

inner toes, but the whole foot aids in removing it. In walking on dry land, the legs move as nearly horizontally in propelling the body forward as is consistent with the resistance offered by the ground. The animal readily resorts to the shield for protection. The neck and head are withdrawn entirely within the shield, the skin rolling off from the greater part of the neck, and allowing it to protrude naked among the viscera. The legs are withdrawn horizontally, and the skin slips off so far that it does not surround them, except below the knees and elbows. When thus withdrawn, the humerus is carried round into or before the wide spread scapular arch, the elbow being placed very near the head or neck; the fore leg and foot are turned back upon the humerus, the flat surface of the foot being nearly horizontal, so that its outer edge rests against the humerus. The knee is carried almost directly forward, the fore leg turned backward against the femur, and the foot again turned somewhat forward, its flat surface being nearly horizontal. See Pl. 6.

It is easy to perceive the close relations which exist, in this family, between the mode of locomotion, the movements and position of the limbs, and the general form of the body. The limbs, for example, move and are withdrawn horizontally; so also is the body widely stretched out horizontally, and moreover it is flat and low. The flat front end offers little resistance to the water before it; its sharp outer edge offers as little resistance also to the water which is driven back by the fore feet. Again, this low end is well adapted to entering the mud, and the fore feet to loosen and remove as much of it as is necessary to enable them to bury themselves in the soft ground. The flattening of the carapace backward is necessary to allow free horizontal movement to the hind legs.

The habits of the Trionychidæ are little known. In confinement, they exhibit great quickness in their motions, which are abrupt and unsteady, except when they swim rapidly in one direction. They then dart their long, slender neck quickly forward or sideways and upwards, as the Snakes do, and bite in the same way, striking suddenly the objects they aim at. Different attitudes of the North American species are represented in Pl. 6. They feed upon shells, especially upon Anodontas and Paludinas, fragments of which I have frequently found among their fæces and in their intestine. They probably grope for them in the mud with their proboscis. They lay from twelve to twenty and more eggs, of a spherical form, and about the size of a musket ball, which they deposit on shore in the sand near the water's edge. The shell of these eggs is thick but very brittle. The eggs of the Trionychidæ and those of the Cinosternoidæ are the only Turtles' eggs I know, the shell of which is not more or less flexible.