

tacles as oars, (Fig. 47;) and some star-fishes (Comatula, Euryale) use their arms with great adroitness, (Fig. 151.) Finally, there are some insects which have their limbs constructed for running on the surface of water, as the water-spiders, (Ranatra, Hydrometra.)

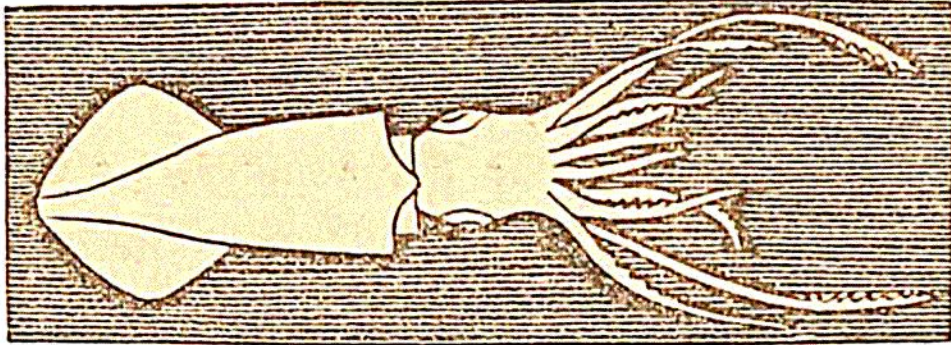


Fig. 47.

198. A large number of animals have the faculty of moving both in the air and on land, as is the case with most birds, and a great proportion of insects. Others move with equal facility, and by the same members, on land and in water, as some of the aquatic birds and most of the reptiles, which latter have even received the name Amphibia, on this account. There are some which both walk, fly, and swim, as the ducks and water-hens; but they do not excel in either mode of progression.

199. However different the movements and offices performed by the limbs may appear to us, according to the element in which they act, we see that they are none the less the effect of the same mechanism. The contraction of the same set of muscles causes the leg of the stag to bend for leaping, the wing of the bird to flap in the air, the arm of the mole to excavate the earth, and the fin of the whale to strike the water.