

GEOLOGY OF NOVA SCOTIA.

I give the following outline of the geology of Nova Scotia, as serving to indicate in a rough manner the extent and ages of the strata, which at one point present to the farmer soils well adapted to recompense his labor, and at another hold the treasures which excite the cupidity of the miner.

I am indebted to Mr. Ami, of the Canadian Geological Survey, for information on this subject, but it may be remarked that on several points definite conclusions cannot yet be drawn.

The Laurentian system is well developed in Cape Breton, occupying the more elevated portions of the island. There are apparently two series—the lower series carrying an extensive calcareous development in addition to the granites, syenites, felsites, slates, etc., common to both. These measures carry gold, silver, lead, zinc, graphite and iron ores, and doubtless will yield the other minerals characterizing the system in Quebec and Ontario.

The Huronian system is not yet recorded as occurring in Nova Scotia.

The upper and lower divisions of the Cambrian are represented here. To the former the gold-bearing series, consisting of an upper slate formation and a lower quartzite formation, has been referred. The foldings of these strata have been broken through by masses of granite at a date slightly preceding the Carboniferous era.

Below McAdams' Brook, Escasonie River, near McPhec's Point, and along the Mira River in Cape Breton, are beds referred to the upper Cambrian. These strata frequently carry ores of iron.

It is interesting to note that the iron-ore deposits of Bell Island, in Newfoundland, are referred to the Ordovician system, and that large areas in the eastern counties are provisionally referred to this system on stratigraphical evidence. This determination, however, requires paleontological corroboration.

The upper division of Sir R. Murchison's Silurian is extensively developed in Nova Scotia. It is typically developed at Arisaig and extends into Pictou County. It also occurs from Nictaux to Wolfville, and at several points along the northern side of the Cobequid Mountains. This formation is noted at several points for large deposits of iron ore.

The Devonian is represented at Nictaux and Arisaig, at both points containing deposits of iron ore. Large areas in Cape Breton, Richmond and Guysboro counties are referred to this age, and contain iron and copper ores.