

Mountain moraine. The river water would require treatment to remove turbidity, filtration and also chlorination to render it potable and safe. It would have to be brought 115 miles at great cost and would require a considerable time to secure it, but would be soft, ample and permanent. The artesian water would require no treatment to render it wholesome or bacteriologically pure though softening is desirable on account of its hardness, the cost would be comparatively low, the supply available in a short period of time and it would be adequate until the demand exceeds 8,000,000 gallons a day.

Zinc-Lead.—F. J. Alcock in *Zinc and Lead Deposits of Canada*¹ summarizes the history, mineralogy, and geology of these metals. Canadian and foreign occurrences are briefly described and statistical information is appended.

Miscellaneous.—Core drilling of bituminous sands of northern Alberta² was described by S. C. Cole. Results clearly indicate that exposures of bituminous sand cannot be regarded as an accurate indication of conditions that may be met in adjacent areas. Logs of holes and analysis of samples are incorporated.

In describing the fire clays of southern Saskatchewan⁴ G. M. Hutt states that those of the Whitemud formation are the most important and that the clays occur in large part in outcrops which can be easily worked and are favourably situated with regard to transportation.

Sydney C. Miffen described the Wabana iron ores, Conception bay, Bell island, Newfoundland.⁴ The deposit is of primary sedimentary origin. The ore beds occur throughout the upper thousand feet of a series of Ordovician shales and sandstones in contact with older Precambrian rocks. The upper bed averages 5 to 8 feet in thickness. Underlying it at an interval of 60 feet is the Scotia bed 7 to 9 feet thick. Although the field is badly faulted and has lean streaks traversing it there is, as yet, no indication of its termination.

A study of the peat bogs in southeastern Canada¹ was made by Vaino Auer. This report gives results of an investigation of thirty-four peat bogs in the region stretching from Niagara district east to and including Nova Scotia. Conditions affecting the growth, origin of flooded lands, physical features due to variation in degrees of moisture, origin and development and evidence of climatic changes are outlined. Lists of seeds and plants found in the bogs are also appended.

L. H. Cole made a report upon the potash salts in the Maritime Provinces.² Potassium chloride occurs at Malagash in small lenticular concretions in a matrix of halite. It is not economical to recover the potash by the present method of operating the deposit, which aims at recovering the sodium chloride only. Near Gautreau village, Westmorland County, New Brunswick, a bore hole enters beds of rock salt 485 feet thick at 1,295 feet in depth. A study of samples from this bore hole reveals the presence of small quantities of potassium and there is a possibility of concentration of potash salts in certain definite horizons in the salt strata. Further drilling and sampling will alone determine whether or not potash salts are present in commercial quantities.

The salt industry of Canada³ was described by L. Heber Cole. Occurrences throughout the Dominion, mineralogy and technology of salt manufacture, the allied industries using salt and the salt industry of Canada are outlined.