

of Ordovician species was obtained. In addition to the material from these definite horizons some few fossils were collected from the drift at the mouth of the Nelson river and in the vicinity of York.

Under the caption "Hudson Bay Exploring Expedition, 1912" Mr. Tyrrell published the results of his investigations in the First Part of the Twenty-second Report of the Bureau of Mines of Ontario. The fossils collected on the expedition had been submitted to me for examination and a preliminary account of these remains is contained in Mr. Tyrrell's report. The present paper is an attempt to present in more extended form a description of all the recognizable material collected by Mr. Tyrrell.

Nearly all the Silurian fossils and many of the Ordovician species are represented by casts only: this has made the identification of the forms difficult, and in many cases, doubtful. In fact, had the material been obtained from an accessible region, much of it would have been thrown away as indeterminable; but the remoteness of the area and the desire to furnish a full account of the *collection* has induced me to carry my determinations beyond the point justified under normal conditions. Mistakes have doubtless occurred, and science has possibly been burdened with more synonyms, but I have refrained from new specific names in many cases where I have little doubt a new species is represented, and have preferred to leave the form indeterminate until better specimens have been found. A complete disregard of this doubtful material would not have done justice to Mr. Tyrrell's work. It is to be understood, therefore, that this paper is an account of the *collection* and not a treatise on the *fauna* of the region.

The collection contains 132 distinct forms to which possibly a dozen more might be added: of these, 48 are ascribed to known species, and 31 are new to science. The remaining 53 species are described, and in some cases figured, but their preservation does not justify specific names, although many of them are probably new. An analysis of the collection is given on the following page.

The most notable feature of this list is the great preponderance of Gastropods and Cephalopods, and in this connection it may be noted that some unusually large forms occur. *Phragmoceras whitneyi* and *Euomphalopterus tyrrelli*, herein described, are of exceptional size for the genera to which they belong.

The general aspect of the fauna of the Severn and Fawn river Silurian indicates an horizon comparable with the Guelph of Ontario, and the Ordovician species of the Shamattawa river suggest the fauna of the Trenton. While presenting features characteristic of the Manitoba Trenton, the Ontario Trenton and the Trenton of Baffin Land, our