

larger articulation with nasal proportionally than in the other species. Antorbital processes are faint tubercles. Zygomatic arches comparatively flattened, their greatest transverse diameter at posterior part of arch, and the transverse diameter of cranium behind external meatus greater than interzygomatic diameter. Malar bone short, only about equal in length to the same bone in *Phoca hispida*. Hard palate truncated behind and reaching close to the hamulars; posterior border of vomer almost entirely concealed and extending very obliquely forwards to join the vomerine crest of the superior maxilla. Tympanic bulla not so swollen as in the other species and somewhat rougher on inferior surface. Foramen lacerum posterius small, basi-occipital not perforated mesially, par-occipitals distinct. The floor of the orbit not so oblique as in the other species of *Phoca*, but approximating more nearly to the vertical. Post-canines with distinct intervals between, and not very strongly implanted. Subcondyloid process of mandible large, triangular, deeply incurved, and continued by a ridge into the tubercle at the angle of the jaw; lower border of body a little incurved and concave in its general outline. Coronoid process shorter and less pointed than in the other species, and the sigmoid notch more shallow.

A comparison of the cranial characters of *Phoca barbata* with those of the three other species of the genus *Phoca*, shows that it differs more from them than they do from each other. These differences are especially seen in the lower jaw as just stated, in the flattening of the zygomatic arches, so that the cranial breadth is greater than the interzygomatic diameter, in the more vertical direction of the floor of the orbit, and in the very pronounced ridge along the line of the squamous suture. It has been pointed out by previous writers (Gill, Allen) that *Phoca barbata* differs from the other species of *Phoca* in having a broader muzzle, in the middle digit of the manus being the longest instead of the digits slightly decreasing in length from 1st to 5th, and in possessing four and not two mammæ, and on these differences Gill has established for it the genus *Erignathus*. To these external differences may now be added those cranial differences which I have just described, so that from the point of view of those zoologists who are in favour of the multiplication of genera, additional data are given for separating it from the genus *Phoca* and calling it *Erignathus barbatus*.

I have not seen any specimens of the Seals which have been named *Phoca caspica*, *Phoca siberica*, and *Phoca equestris* (*Histriophoca fasciata*).

Halichærus, Nilsson.

Infraorbital foramen does not open into anterior part of floor of orbit but below it, for the floor of orbit does not form a continuous slope with the posterior border of the zygomatic root of maxilla, but is separated from it by a deep vertical surface. Anterior nares high and capacious. Post-canines each with a large, conical, simple cusp;