

On the legs some of these tubercles are enlarged, and their scales form sharp projecting ridges; along the top of the tail there is a row of very strong and large tubercles of this kind, and there are many other large ones about the tail generally, forming on some parts of it a continuous covering.

The animal lives mostly in the water, but makes considerable passages overland. It does not, like the Trionychidæ, remain burrowed in the soft muddy bottom, but rather lies in wait for prey under shelving banks, or among the reeds and rushes. It moves over the bottom with long strides, touching it with the feet, and also striking the water with the broad surface of the feet and of the legs. Both in the water and on dry land, the limbs move in a much more nearly perpendicular plane than in the Trionychidæ, and the body is raised high from the ground; on dry land, a considerable part of the weight of the body thus raised is borne by the long, strong tail, which reaches down to the ground. When the animal is at rest, the elbow is brought up and back, and a little inward; the forearm is turned down, and the flat of the foot rests on the ground; the knee is carried forward but little upward, the leg below the knee is turned back upon the femur, and the foot again turned forward, resting on the ground; the neck is withdrawn so as to carry the back part of the head under the carapace; the tail is bent to one side. See Pl. 4 and 5. In this position, the head, the limbs, and the tail are ready for action, the hind pairs of limbs well protected by their position under the body, and all withdrawn nearly as far as they can be. When danger approaches, the animal does not try to withdraw its head and limbs further into the shield, but resorts to a more active defence. It faces the attack, raises itself upon the legs and tail, highest behind, opens widely the mouth, and, throwing out the head quickly as far as the long neck will allow, snaps the jaws forcibly upon the assailant, at the same time throwing the body forward so powerfully as often to come down to the ground when it has missed its object. As far as regards the will of the animal, this is almost the exclusive mode of defence, for it is slow to retreat, and cannot withdraw entirely into the shield. It catches its prey in a similar way, by throwing the head forward.

Many of the most important distinguishing characters of this family may clearly be traced to its peculiar habits. For example, the height and exposed condition of the front end, the descent of the shield behind, the position of the limbs and consequent form and small size of the plastron, the breadth of the hind part of the head, the strength of the neck and of the longissimus dorsi, the consequent flattening of the upper surface over the latter, and the size of the tail; indeed, nearly all the prominent characters given above are plainly connected with the most marked peculiarity in the mode of life of the family, namely, the defence by action with the jaws, instead of a quiet retreat into the shield.