

both dolomites and high calcium limestones. The greater part of the Silurian limestones are impure. The carboniferous limestones differ greatly in appearance and purity. Great areas of Silurian and lesser areas of Devonian and Carboniferous limestones are found in Gaspé. There are two types of Silurian limestones:—(1) a crystalline, or semi-crystalline, heavy-bedded, pinkish limestone; (2) a dark-coloured, fine-grained thin-bedded limestone. The pure limestone occurs in large areas separated by areas of impure limestone. Carboniferous rocks include no limestone of importance. The limestone in the Timiskaming district is of Ordovician and Silurian age. The Ordovician limestone disintegrates rapidly, making it generally unsuitable for building purposes. It may be utilized as a flux. The Silurian limestone varies from high calcium limestone to dolomite. Some of it may be used as a source of lime, and some as a building stone.

Molybdenite.—In University of Toronto Studies, William Gerrie describes molybdenite occurrences in La Corne and Malartic Tps., Quebec. Molybdenite deposits lie on the western margin of the La Corne intrusive body, which varies from a hornblende syenite to a biotite granite. The ore is free from sulphides other than molybdenite and carries 2 to 3 p.c. of the mineral. The veins give promise of producing a reliable tonnage.

Oil.—In an article entitled "Carbon Ratios as an Index of Oil and Gas in Western Canada", I. W. Jones⁷ critically examines the "carbon ratio theory" and concludes that the fixed carbon content of coals cannot be used to measure the regional dynamic metamorphism, nor can it serve as an index to possible oil and gas accumulation. "Oil and Gas in Western Canada", by G. S. Hume¹, affords an up-to-date concise *résumé* of the oil and gas situation in the Western Provinces. The different theories of origin, accumulation and favourable structures are briefly outlined; carbon ratios of coal as an index to the occurrence of oil and gas and geophysical methods for locating oil are discussed; the general physiography and stratigraphical geology of the great plains is stated; and a description of different oil fields is given under the headings:—geology, stratigraphy, structure, horizons, oil developments and prospects. An appendix contains a list of wells drilled in Manitoba, Saskatchewan, Alberta, British Columbia and the Northwest Territories. G. S. Hume⁴ outlines the search for oil in Western Canada. Oil in commercial quantities has been discovered in three localities in Alberta, namely, Turner Valley in the Foothills, Skiff area of southern Alberta, east of Lethbridge, and the Wainwright area. Royalite No. 4 in the Turner Valley affords a flow of gas and naphtha averaging 598 barrels of naphtha daily. This well is 3,740 feet deep and the flow emanates from Palæozoic limestone. In the Skiff area commercial oil is found in Jurassic strata at a depth of 3,090 feet. In the Wainwright area oil is found at a depth of 2,065 feet. The Palæozoic limestones appear to be a fertile horizon for oil. All wells reaching this horizon secure production. G. S. Hume¹ examined the Jumping Pond-Bragg Creek area, Alberta. A description of sedimentary rocks exposed with their structure is given and illustrated by sketch maps. Favourable structure exists, but the heavy dips of exposed beds indicate severe metamorphism. No drilling has yet been completed in the area.

Silver.—H. E. McKinstry⁷ describes the silver mineralization at Beaverdell, B.C. The geology of the area has been described by Reinecke. The veins or shear zones strike east and west and most of them dip southward; a few dip vertically or northward. They vary in width from a few inches to six or eight feet, though the individual ore-bearing streaks are rarely more than a foot or so in width.