Hylerpeton intermedium, s. n.

This species is known as yet only by the mandibles and portions of the skull, which are rather shorter than those of adult individuals of *H. longidentatum*, a few scattered bones and portions of the scaly skin and ventral armature. The extremity of the mandible and the cranial bones have the same slightly waved surface as in the other species. Mandibles 3 cm. long, and the teeth, which are about fifteen in each ramus of the lower jaw, are simple, with large pulp cavities: those of the maxillary bone slightly enlarging upwards, and intermediate in form between the long slender teeth of *H. longidentatum* and the thick obtuse teeth of *H. Dawsoni*. The ventral surface was armed with thoracic plates and long oat-shaped scales closely placed in chevron. The upper parts were covered with a shining skin, in places ornamented with scales or rows of vandyked processes, as in the other species of the genus. The limbs seem to have been well developed.

Genus Platystegos, Dawson.

Head broad and short; orbits very large; cranial bones deeply sculptured; teeth strongly plicated and curved, with sharp edges at apices, especially the inner palatal teeth, which are very large; many minute teeth on the vomerine bones; vertebræ ossified, biconcave; limb bones imperfectly ossified, short; lower surface protected with a thoracic plate and thick, densely imbricated oval or quadrate bony scales in transverse, chevron-wise rows; body above with thin, rounded scales, concentrically marked.

Platystegos loricatum, s. n

Characters as above. Head about 8 cm. long; when flattened, 9 cm. broad across parietal foramen; squamosal or supratemporal bones projecting backward much behind the condyles; parietal foramen small; orbits large; length of longest tooth seen 7 mm.; cranial bones closely and deeply pitted; humerus with very thin bony walls, cartilaginous within, 3·5 cm. long.

This animal seems, in its teeth and the form and sculpture of the skull, to have been intermediate between Dendrerpeton and Baphetes. The bones of the best specimen are unfortunately dispersed in a very hard matrix.

These new discoveries have not added much to our list of species; and they show that no material change of land fauna occurred during the deposition of 400 ft. of beds. I hope in the course of this year to work out, photograph, and prepare for publication the principal portions of the new species, and also some new points relating to