

leaving the descriptions and figures of the species to be given in a paper which will appear in the Appendix to this Report.

“The fossils as yet known to occur in the rocks of the Saint John group, are principally Trilobites, which are represented by quite a large number of species, and Brachiopoda, which last are of more rare occurrence. All these fossils are preserved as casts or impressions, the tests of the crustacea and the shells of the Brachiopoda being usually transformed into oxide of iron.

“All the specimens have suffered more or less from distortion through pressure and the metamorphosis to which the rocks enclosing them have been subjected. The Trilobites occur also as detached fragments, so that their accurate determination is not easy, and more material is required in order satisfactorily to figure and describe all the species.

“Representatives of four genera of Trilobites have been obtained thus far from the Saint John rocks, viz:—*Paradoxides*, *Conocephalites*, *Agnostus*, and a new genus (?) allied to *Conocephalites*.

“The number of species in each genus has not yet been satisfactorily made out; but of *Paradoxides* there are at least five, of *Conocephalites* seven, and of *Agnostus* and the new genus each one.

“All the species appear to be new. One of the *Paradoxides* bears a close resemblance to *P. rugulosus*, Corda, from the Etage C of Barrande, in Bohemia, and one of the *Conocephalites* is allied to *C. coronatus*, Barrande, from the same fauna and horizon, though neither is identical with the European species.

“There are six species of Brachiopoda, belonging to the genera *Orthisina*, *Discina*, *Obolella*, and *Lingula*. I have not been able to identify any of the forms with described species.

“Though all the species from the Saint John group are apparently new, yet the occurrence of *Paradoxides* and *Conocephalites*, genera confined entirely to the so-called Primordial fauna of Barrande, and everywhere characteristic of it, together with the strong likeness borne by the Saint John species, in their facies, to those of the same genera of the faunæ of the Primordial in Europe and America, enable us unhesitatingly to assign to the Saint John group, or at least to that lower part of it which has afforded Trilobites, a geological position equivalent to Barrande's Etage C, or to the Potsdam proper of America.

“As Agassiz has shown, Barrande uses the word fauna, in his term primordial fauna, in a sense equivalent to epoch or horizon, A fauna is strictly a collection of animals confined within a limited geographical area. The terms ‘primordial fauna,’ ‘second