when they remain together, are so much crushed as to render the shape of the skull not easily discernible. They are smooth on the outer surface to the naked eye; and under a lens show only delicate, uneven striæ and minute dots. They are more dense and hard than those of Dendrerpeton, and the bone cells are more elongated in form. The bones of the snout would seem to have been somewhat elongated and narrow. A specimen in my possession shows the parietal and occipital bones, or the greater part of them, united and retaining their form. We learn from them that the brain case was rounded, and that there was a parietal foramen. There would seem also to have been two occipital condyles, as in modern Batrachians. Several well-preserved specimens of the maxillary and mandibular bones have been obtained. They are smooth, or nearly so, like those of the skull, and are furnished with numerous sharp, conical teeth, anchylosed to the jaw, in a partial groove formed by the outer ridge of the bone. In the anterior part of the lower jaw there is a group of teeth larger than the others. The total number of teeth in each ramus of the lower jaw was about forty, and the number in each maxillary bone about thirty. The teeth are perfectly simple, hollow within, and with very fine radiating tubes of ivory. The vertebræ have the bodies cyclindrical or hour-glass shaped, covered with a thin, hard, bony plate, and having within a cavity of the form of two cones, attached by the apices. This cavity was completely surrounded by bone, as it is filled with stained calcspar in the same manner as the cavities of the limb bones. probably occupied by cartilage. The vertebræ were apparently bi-concave, and are furnished with upper and lateral processes similar to those of small lacertian animals. The ribs are long, curved, and at the proximal end have a shoulder and neck. They are hollow, with thin hard bony walls. The anterior limb, judging from the fragments procured, seems to have been slender, with long toes, four or possibly five in number. The