

been opened, and trial shipments have shown some of the stone to be of excellent quality.

Mortar and Cement.—Among the mineral cements there are none which approach in importance those which consist of lime or some of its compounds. Ordinary mortar is made from quick-lime and sharp clean sand, its cementing qualities depending chiefly on the formation of calcium carbonate by the absorption of carbonic acid from the atmosphere. At the same time calcium silicate, which forms very slowly, considerably strengthens the cement after a number of years. Both ordinary limestone and dolomite are converted into lime by heating in kilns until the carbonic acid has been expelled. The first yields "hot" limes, the latter "cool" limes, so called from the relative amounts of heat developed in slacking. Both form good mortars, although the magnesium limes slack less rapidly and set more slowly. Both varieties are extensively made in Canada, particularly where other limestone industries are established. Every province except Prince Edward Island has its own supplies, the total product being valued at \$700,000 in 1895.

Ordinary lime like that just described, which is made from nearly pure material, will not harden if immersed in water, but if made from a rock containing considerable clay it has this valuable property. Such a lime is properly called a cement, and it may be a natural or a Portland one, according as it is made from natural rock or an artificial mixture. A hydraulic limestone consists, then, of calcium or