

W. H. Collins,¹ A. G. Burrows and H. C. Rickaby,² presented studies of the southwestern portion of the Sudbury Nickel basin, Sudbury District, Ontario. Collins points out that an opinion prevails that lead-zinc deposits inside the basin have originated from the nickel irruptive and that they have localized along fault planes that afforded channels for the ascending mineral solutions. The interior of the basin is largely surfaced with clay and sand and it is almost impossible to find faults on the ground. About the only clues to their existence and course are found in the rocky area underlain by the nickel irruptive. Several faults are indicated. Burrows and Rickaby state that the lead-zinc-copper deposits within the basin lie in a major fault cutting the basin. Deposits are found in the black slates and tuffs, in hard silicious volcanic fragmental rock that is near the contact with the micropegmatite and at several places in the micropegmatite. Descriptions of development are given of the Treadwell-Yukon, Sudbury Basin and other properties.

In the Cartier-Stralack area, Sudbury District, Ontario,³ F. F. Osborne found pre-Huronian gneiss and schists, granite, basic intrusives (probably Keweenawan) and Huronian sediments. Lead, zinc, copper, nickel, cobalt, magnetite, specularite and molybdenite mineralization with in some cases gold and silver values are found. The properties of promise are in the pre-Huronian gneisses and schists; the deposits in the granite are unimportant and those in the Huronian rocks are sparse.

The Desmeloizes area, Abitibi County,⁴ Quebec, was studied by J. B. Mawdsley. The area is underlain by Precambrian volcanics, sediments, quartz-diorite, granite and diabase dykes. Deposits of lead-zinc-copper associated with pyrite and pyrrhotite occur in carbonated and silicified, brecciated and sheared volcanics. Descriptions of the Abana mine and other properties are given.

Limestone.—A preliminary report upon the limestones of northern and western Ontario and of the Prairie Provinces² was made by M. F. Goudge. In Alberta great thicknesses of Cambrian to Carboniferous limestones are exposed along the eastern ranges of the Rocky Mountains. These limestones vary widely in quality and type not only in vertical sections but also laterally in the same beds. The attitude of the rocks in most cases does not lend itself to the cheapest method of mining.

Mica.—H. S. Spence outlined the status of the Canadian mica industry,² the world's supply and production, mode of occurrence, method of mining and preparation for the market, mines and occurrences of phlogopite, muscovite and other varieties in Canada, marketing, uses, manufacturers and patents relating to the industry.

Oil and Gas.—The oil possibilities of the northern Okanagan valley, British Columbia,¹ were briefly summarized by C. E. Cairnes. The underlying rocks, comprising the much altered Shuswap series associated with granite intrusions, present little encouragement for drilling for oil.

M. Y. Williams and W. S. Dyer made a report upon the stratigraphy and structural and economic geology of southern Alberta and southwestern Saskatchewan.¹ Descriptions of Bow Island, Medicine Hat and Foremost gas fields are given. The oil and gas possibilities are summarized. The coal, sodium sulphate, shale and clay for brickmaking, building stone, artesian water, volcanic ash and bentonite resources are briefly outlined.