ROYAL SOCIETY OF CANADA

son River respectively), consist of cream-coloured limestones and dolomites, with red calcareous marks and shales abounding in fossil remains. In eastern Manitoba Mr. Dowling describes the following succession in descending order :—

V. Hudson River shales.

IV. Upper Mottled limestones.

III. Cat Head limestones.

II. Lower Mottled limestones.

I. Winnipeg sandstones.

There is no doubt that a belt of Ordovician rocks underlies the Silurian, Devonian and Cretaceous system along the eastern prairie plateau, both northward, westward and southward. Dr. J. F. Whiteaves has described a very interesting series of Galena-*Trenton* and Black River fossils from Lake Winnipeg and its vicinity.

The Cordilleran Region.—In British Columbia rocks of Ordovician age appear in the Rocky mountains proper, at Devil's Head lake, near Banff. Along the Kicking Horse river at Glen Ogle, graptolitic slates and limestones with shales carrying an Ordovician fauna have been described by Mr. McConnell. The graptolitic fauna recognized by Prof. C. Lapworth, of Birmingham, is here classed as constituting the Wapta formation, and belonging to the upper half of the Ordovician system.

In the Selkirk range, no outcrop of rocks definitely referable to this age have as yet been detected, but some of the black graphitic and bituminous slates and limestones may possibly belong to this system. In the Yale district, west of Lansdowne, at Adam's lake, Dr. Dawson and Mr. McEvoy have recorded, and refer, certain crystalline limestones to this horizon, and on the Dease river, in the Yukon territory, graptolitic slates similar to those of the *Wapta* formation at the Glen Ogle quarries on the Kicking Horse river have been described by Mr. McConnell, and the graptolites which those slates carry were studied by Prof. Chas. Lapworth, of Mason Science College, Birmingham, and reported upon to the Canadian Geological Survey.

THE SILURIAN SYSTEM.

The Acadian Region.—The Silurian system as understood in Canada, and restricted to the upper division of Sir Roderick Murchison's Silurian is extensively developed both in Nova Scotia and New Brunswick. At Arisaig, in Antigonish Co., Nova Scotia, several thousand feet of more or less disturbed and inclined strata, including an almost regular succession of different members of this system, made up of sandstones, slates, iron ores, and black graptolitic slates and limestones, with mud-

202