

operations ; for some of these it would require purification, especially from iron ; it has been employed in Newport in some simple process of domestic dyeing. The slate in which it occurs would yield it largely if properly treated, and there is an immense quantity of the rock ; common alum, however, is sold at a very low price. The presence of nickel and cobalt in the mineral is interesting—the former has never, so far as I know, been found before in the Province. Since Hunt has met with* small quantities of nickel in various minerals of the Silurian rocks of Canada, these metals may be generally distributed in such rocks here in like amount ; there may also be richer ores of both nickel and cobalt in the range of rocks affording the magnesia alum containing these metals.

ART. IX.—*Notice of the occurrence of a Trilobite in the Lower Carboniferous Limestone of Hants Co.* By PROF. HOW, D.C.L., King's College, Windsor.

THE object of the present notice is to acquaint the members of the Institute with the fact of the existence of an undoubted Trilobite in the Lower Carboniferous Limestone of the Province. This rock has been, it is well known, a great deal examined in various parts of the country, and numerous fossils have been obtained from it. It is interesting to have the addition of a well marked trilobite to its varied fauna, as affording precise means of comparison with corresponding deposits in other places. There is a “trilobite or limulus” mentioned in the list of fossils given in the appendix to Acadian geology, as occurring at De Bert River, Cumberland Co., but as there is no description of it in the body of the work, I could not compare it with the fossil now noticed. Several specimens of this were found by myself, last July, in a quantity of blue limestone rock, brought here for the purpose of building the new College Library. On enquiry I was told that the rock was brought from the mouth of the Kenetcook River, Hants Co. I sent specimens of the fossils to the Rev. Mr. Honeyman, during the Exhibition, and they proved a welcome addition to the illustrations of the Geology of the Province. Mr. Honeyman informed me that the trilobite belongs to the genus *Phillipsia*.† This is nearly if not quite the sole genus remaining to the carboniferous period

* Report on Geology of Canada, 1863, p. 507.

† It has since been described by Mr. Billings, Paleontologist to the Geological Survey of Canada, to whom I sent specimens, as a new species, under the name of *Phillipsia Howi*, in *Canadian Naturalist*, July, 1862.

of the large order of the trilobites. Various other fossils occur along with it which resemble closely, but are not I think entirely identical with, those found in the Lower Carboniferous Limestone of other localities in the Province, but their exact nature is not yet made out. Specimens of the trilobite are sent for the Cabinet of the Institute, together with some of the fossils found in the same rock, viz: Producta, Spirifer, Cyathophyl- lum, Encrinite, Fenestella, etc.

King's College, Windsor,
February 23rd, 1863.

ART. X. — *On the occurrence of Littorina Littorea on the coast of Nova Scotia.* By JOHN R. WILLIS, Halifax, N. S.

I HAVE been induced to present for the consideration of the Nova Scotia Institute of Natural Science, the following brief remarks on the occurrence of this fine Littoral shell on such portions of Nova Scotia coast as I have been enabled personally to examine.

Some time since (Dec. 1857), I sent a large number of specimens, animals and shells, to the celebrated Dr. A. A. Gould of Boston, author of Reports on Invertebrata of Massachusetts, &c., and to Professor Stimpson, of the Smithsonian Institution, Washington, D. C., author of several valuable works on the Invertebrata of United States; both gentlemen expressed themselves astonished at the occurrence of this shell on the coast of Nova Scotia, and agreed in asserting that it had not been met with on any part of the eastern coast of the United States. Some time afterwards Professor Stimpson visited England in order to prosecute his researches among the British Mollusca, in the course of which, he ascertained, by carefully comparing our Nova Scotia species with that on the British coasts, under the same name, that there was not the slightest specific difference between them. On his return to Washington, via Halifax, I had the pleasure of a lengthy interview with him, and he informed me that he had found it nearly impossible to convince several eminent British Conchologists, that *Littorina Littorea* was ever collected on the coasts of Nova Scotia at all. He had managed to convince himself, however, by ocular demonstration of my veracity, for, on landing from the Steamer at Messrs. Cunard's wharf, it was the first thing he sought for, and, on one of the logs of the wharf, he