

3. In pegmatite dykes.

The molybdenite deposits of the Quyon district, Quebec, are described by M. E. WILSON in the *Canadian Mining Journal*, volume 39.

Moulding Sand.—Among the sand deposits investigated by L. H. COLE (2 and 6) was a deposit of moulding sand occurring near Brockville. The results of laboratory tests and of practical tests made in foundries showed that the Brockville sand is a suitable moulding sand for stove plate and similar light work in iron, but although the heavier castings made in it were all right, it would not be advisable to use it on very heavy work, as the possibility of its failure would be greater than the coarse sands in general use, owing to the fineness of its texture, with the resultant tendency to sinter when exposed repeatedly to the molten metal. It appears to answer all requirements for use in the general run of brass foundry work. With a little care in selection and grading at the pit, several grades uniform in texture could be obtained.

Notes are given by Mr. COLE on the methods of testing moulding sand and the qualities in a sand necessary to render it suitable for foundry work. Other uses of sand, particularly that consisting of nearly pure silica, are given. Very pure material is required for the manufacture of glass, carborundum, ferro-silicon and refractory brick.

Nickel.—In an interesting paper published in the *Transactions of the American Institute of Mining Engineers*, volume 59, HUGH M. ROBERTS and ROBERT DAVIS LONGYEAR describe the discovery by drilling of a large body of nickel ore concealed under a great thickness of unconsolidated material in the township of Falconbridge. With regard to the origin of this and other Sudbury deposits it is thought that the sulphides were carried downward with the norite differentiate of a magma intruded as a laccolith along a plane of unconformity beneath the Animikie sediments. As the norite consolidated the sulphides remained in solution and with an acid component of the magma made their way to the base of the norite. The sulphides were finally precipitated along the contact and the acid component solidified into granite. The paper was discussed at some length by geologists of repute.

A contribution to the discussion of the origin of the Sudbury deposits was made by W. H. GOODCHILD in *Economic Geology*, volume 13. GOODCHILD also contributed a series of articles to *Mining Magazine*, volumes 18 and 19, entitled "The Evolution of Ore Deposits from igneous magmas." "These articles are remarkable in many ways. They not only introduce an entirely new aspect of the problems of ore genesis, but they develop many interesting physical and molecular relationships and reactions in connection with mineral and rock formation. Of these reactions, the most important in their influence are the changes in volume following chemical combination or dissociation and allotropic modifications."

The geological relations of the Alexo nickel deposit of Dundonald and Clergue townships are described by M. B. BAKER (3). The ore lies at the contact of peridotite with lavas of earlier age and consists