ROYAL SOCIETY OF CANADA

of diabases and diorites, with chloritic schists, mica schists, quartzites, and slates, which have proved to be highly productive of minerals of economic value to man; gold, silver, lead and copper being conspicuous.

General Note. In no other country on the face of the earth is there such a development of old crystalline rocks referable to the Laurentian and Huronian as is to be found in Canada. The rocks which constitute them are highly metalliferous, and the varieties or species of minerals of economic value, which must lie hidden in their formations, are so numerous that the latent resources of Canada can be affirmed to be a store of untold wealth. These will, no doubt, soon be more extensively developed and utilized as the country is opened up and our population increases from year to year.

The Algonkian of Van Hise and other North American geologists is a newly-coined term which embraces practically the same rock-formations as the Huronian. Prof. Van Hise's Map of the Algonkian compared with Sir Wm. Logan and Murray's Map of the Huronian system suffices to show that the two systems are synonymous—the earlier term Huronian having priority.

No definite organisms have as yet been recorded from the Laurentian or Huronian of Canada. The terms Laurentian and Huronian introduced into geological nomenclature by Sir Wm. Logan in the early days of the Canadian Geological Survey are now very generally adopted throughout the world.

THE CAMBRIAN SYSTEM.

The Cambrian system forms the base of the Palæozoic column, and is the term now generally adopted to include those sedimentary formations which hold entorubed in their strata the earliest truly recognizable forms of animal life in a fossillized condition.

The Acadian Region.—In Newfoundland, Nova Scotia and New Brunswick, the three divisions into which the Cambrian formations are naturally and generally divided, namely: Lower, Middle and Upper, are all well represented. In certain portions of Newfoundland, at Smith's Sound and Signal Hill, and St. John, N.B., also on the Kennebecasis river, series of fossiliferous sediments have been assigned by Dr. G. F. Matthew to the *Etcheminian* system and by him separated from the Cambrian proper. The *Etcheminian* appears to be a phase or formation in the series of fossiliferous Lower Cambrian sediments, and its position is evidently in the Lower or Eo-Cambrian.

The gold-bearing series of Nova Scotia, consisting of an upper slate formation and a lower quartzite formation, both destitute of fossils,

194