

The tarsalia were seven in number. The *astragalus* was a larger bone than the *os calcis*. Its posterior process reached behind the corresponding process of the *os calcis*, and formed the most projecting part of the heel; it was grooved for the tendon of probably the *plantaris* muscle. Its head passed in front of the same bone, and articulated with the *scaphoid* and *cuboid*. Its inferior surface articulated with the *os calcis*, and its superior and external lateral surface with the two bones of the leg.

The *os calcis* was attenuated behind into a *calcaneal* process, and articulated with the *astragalus* and *fibula* on its superior, and the *cuboid* on its anterior surface. The *cuboid* possessed both a *plantar tubercle* and a deep *peroneal* groove, and articulated with the *os calcis*, *astragalus*, *scaphoid*, *ecto-cuneiform*, and 4th and 5th *metatarsals*. The *scaphoid* was shaped not unlike the human bone, and articulated with the *astragalus*, *cuboid*, and three *cuneiforms*. Of the three *cuneiform* bones the *ento-* was much the largest, and the *meso-* was so small as not to be visible on the *plantar* surface. The *ecto-cuneiform* had a *peroneal* groove on its *plantar* surface, and it articulated with the *scaphoid*, *meso-cuneiform*, *cuboid*, and 2nd and 3rd *metatarsals*. The *meso-cuneiform* was only seen on the *dorsum* of the foot, and the *ento-cuneiform* passed so far in front of it that the 2nd *metatarsal* had to be prolonged both backwards and inwards in order to reach it; it articulated with the other *cuneiforms*, the *scaphoid*, and the 2nd *metatarsal*. The *ento-cuneiform* articulated with the *meso-cuneiform*, *scaphoid*, and 1st and 2nd *metatarsals*.

The vertebral column of *Leptonychotes* measured, with the discs dried and in position, 1540 mm. or 5 feet, and as the skull was 237 mm. long, the length from the *premaxillary* bone to the tip of the tail was 1777 mm. or 5 feet 9 inches. As the ossification of the skeleton was so imperfect it is obvious that this seal in its adult condition must grow to be a much longer animal than was the specimen above described.

The length-breadth indices of the skulls measured in Table III., calculated on the relation of the *condylo-premaxillary* length to the *interzygomatic* width, were for Weddell's Seal 59.9, and for the crania of *Stenorhynchus leptonyx* 49.8 and 54.8 respectively, but calculated on the width behind the external meatus this index was 66 for Weddell's Seal and 51 and 53.5 for *Stenorhynchus leptonyx*. These figures show at a glance how much wider in relation to the length the skull of Weddell's Seal is than the other two crania.