

from Keeweenawan basic intrusives. In concluding Leith states that the general hypothesis of concentration of iron ores by downward moving waters from the surface still seems to be adequate to cover the main body of the facts yet known.

Lead-Zinc.—J. MacIntosh Bell summarizes the genesis of the lead-zinc deposits at Pine Point, Great Bear lake, Northwest Territories.⁷ The rocks in the vicinity are middle Devonian, comprising Slave Point shaly limestone, Presqu'ile dolomite and dolomitic limestone, and Pine Point limestone. The ore appears to occupy zones of intense jointing along anticlinal crests or domes in the Presqu'ile formation.

Ralph Tuck describes a lead-zinc deposit at Geneva Lake, in the northern part of Hess township, Sudbury district, Ontario.⁷ Keewatin volcanics, Algoman granite, Bruce and Cobalt sedimentary series, and Keeweenawan granite and basic intrusives occupy the area. The ore body consists of an irregular tabular vein within greywackes and quartzites that contain injections of granite and alaskite.

Limestone.—A preliminary report on the limestones of British Columbia² is made by M. F. Goudge, giving descriptions of limestones at properties now being worked. Owing to the action of igneous intrusions and of mountain building agencies most of the limestones are highly metamorphosed. Along the coast and throughout the interior of the province are many deposits of limestone, some of which are of great size and many of which are very pure.

Oil and Gas.—A paper upon the Alberta syncline is presented by Theodore A. Link in the Bulletin of the American Association of Petroleum Geologists. Failure to encounter productive horizons in the Palæozoic limestones of the plains may be caused by the progressively lower bevelling of the older rocks to the east before the deposition of the Jurassic beds. The Turner Valley productive horizon has evidently been eroded away in the plains area prior to deposition of the Mesozoic beds.

Overthrust faulting and oil prospects of the eastern foothills of Alberta between the Bow and Highwood rivers, Alberta,⁷ is the title of a paper written by G. S. Hume. The foothills are characterized by numerous nearly parallel reverse faults often of great length and mostly of unusual steepness. The faults dip 65 degrees to 75 degrees or more at the surface. Wells drilled in certain areas indicate two faults which although steep at the surface become low angle faults at depth with westerly dips of not more than 20 degrees. One of these faults underlies Turner Valley and has been penetrated by a few wells which after passing through a considerable thickness of Palæozoic limestone cut the fault and the Cretaceous strata beneath.

Phosphate.—Some problems of the Rocky Mountain phosphate field, Canada and the United States,⁷ are indicated by G. R. Mansfield. At Banff, Alberta, and in the various British Columbian occurrences the beds corresponding with the phosphoria formation are part of a group included in the so-called Rocky Mountain quartzite.

Radium.—H. S. Spence gives a description of the occurrences of pitchblende and silver ores at Great Bear Lake, Northwest Territories.² Pitchblende is found in persistent vein systems within or along the contacts of highly sheared and brecciated greenstone bands which vary from ten to fifty feet in width. The mineral has