

ern Barramunda or *Ceratodus* of Australia, and with teeth suited for grinding vegetable food. It is also possible that some of the smaller plate-covered fishes (Placogonoids, like *Pterichthys*) might have fed on vegetable matter, and, in any case, if they fed on lower animals, the latter must have subsisted on plants. I mention these facts to show that the superabundant vegetation of this age, whether aquatic or terrestrial, was not wholly useless to animals. It is quite likely, also, that we have yet much to learn of the animal life of the Erian swamps and woods.

NOTES TO CHAPTER III.

I.—CLASSIFICATION OF SPORANGITES.

It is, of course, very unsatisfactory to give names to mere fragments of plants, yet it seems very desirable to have some means of arranging them. With respect to the organisms described above, which were originally called by me *Sporangites*, under the supposition that they were Sporangia rather than spores, this name has so far been vindicated by the discovery of the spore-cases belonging to them, so that I think it may still be retained as a provisional name; but I would designate the whole as *Protosalvinia*, meaning thereby plants with rhizocarpean affinities, though possibly when better understood belonging to different genera. We may under these names speak of their detached discs as macrospores and of their cellular envelopes as sporocarps. The following may be recognized as distinct forms:

1. *Protosalvinia Huronensis*, Dawson, *Syn.*, *Sporangites Huronensis*, "Report on Erian Flora of Canada," 1871.—Macrospores, in the form of discs or globes, smooth and thick-walled, the walls penetrated by minute radiating pores. Diameter about one one-hundredth of an inch, or a little more. When *in situ* several macrospores are contained in a thin cellular sporocarp, probably globular in form. From the Upper Erian, and perhaps Lower Carboniferous shales of Kettle Point, Lake Huron, of various places in the State of Ohio, and in the shale boulders of the boulder clay of Chicago and vicinity. First collected at Kettle Point by Sir W. E. Logan, and