

MICA SCHIST.

Mica Schist is a rock composed largely of mica and quartz. The mica occurs in small scales all similarly oriented, thus giving the rock its typical structure, which is known as *schistose*. This foliation or schistose structure permits of easy cleavage along the planes parallel to the mica scales, while the rock is difficult to break in other directions.

The particular variety of this rock which is found to be best suited to the purpose described below is that in which *sericite* is the mica present. This variety is more definitely designated as *sericite schist*.

A sample of sericite schist furnished to the writer by a foundryman was tested by Dr. H. T. Kalmus at the School of Mining, Kingston, and its melting point determined to be 1629°C., or about 100° lower than that of pure kaolin.

Its composition is as follows¹:—

SiO ₂	88.00%
Al ₂ O ₃	5.43%
FeO	.50%
Fe ₂ O ₃	3.29%
CaO	.33%
MgO	.40%
TiO ₂	.39%
K ₂ O	1.30%
Na ₂ O	.22%
H ₂ O (Combined)	.88%

100.74

USES.

An increasing number of foundrymen are substituting mica schist for the firebrick used for lining cupolas. The rock is broken into convenient size and shape, about six or eight inches long, four or five inches wide and a couple of inches thick, and cemented into place with fireclay and fragments of the rock

¹Analysis by Mr. H. A. Leverin, Mines Branch.