

ful, and appears to the common observer as the most striking of the Nova Scotia silurian fossils in my collection.

I have also found here, but not in situ, a cast of a large *Orthoceras*. Its length is 8 inches—it tapers very little—the siphuncle is central—cross section is elliptical having a transverse diameter of $1\frac{1}{2}$ inches and a conjugate diameter of 1 inch. The fossils of this section are generally found like our elegant coral and *Orthoceras* in the cairns piled up by the farmers in the overlying fields. In the cairns of the northern part of the section the fossils appear chiefly to correspond with those of the upper group of Arisaig. Here we have the *Dalmania Loganii* the *Calymene Blumenbachii* the *Bellerophon trilobatus*, and a tuberculated crinoid, so that it is possible we have here an equivalent of the upper Arisaig groups as well as a lower group probably the equivalent of the Wenlock limestone of Murchison.

I hope yet to have opportunities of examining these sections more in detail, and of submitting full collections of their fossils to the proper authorities, in order that their true age and the character of their organisms may be determined.

I would refer also to a subsection, which although not so interesting to the collector may be of equal interest to the geologist, as it is possibly to be regarded as a descending continuation of the Arisaig section. It occurs at Doctor's Brook about $2\frac{1}{2}$ miles east of Arisaig Pier. This will make the whole Arisaig section extend about 5 or 6 miles S.E. and N.W.

The Silurian strata are here very much altered and distorted, arising, as Dr. Dawson has already observed, from volcanic action of the carboniferous era. Of this there are obvious remains existing at various points along the sea shore from the conglomerate on the east to the conglomerate on the west of the Arisaig Silurian strata, or from Malignant Brook till beyond McCara's Brook, a distance of at least ten miles. In Malignant Brook and a little brook to the eastward, we find subcrystalline trap in immediate contact with the lower carboniferous conglomerate, and the latter has consequently become very much hardened; to the west of this the section is obscure and depressed till we reach a small brook having elevated ground on its western side, and there is no appearance of rock of any kind until we meet the subcrystalline trap and altered Silurian strata of Doctor's Brook. From this point to Arisaig Pier we find the same kind of trap in contact with the Silurian strata, and converting these into a red jaspida-