

referred to Protozoa or to Hydrozoa, or, as seems more likely, are divided between the two, they resemble Eozoön in general structure and mode of accumulation of calcareous matter, and occupied a similar place in nature. My own conclusion, in discussing the microscopic structures of the specimens of Eozoön, was that they were probably those of Protozoa allied to those Foraminifera with thick supplemental skeleton<sup>1</sup> which had been described by Dr. Carpenter. At the same time, I suspected that those Stromatoporoids, like Cœnostroma, which possesses thick laminae penetrated by ramifying tubes, might be allied to the Laurentian fossil. Dr. Carpenter regarded the structures as combining in some respects those of Rotaline and Nummuline Foraminifera, and ably, and as I think conclusively, defended this view when attacked.<sup>2</sup> The Rotaline type of Foraminifera has since that time been traced by Cayeux and Matthew far down into the pre-Cambrian rocks. The Nummuline type is not known so early. As to the canal-bearing Stromatoporoids, none of them show the fine tubulation, though some have radiating and branching canals. Recent students of the Stromatopora seem disposed to refer them to Hydrozoa,<sup>3</sup> a conclusion probable in the case of some of the forms (especially those spinous ones incrusting shells), but doubtful in the case of others, and more particularly the oldest of all, belonging to the genus Cryptozoön of Hall, and Archæozoön of Matthew,<sup>4</sup> the structure of which seems, so far as known, to consist of very thin primary laminae with a supplemental tubulated skeleton resembling that of the genus *Loftusia*, and which must, I think, be regarded as foraminiferal. In any case, whether these primitive forms are Protozoa or rudimentary Hydroids, they reach back in time nearly as far as

<sup>1</sup> Calcarina, etc

<sup>2</sup> Ann. and Mag. Nat. Hist., *loc. cit.*

<sup>3</sup> Nicholson, Monographs Paleontographical Society.

<sup>4</sup> Bulletin Nat. Hist. Survey of New Brunswick, 1894-95.