Orbital Ridges give rise to the Facial characteristics of the Adult Skull as we recognise them.

ACKNOWLEDGMENT.

My warm thanks are due to Mrs. R. W. Legge, who, as stated, found Specimen B., for her permission to describe it.

Also to Mr. Angus Hean, B.D.Sc., who was greatly interested in the Dentition of both Crania.

REFERENCES.

1899—H. Ling Roth—*Aborigines of Tas.*, 2nd Ed.

1909—Berry and Robertson—Trans. Roy. Soc. Vic., Vol V., pt. 1.

1924—R. Pulleine—Trans. Roy. Soc. of S.A., Vol. 48.

1925—Scott and McClinton—Pap. and Proc. Roy. Soc. Tas., 1925.