

the Elephant Seal obtained from the Falkland Islands, and, for convenience of reference, have included in the table the measurements of his specimen.

From this table it will be seen that none of these skulls equalled in length the Falkland Island specimen, or indeed two other large skulls referred to in Professor Flower's table on p. 147 of his memoir, but that they closely approached in length the skull in the Berlin Museum obtained in Kerguelen Island by the German Transit of Venus expedition. In their other dimensions also they were much smaller than the skull from the Falkland Islands above referred to, which is much the largest specimen that has yet been measured. The very material difference between the dimensions of the male skulls and the largest female will at once be recognised. It will be of importance therefore to determine, if possible, whether this difference is sexual or merely due to a difference in relative age. The female skull is, I believe, to be regarded as approaching adult, for the occipito-sphenoidal synchondrosis was obliterated, except for a faint trace on the surface of the bone on each side, and the junction between the pre- and post-sphenoids was only indicated by a surface mark. But it should be stated that in the cervical vertebræ which accompanied this skull the plate-like epiphyses of the bodies were not ankylosed. In the female skull next in size to the above, the condylo-premaxillary length of which was 274 mm., both the basi-cranial synchondroses were unossified, though the interval between them was narrow.

TABLE I.—CRANIA OF ELEPHANT SEAL.

	♂ Challenger. Heard Island. <i>h.</i>	♂ Prof. Scott. Heard Island.	♂ Challenger. Kerguelen Island. <i>c.</i>	♀ Challenger. Kerguelen Island. <i>f.</i>	♂ Prof. Flower. Falkland Islands.
	mm.	mm.	mm.	mm.	mm.
Length from front of premaxilla to occipital condyle,	486	493	402	300	564
" " to occipital crest,	508	497	392	296	597
Extreme interzygomatic width,	354	350	281	222	384
Extreme width between occipital crests,	203	201	187	171	242
Greatest width at posterior edge of external meatus,	284	303	253	199	...
Greatest width of palate,	178	154	124	89	185
Width of maxilla across middle of rostrum,	168	160	122	73	176
Width between outer sides of base of upper canines,	160	146	106	62	158
" " upper lateral incisors,	58	...	43	31	60
" " lower canines,	83	64	38	93
Length of palate from mesial notch behind to incisor teeth,	250	248	176	128	272
Height of skull from basion to middle of occipital crest,	167	160	141	112	...
Smallest inter-frontal width in plane of upper surface,	65	71	52	38	...
Length of nasals,	55	65	55	43	...
Greatest width of anterior nares,	98	96	82	48	...
Vertical diameter of mes-ethmoid at anterior nares.	80	85	64	48	...
From antero-inferior angle of mes-ethmoid to central incisor,	158	145	127	85	...
Greatest length of mandible,	350	326	253	191	375
Greatest width at condyles of lower jaw,	318	236	195	352

In Dr. Scott's male the occipito-sphenoidal synchondrosis was obliterated mesially, but on each side a gap about 1 mm. wide separated the two bones; the synchondrosis between the pre- and post-sphenoids was, however, open both mesially and laterally.