processus transversus, or as a first rudimentary rib,) and from the dorsal shield in its neighborhood, going to the scapula and drawing it backwards. This muscle is the M. subclavius or retractor scapulæ of Bojanus. A third muscle is extended between the tongue-bone and the coracoid, the M. coracohyoideus. Besides this muscle, which originates from the lower side of the bony framework of the tongue-bone, we find for the tongue two other pairs of muscles, the musculi hyothyreoidei and the musculi cricoarytænoidei.

The muscular apparatus of the extremities is remarkable for its similarity to that of Mammalia.[1] In place of the M. pectoralis major, we find two muscles, one originating from the middle part of the sternum and attached to the tuberosity of the humerus, whence it spreads downwards over the arm and the forearm, and another, much weaker, arising from the anterior part of the sternum and attached to the same internal tuberosity. The deltoid muscle originates from the end of the acromion and goes to the same tubercle. The muscles arising from the scapula, the M. subscapularis and the M. teres, are both attached to or near the tuberculum externum. A muscle corresponding to the M. latissimus dorsi, arising from the exterior lateral part of the dorsal shield, is attached to a little cavity inside of the tuberculum externum. The M. coracobrachialis, arising from the coracoid and attached to the tuberculum externum of the humerus, is simple in the family of Emydoidæ, and double, as in Mammalia, in the Trionychidæ. The muscles of the forearm, and those of the hand and fingers, are essentially identical with those of the Saurians; the degree of development of the muscular apparatus of the hand and fingers varies much, however, in different families. They are much less developed in the sea and land Turtles than in the webfooted Emydoidæ, Cinosternoidæ, Chelydroidæ, and Trionychidæ. The characteristic muscles of the hind extremities are the following: two musculi glutæi, (a major and a minor,) originating from the os ilii and from the seventh rib. Forming at first one muscle, they are soon divided into two branches, one of which is attached to the trochanter, the other to the femur itself. The M. biceps, originating from the os ilii, is inserted upon the fibula. The M. psoas, originating from the last vertebra of the back, before the sacrum, is attached to the upper part of the femur. The Musculi adductores femoris originate, one from the symphysis ischiadica, another from the os pubis, and a third from the membrana obturatoria and from the anterior margin of the os ischii.

[1] Its development, however, is very different in different families. The fore legs and the hind legs have an equally strong muscular apparatus in land Turtles, where the whole body stands in equilibrium; while in sea Turtles, in which the fore legs are the chief locomotive organs while the hind legs serve almost only as rudders, the fore legs have a much larger muscular development.