



FIGURE 2.—Generalized neural formula of a pond turtle (A) and land tortoises (B-D). A. *Chrysemys concinna*. B. *Geochealone folsomiana*. C. *Geochealone tectoris*. D. *Kinixys erosa*.

the adjacent elements. In those pleurals that are narrower proximally, they are expanded distally. Thus the pleural bones appear to be dovetailed with one another (Fig. 3), producing a very rigid dome. The mechanical advantages of this system have been discussed by Bienz (1895). These modifications are generally more conspicuous in later fossil species within each group. That this differentiation has been evolved independently in several tortoise genera is suggested by the fact that the modification takes place early in the fossil record of some genera and later in others.

4) In most turtles the position of the rib shows distinctly on the internal surface of each pleural bone, and the rib heads are broad and thick. The rib heads join their respective centra at the anterior ends of the latter, and the anterior ribs come into contact with the next anterior centrum as well. In extant tortoises the ribs are only faintly indicated on the pleurals, and the rib heads are usually greatly reduced. Early fossil types tend to have large ribs. Thus there is a gradual reduction in rib head size with time.

The distal ends of the ribs of tortoises are also reduced when compared with the emydid condition. In most turtles the distal rib ends project beyond the ends of the pleural bones, and the projected ends are usually received in pits in the dorsal edge of the peripherals. In most extant testudinids the rib ends have all but disappeared, and in adults a