edge of the maxillary root of the zygoma, from which spot the palate diminishes in transverse diameter both forwards and backwards; posterior border either truncated or emarginate. Articulation of vomer with floor of the nose variable in position. Carotid canal distinct from and antero-external to the foramen lacerum posterius. Occipital condyles converging anteriorly, their articular surfaces frequently continuous; basioccipital flattened and usually perforated mesially. Anterior nares far from terminal. Malar variable in its length. Neck short. Hind limbs directed backwards, not used in land locomotion. Front limbs smaller than posterior, digits armed with strong terminal claws. Palms and soles hairy. Dentition—incisors variable, canines $\frac{1-1}{1-1}$, post-canines $\frac{5-5}{5-5}$. Mammæ 2 or 4. Scapula with præ- and postspinous fossæ almost equal in area. Humerus with or without supra-condyloid foramen. Ilium with crest much everted and in transverse plane of base of sacrum. Femur with small trochanter absent or rudimentary. Astragalus with a long calcanear process.

TRICHECHIDÆ.

Without pinna of ear and scrotum; postorbital processes either wanting or rudimentary; alisphenoid canal large; mastoid massive but not entirely discontinuous from the tympanic bulla; posterior border of nasal articulating with anterior border of frontal almost in the transverse plane of skull. Inner wall of orbit complete, but that of zygomatic fossa defective. Lateral borders of hard palate almost parallel to each other behind, though somewhat converging anteriorly; posterior border truncated. Vomer articulating with floor of nose well in front of hinder border of palate. Carotid canal distinct from and in front of foramen lacerum posterius. Basi-occipital mesially keeled and not perforated. Anterior nares terminal. Malar short. Neck longer than in Phocidæ. Palms and soles hairless; manus and pes can be turned forwards and used for land locomotion. Upper canines 1-1, elongated into great tusks. Mammæ 4. Scapula with præspinous much larger than postspinous fossa. Humerus without a supra-condyloid foramen. Ilium with crest everted and in front of base of sacrum. Femur with rudimentary small trochanter. Astragalus without a calcanear process.

OTARIIDÆ.

With pinna of ear and scrotum; postorbital processes distinct; alisphenoid canal present; mastoid quite discontinuous from tympanic bulla and prominent; tympanic bullæ only slightly swollen; anterior mesial process of frontal passing between the diverging posterior ends of the nasals. Inner wall of the orbit very defective, so that