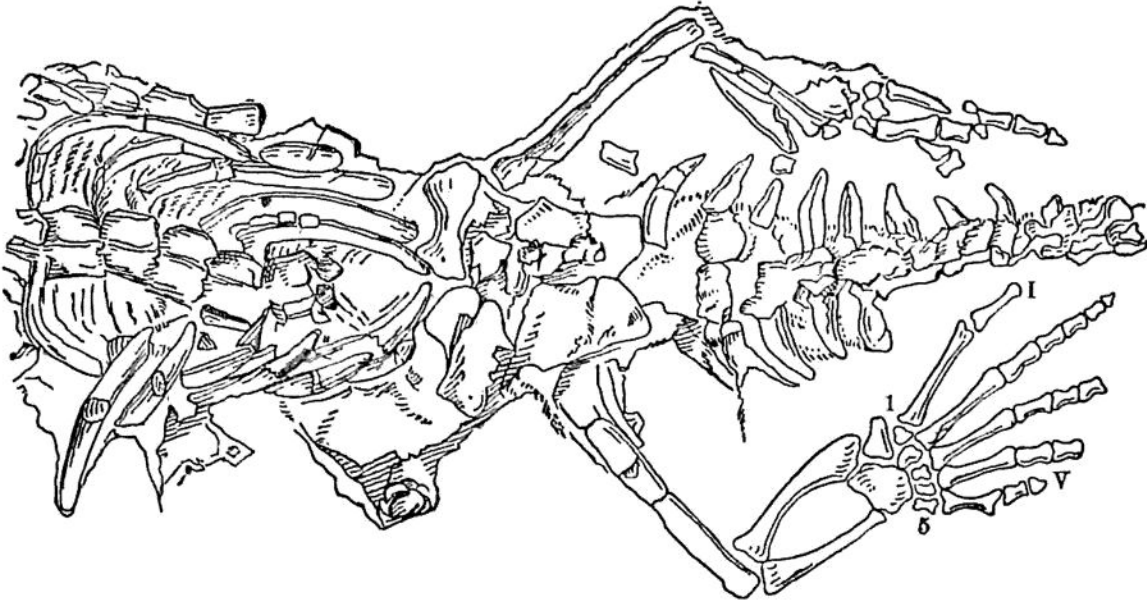


*Dimetrodon* of Cope, which has several Texas species, remarkable for the great length of the neural spines of the lumbar vertebrae which supported the broad dorsal fin characteristic of the genus; and other related genera, for which Cope instituted the family of *Theromora* — made by some a part of

1125.



*Mesosaurus tumidus* (natural size); 1-5, tarsals; I-V, metatarsals. Cope.

the group *Anomodontia*. Other related species, from New Mexico, are the *Ophiacodon grandis* Marsh, about 10 feet long; also species of *Sphenacodon* and *Nothodon* of Marsh. These early Rhynchocephalians and Anomodonts combine Amphibian and Mammalian characteristics along with the Reptilian.

### *Characteristic Species.*

#### 1. CARBONIFEROUS PERIOD.

**PLANTS.** — 1. **Seaweeds** are rare in the Coal-measures. A *Spirophyton*, like *S. caudagalli* (page 582), has been reported by Lesquereux as occurring in sandstone, probably of this era, or of the Subcarboniferous, in Crawford County, Ark. Species of the genus *Caulerpites* have been observed in Pennsylvania, Illinois, Indiana, Missouri, in both the Lower and Upper Coal-measures. *Chondrites Colletti* Lsqx. was obtained near Lodi, Ind., overlying a thin coal-bed at the base of the Coal-measures. Lesquereux remarks that, although the iron-stone concretions have preserved the most delicate parts of Ferns and Insects, no trace of a *Fungus* or *Lichen* has been found in them. He observed elsewhere, however, evidences of parasitic Fungi. A large Fungus, having some resemblance to an *Agaricus*, has been reported, with illustrations, by H. Herzer, from the Lower Kittanning coal-bed of Tuscarawas County, Ohio, and named *Dactyloporus archæus*.

2. **Lepidodendrids.** — Fig. 1033, part of the surface of the *Lepidodendron aculeatum* Sternb., a common species both in the United States and in Europe; 1034, *L. clypeatum* Lx.; 1036, *L. Veltheimianum* St., which is also Subcarboniferous and European; 1035, *Halonion pulchella* Lx., Arkansas. Other common species, and of wide range, are *Lepidodendron Sternbergii* (also Subcarboniferous), *L. dichotomum* Brgt., *L. modulatum* Lx.

3. **Sigillarids.** — Fig. 1037, *Sigillaria Sillimani* Brgt., Pa., Ind.; 1038, *S. Pittstonana* Lx., Pittston, Pa., Ky.