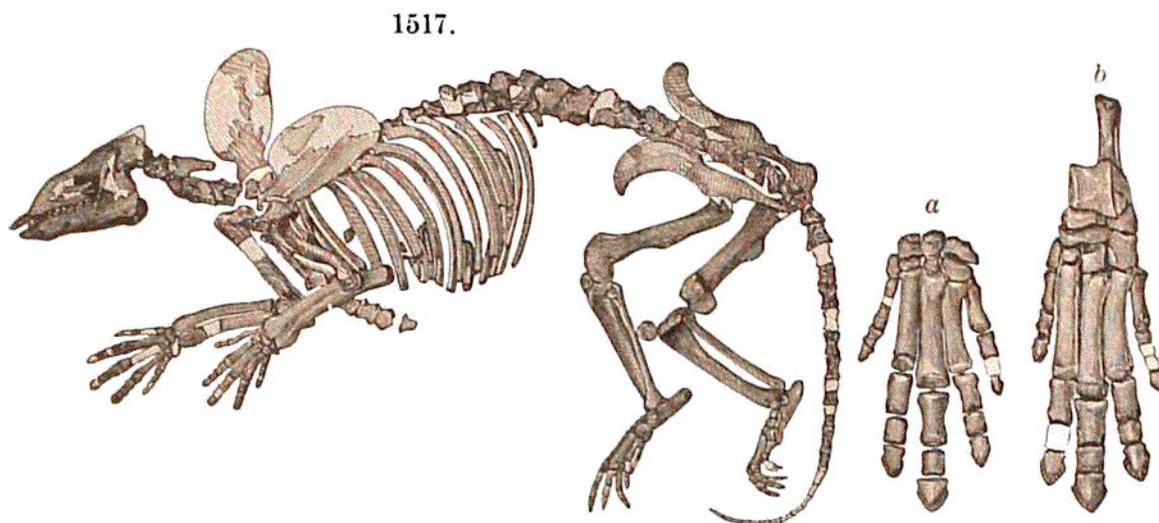


Moreover, the types are generally comprehensive or intermediate kinds. The flesh-eaters are intermediate in their teeth and other characters between Carnivores and Insectivores, and have been referred by Cope to a separate group named *Creodonts*, from the Greek for *flesh* and *tooth*. Another group has some of the features of the Tillodonts, Rodents, and Ungulates; and the Ungulates also have some of the characteristics of Carnivores or Quadrumana.

The prototypic features are presented by species of the genera *Phenacodus*, *Coryphodon*, and many others. They are well illustrated, as pointed out by Cope, in the *Phenacodus primævus*, described by him from a specimen found in the Wasatch beds (Fig. 1517). Besides the primitive features of 44 teeth, of five similar toes to both fore and hind feet, of the carpal in series with the digits (Figs. 1517 *a*, *b*), the feet were probably plantigrade, the foot striking the ground with the whole sole, instead of being



MAMMAL. — *Phenacodus primævus* ( $\times \frac{1}{16}$ ). Cope.

raised on the toes (digitigrade). The animal is supposed to have been omnivorous, from its teeth. The length of the body was about four feet. The *Creodonts* (prototypic Carnivores) of the Puerco beds also are described by Cope as plantigrade species.

These characters are also well exhibited, as shown by Marsh, in species of *Coryphodon* from the Wasatch group. A restoration of *Coryphodon hamatus* of Marsh is represented in Fig. 1518, and the fore feet and hind feet in Figs. 1518 *a*, *b*. The length of the body was six feet. The special prototypic features of the feet and limbs are manifest, after the above statements, without special remarks. The animal was digitigrade, and had short, nearly equal toes, a type of foot which is represented also in the modern Elephant.

An early genus in the line of the Tapir is *Systemodon* of Cope, represented by *S. tapirinus* from the Wasatch. Besides other primitive features, it has the teeth in a continuous series, there being no interval (diastema) between the canines and the premolars.