

(except in *Procellaria* where it is just) but shorter, and the same is always the case when it is compared to the ulna. It is never twice as long as the femur. The tibia is only a little, or not at all, longer than the humerus or manus.

Name.	Humerus.	Ulna.	Manus.	Femur.	Tibia.	Tarso-Metatarsus.	Middle Toe.
<i>Oceanites oceanicus</i> , . . . .	23	21	34	15	50	35	28
<i>Garrodia nereis</i> , . . . .	20	17	26(?) <sup>1</sup>	14	51	34	25
<i>Pelagodroma murina</i> , . . . .	27	24	37	18	60	41	35
<i>Fregatta melanogastra</i> , . . . .	27	23	36	19	56	38	26
<i>Cymochorea leucorrhœa</i> , . . . .	35	35	42	16	37	24	26
<i>Procellaria pelagica</i> , . . . .	26	24	33	13	33	22	20
<i>Bulweria columbina</i> , . . . .	62	62	63	20	42	28	28
" <i>Cestrelata grisea</i> ," . . . .	81	83	84	31	61	36	43
<i>Majaqueus æquinoctialis</i> , . . . .	151	154	143	51	116	67	81
<i>Adamastor cinereus</i> , . . . .	134	132	127	50	108	62	78
<i>Puffinus anglorum</i> , . . . .	79	72	86	31	79	46	51
" <i>obscurus</i> ," . . . .	66	63	71	25	66	40	44
<i>Daption capensis</i> , . . . .	86	84	91	38	80	46	56
<i>Aeipetes antarcticus</i> , . . . .	98	93	100	44	88	44	56
<i>Thalassœca glacialis</i> , . . . .	115	113	118	48	96	57	68
<i>Fulmarus glacialis</i> , . . . .	118	116	117	50	113	54	67
<i>Ossifraga gigantea</i> , . . . .	243	236	212	88	184	94	130
<i>Prion desolatus</i> , . . . .	57	56	56	23	53	32	35
<i>Pelecanoides urinatrix</i> , . . . .	43	33	44	23	46	24	27
<i>Diomedea exulans</i> , . . . .	428	417	290	110	246	124	168
" <i>brachyura</i> ," . . . .	281	285	222	76	175	96	122
<i>Thalassiarche melanophrys</i> , . . . .	259	262	202	80	161	83	118

#### IV. THE CLASSIFICATION OF THE TUBINARES.

The propriety of the division of the entire order Tubinares into two main families, which must be termed the Oceanitidæ and Procellariidæ,<sup>2</sup> first proposed by Professor Garrod in 1873 (*vide supra*, p. 9), has been fully borne out by my further investigations into the structure of these forms. To the differences in their myological formulæ, and in the presence or absence of cæca, may now be added numerous other points, both external and internal.

The Oceanitidæ agree together in having the following peculiarities which are not shared in—with one or two exceptions marked by an\*—by any of the Procellariidæ:—

The number of secondary remiges is never more than ten. The tarsi are not uniformly reticulate, but are either ocreate, or covered by large transversely-oblique

<sup>1</sup> Imperfect in the specimen measured. This length is estimated.

<sup>2</sup> Cf. Proc. Zool. Soc., 1881, p. 737.