In regard to the evidence of the age of the great mass of these rocks, forming the so-called upper and lower Cache Creek groups, the following points may be stated. A portion at least of these rocks was, in 1871, shown, by fossils collected by Dr. Selwyn, to belong to a horizon between the base of the Devonian and summit of the Permian; additional fossils have since been procured, of which the most characteristic is the peculiarly Carboniferous foraminifer *Fusulina*, which has now been found in several localities scattered over a wide area. While it is therefore quite possible that distinctively Devonian, or even Silurian or Cambrian rocks may yet be identified in the interior plateau, there is as yet no proof that any of a date earlier than the Carboniferous occur, and the association of the other beds with the fossiliferous limestones is such as to show that a great part of them must be approximately of this age.

In the southern portion at least of the Interior Plateau region, there exist besides the Palæozoic rocks above described, and in addition to the probably in part Triassic argillites extensive, but as yet undefined areas of Triassic rocks of another character. These are largely of volcanic origin and have been designated the Nicola series. They have generally a characteristically green colour, but are occasionally purplish and consist chiefly of felspathic rocks and diorites, the latter often more or less decomposed. These rocks are in some cases quite evidently amygdaloidal or fragmental, and hold towards the base beds of grey sub-crystalline limestone intermingled in some places with volcanic material and containing occasional layers of water-round detritus. The distinctly unconformable junction of this series with the Câche Creek rocks is seen on the South Thompson, a few miles above Kamloops.

The older rocks of the Coast and Vancouver Island ranges may, in the present state of our knowledge, be treated of together, those of Vancouver Island being first described, as being the best known.

In 1872 the late Mr. J. Richardson described a section across the centre of Vancouver Island,* comprising a great thickness of beds which have been closely folded together and overturned. These consist of limestones, generally crystalline, but varying in texture and colour, interbedded with compact amygdaloidal and slaty volcanic rocks of contemporaneous origin. These are classed generally as "diorites" in the report cited, but admit of separation into several different species of igneous rocks, not here necessary to detail. Argillites also occur, but are apparently not prominent in the section. Fossils are found abundantly in some of the limestones, and though invariably

* Report of Progress, Geol. Survey of Canada, 1872-73, pp. 52-56.