AMPHIBIA.

the same office as the tail of the cetacea, and propel the animal forwards: but when employed separately, they are more qualified to act as oars. The walrus has feet still more developed, and distinctly divided into toes, which are disposed so as to strike backwards against the water.

§ 4. Mammiferous Quadrupeds in general.

FROM the imperfectly developed aquatic and amphibious tribes, we gradually ascend to the more finished structures of mammiferous quadrupeds, which are expressly fitted for progression on land. In these the powers of development, not being expended in the mere effort of giving expansion to the several textures, and of swelling the bulk of the frame, sometimes to inordinate dimensions, are employed rather in reducing the elements of the organization into compact forms, and in concentrating their energies, so as ultimately to attain the extent of power and harmony of action, which are displayed in the higher orders of warm-blooded quadrupeds.

It is to these favoured tribes that we must look for examples of the most complete development of the skeleton, and the most advantageous disposition of mechanic force. We have seen that reptiles, from the comparative shortness of their limbs, and the torpidity of their muscular powers, are but ill adapted for rapid progression. All the more perfectly formed quadrupeds of the class mammalia, having the trunk of the body raised high upon the limbs, possess great range of motion, and can traverse with fewer steps a given space.

The office of the limbs, as far as they are concerned in progressive motion, is two-fold. They have, first, to sustain the weight of the body, which they must do by acting in opposition to the force of gravity; and they must, secondly, give the body an impulse forwards. Let us consider more particularly the relations which the structures bear to each of these two functions.