

graphite; high grade ores consist almost entirely of silicates carrying 15 to 20 p.c. of graphite. Short notes on graphite in Canada are presented by HUGH S. SPENCE (2).

Iron.—Volume 2 of a report by E. LINDEMAN and L. L. BOLTON (2) on the iron ore occurrences in Canada gives a succinct description of the known occurrences of iron ore throughout Canada. Many of these are without doubt of no economic value, but there are many that merit further investigation. Volume 1, previously published, contains descriptions of the principal iron mines of Canada. In a paper published in the *Journal of Geology*, volume 26, E. S. MOORE describes the geology of Belcher islands. Iron formation forms part of a thick series of sediments consisting of limestones, shales, quartzites and graywackes, and this series is intruded by sills and overlain by flows of diabase and basalt. The iron formation consists of jasper, chert, hematite, magnetite, siderite and green granules regarded as the iron silicate, greenalite. A. H. A. ROBINSON (2) gives the results of examinations made of a number of deposits of iron ore in Ontario. Analyses of samples taken and observations regarding the extent of the deposits are given. Investigations were made in the townships of Levant, Lount and Snowdon and on Seine bay and Bad Vermilion lake. T. L. TANTON (1) gives brief notes on iron ore deposits lying east of lake Nipigon.

Limestone.—Samples have been taken from the limestone quarries and many of the principal limestone outcrops of Ontario by HOWELLS FRECHETTE. Analyses were made to determine the percentage of calcium carbonate, magnesium carbonate, alumina, ferric oxide and insoluble mineral matter. The results (2) show that some of the geological formations are decidedly dolomitic and that others are very pure limestone. Great numbers of samples were found to carry over ninety p.c. of calcium carbonate and several exceeded ninety-five per cent. The results of a few analyses follow: the upper 10 feet of the 16-foot face of the quarry of H. ROBILLARD and Son on lot 22, concession 1, Gloucester township, carried 95·80 p.c. of calcium carbonate and the lower 6 feet 97 p.c.; the 30-foot face of the western pit of the Standard White Lime Company at Beachville, Oxford county, carried 96·37 p.c. of calcium carbonate; the lower part of the quarries of the Solvay Process Company near Amherstburg, Essex county, carried 97·08 p.c.; and brecciated limestone of lot 8, concession A, Carrick township, Bruce county, carried 97·08 p.c. calcium carbonate.

Magnesium Sulphate.—There are two small lakes on Kruger mountain from which in recent years large quantities of magnesium sulphate have been recovered. One of these lies on the British Columbia side of the International Boundary and has an area of about 70 acres. OLAF P. JENKINS in describing this lake in the *American Journal of Science*, volume 46, says that the brine at the time of his visit was so strong that it was heavy and slimy like the white of an egg. In the latter part of the summer the solution of epsomite is so concentrated that during the cool nights the salt crystallizes out.