

sive in their character to throw any positive light upon the age of the rocks which hold them. The other markings before mentioned, such as worm-burrows, shrinkage-cracks, and rain-drop impressions, although they furnished conclusive evidence as to the physical conditions under which the beds were formed, did not serve to remove the obscurity which enveloped the discussion of their age.

“Subsequently, during an examination of the valley of the Coldbrook by Mr. Matthew and his brother, organic remains were observed of a more decided character. These latter consisted, besides some obscure relics of a small orthoceratite, and numerous trilobites of two or three species, but these were so excessively distorted that no satisfactory conclusions could be based upon their study. Until the present summer, therefore, the age of this great series, although vaguely surmised, remained a subject of discussion and doubt. The discovery of finely-preserved Trilobites and Brachiopods at Ratcliffe’s stream, and in the valley of the Coldbrook, has now removed this doubt, and left no uncertainty as to the age and origin of the group which holds them. We regard this discovery as among the most interesting and valuable results of our summer’s labour.

“That the discussion of this question might have the careful and attentive study which its importance demanded, the fossils above referred to were placed in the hands of Mr. Hartt, who, as will be seen below, has enjoyed peculiar facilities for their determination and comparison. It had been hoped that the entire results of that gentleman’s labours might have been embodied in the present Report, but the want of sufficient leisure for their complete analysis, has prevented this from being accomplished. The following notice is, however, introduced as preliminary to a more detailed description to be given hereafter :

*Preliminary Notice of a Fauna of the Primordial Period in the vicinity of St. John, N. B.*

By C. FRED. HARTT, A.M.

“My examination of the fossils collected last August, from the Saint John group, at Ratcliffe’s millstream, by Prof. Bailey, Mr. Geo. Matthew, and myself, and of a collection made from the same group at Coldbrook, in 1863, by Messrs Geo. and C. R. Matthew, is not yet sufficiently complete to enable me to give an extended description of them here. I shall therefore limit myself, at present, to a notice of the genera, and of the aid they afford in the determination of the geological position of the Saint John group,