One of the so-called "primordial" Trilobites of the genus *Sao*, a form not found as yet elsewhere in the world, has afforded M. Barrande a fine illustration of the metamorphosis of these creatures; for he has traced them through no less than twenty stages of their development. A few of these changes have been selected for representation in the accompanying figures, that the reader may learn the gradual manner in which different segments of the body and the eyes make their appearance. When we reflect on the altered and crystalline condition usually belonging to rocks of this age, and how devoid of life they are for the most part in North Wales, Ireland, and Shropshire, the information respecting such minute details of the Natural History of these crustaceans, as is supplied by the Bohemian strata, may well excite our astonishment, and may reasonably lead us to indulge a hope that geologists may one day gain an insight into the condition of the planet and its inhabitants at eras long antecedent to the Cambrian; for those parts of the globe which have been subjected to a scrutiny as rigorous as North Wales and Bohemia are insignificant spots, and we are every day discovering new areas, especially in the United States and Canada, where beds as old as the "primordial schists," or older, may be studied.

*Sweden and Norway.*—The Lingula Flags of North Wales, and the "primordial schists" of Bohemia, are represented in Sweden by strata, the fossils of which have been described by an able naturalist, M. Angelin, in his "Palæontologica Suecica (1852–4)." The "alum schists," as they are called in Sweden, resting on a fucoid-sandstone, contain trilobites belonging to the genera *Paradoxides*, *Olenus*, *Agnostus*, and others, some of which present rudimentary forms, like the genus last mentioned, without eyes, and with the body segments scarcely developed, and others again have the number of segments excessively multiplied, as in *Paradoxides*. These peculiarities agree with the characters of the crustaceans met with in the Upper Cambrian strata, before mentioned.

*United States and Canada.*—In the table, at p. 444, I have already pointed out the relative position of the Potsdam Sandstone, which has long been known as the lowest fossiliferous formation in the United States and Canada. I have seen it on the banks of the St. Lawrence in Canada, and on the borders of Lake Champlain, where, as at Keesville, it is a white quartzose fine-grained grit, almost passing into quartzite. It is divided into horizontal ripple-marked beds, very like those of the Lingula flags of Britain, and replete with a small round-shaped *Lingula* in such numbers as to divide the rock into parallel planes, in the same manner as do the scales of mica in some micaceous sandstones. This formation, as we learn from Mr. Logan, is 700 feet thick in Canada; the lower portion consisting of a conglomerate with quartz pebbles; the upper part of sandstone containing fucoids, and perforated by small vertical holes, which are very characteristic of the rock, and appear to have been made by annelids (*Scolithus linearis*).

On the banks of the St. Lawrence, near Beauharnois and elsewhere,