

never goes above it, so that the crustaceans of the second group taken together, represent the second fauna.

"The cephalopods are here represented by the two genera, *Orthoceras* and *Cyrtoceras*, furnishing together nine species, and we may remark that the species of the latter genus, four in number, are relatively numerous for such a horizon. Now the cephalopods, which are not rare in the second fauna, have never been observed in the primordial fauna. In the table which we published in 1859 (*Bull. of the Geol. Society of June, XVI, 543*), we have it is true indicated, with a doubt, the presence of an *Orthoceras* in the primordial fauna of Scandinavia. We however take advantage of the present occasion to correct this indication, which as we have mentioned in our *Parallels* p. 43, was furnished by Mr. Angelin. This savant, who is now with us, informs us that he has lately established in the most positive manner, that the orthoceratite in question really occurs in his region *B C*—*Ceratopygarum*, that is to say in the alum slates with limestone beds, which contain the first portions of the second fauna in Sweden. In accordance with this fact, it would appear that the cephalopods indicated by Mr. Billings in his 2nd group must be referred to the second fauna.

"The gasteropods furnish to the second group six genera, which are commonly found in the second fauna of various countries, but as these types are reproduced in the third fauna, their presence here has no bearing upon the question before us.

"The acephala are only represented by the new genus *Cyrtodonta* lately established by Mr. Billings, according to whom the eleven species of this genus already described, belong to the Black River and Trenton limestones, i. e., to the second fauna of Canada, although allied forms may also occur in the third fauna. (*Canadian Naturalist*, December 1858, p. 331.)

"The class of brachiopods, which is relatively but little developed, offers four genera, *Lingula*, *Orthis*, *Strophomena* and *Camarella*, which last genus was founded by Mr. Billings in 1859, to include several species of the second fauna of Canada, (*Canadian Naturalist*, August, 1859, p. 301). Nothing however indicates that similar forms may not also occur in the third fauna, as is the case with the three other genera mentioned. Thus the fossils of this class, generically considered, establish nothing as to the geological horizon of the second group, although it is very