

He has most courteously placed his notes at my disposal, and in this place I shall quote what he says respecting the lower jaw.

“The peculiar upward curve of the inferior edges of the rami of the mandible immediately behind the termination of the symphysis is alike in both specimens. The upper surface of the symphyseal portion is in the New Zealand specimen broader than in the one from the Cape; the whole beak-like mass constituting this symphyseal portion being less attenuated and not presenting such sharp projecting alveolar ridges. In the New Zealand specimen the symphyseal line appears superiorly as a deeply-sunken groove, to the suture at the bottom of which the bone curves evenly downwards on each side, whereas in the Cape specimen a slightly raised ridge in each bone runs parallel and close to the suture.

“In the New Zealand specimen the under surface of the symphyseal beak is evenly rounded, except at its very hindermost part, where two very slight ridges are to be made out, situated one on each side of the symphyseal line, and passing off into the inferior edges of the two rami. In the Cape specimen the symphyseal beak shows a lateral groove towards the tip, situated below the alveolar border, and instead of being rounded on its under surface, is compressed and sharply keeled along the middle line. The mental foramen in the outer surface of the jaw below the position of the tusk is a small and simple aperture in the New Zealand jaw, but in the one from the Cape it is large, and leads to a canal in the bone. The swelling caused by the large alveoli of the tusks is alike in both specimens. The portion of the symphyseal beak in front of the spot where the anterior margin of the tooth emerges from the alveolus is about 1 inch longer in the Cape specimen than in that from New Zealand. In the New Zealand specimen the alveolar margin of the rami behind the teeth is very much compressed and sharp, and the alveolar groove can only be traced for about 2 inches backward: it then becomes obliterated when the margin of the jaw is knife-edged. In the Cape specimen the alveolar margin is much broader, and the groove visible up to the cut end of the rami.”

In the younger specimen *C* the alveolar groove extended from the anterior end of the mandible to  $7\frac{1}{4}$  inches behind the socket for the tooth. It was a narrow groove in its entire extent except in the region of the tooth, where it expanded into an appropriate socket. A well-marked mental foramen communicated with the inferior dental canal below the position of the alveolus.

*The Teeth.*—I shall now proceed to describe the form and structure of the very remarkable teeth of *Mesoplodon layardi*, and as the study of the tooth in the younger animal has thrown great light not only on the structure but on the peculiarities of form of the adult teeth, I shall in the first instance describe it.

The teeth of the young *Mesoplodon layardi* were imbedded in their sockets, one in each half of the lower jaw. Each tooth consisted of a small triangular denticle, which represented the crown of the tooth, and of a larger part, which for descriptive purposes may be termed the fang. The denticle projected outwards and slightly upwards from