average length of ten old male skulls is 375 mm., their breadth 221 mm.; whilst the mean length of two old female skulls is 296 mm., and their mean breadth 157 mm. In the examination, therefore, of the adult skulls of the Sea Lions, both northern and southern, differences in size are of no value as indicative of specific characters, but are only of sexual importance.

Eumetopias californianus (Lesson). Californian Sea Lion.

Otaria californiana, Lesson, Dict. Class d'Hist. Nat., xiii. p. 420, 1828. " Gillespii, M'Bain, Proc. Roy. Phys. Soc. Edin., vol. i. p. 422, 1858. Arctocephalus gilliespii, Gray, Brit. Mus. Catal., p. 55, 1866 (errore). Zalophus gillespii, Gill, Proc. Essex Inst., vol. v. p. 13, 1866.

The late Dr. James M'Bain, R.N., of Edinburgh, was the first naturalist to describe the skull of this animal ¹ from a specimen obtained from the Gulf of California, which was given to him by his friend Dr. Gillespie. I purchased this skull after Dr. M'Bain's death for the Anatomical Museum of the University of Edinburgh. This animal is generally recognised as distinct both from its southern neighbour, Otaria jubata, and from the northern or Steller's Sea Lion, though whether a special genus Zalophus should be established for it, or it should be regarded as only a distinct species of Otaria, or of Eumetopias, is still a moot point amongst zoologists. Although Dr. M'Bain's description embraces many of the characters of the cranium, and particularly the prominent sagittal crest on the vertex of the skull, yet I may refer to several additional points and measurements.

TABLE IX.—SKULL OF EUMETOPIAS CALIFORNIANUS.

| 200 18 9005 SP 9005 | | | | | | | mm. |
|--|---------------|---------|---|---|----|---|-----|
| Extreme condylo-premaxillary length, | | | * | | | . | 292 |
| From front of premaxilla to occipital crest | , . | | | | • | | 268 |
| From basion to optic foramen, . | | | | • | • | | 116 |
| From optic foramen to premaxillary tuber | cle, . | | | • | • | | 159 |
| Extreme interzygomatic width, . | | | | • | | | 168 |
| Extreme width immediately behind extern | nal meatus, | | • | | • | | 150 |
| Greatest width of palate, | | | | • | | . | 47 |
| Width between outer sides of base of upp | er canines, . | | | | •: | | 56 |
| Width between outer sides of base of uppe | r lateral inc | isors,. | | • | | | 33 |
| Width between outer sides of base of lowe | r canines, | | | | • | | 42 |
| Length of palate to incisor teeth, . | | | | • | | . | 128 |
| Height from basion to middle of occipital | crest, . | | | | • | | 102 |
| Smallest interfrontal width in plane of upper surface, | | | | | | . | 25 |
| | • • | | | | • | . | 51 |
| Greatest width of anterior nares, . | | | * | | • | | 31 |
| Greatest width at postorbital processes, | | | | | • | . | 68 |
| Greatest length of mandible, | | | • | | • | | 214 |
| Greatest width at condyles of lower jaw, | | | • | | | | 152 |
| Greatest height of sagittal crest, . | | | | | | . | 30 |

¹ Proc. Roy. Phys. Soc. Edin., vol. i. p. 422, 1858.