

the Canadian mica imports were only one forty-third of the Indian.

A comparison of Tables 2 and 4, showing the average value per ton of the mica shipped to the United States and of that sent to English buyers, discloses a rather remarkable difference of price; in one case (1905) the latter would appear to have paid \$336.80 per ton more for their mica than the Americans, while in 1909 the reverse is the case, the prices being in favour of the English consumers by \$14.48 per ton.

The accurate average price is not, however, claimed to be shown in the above tables; in fact, the figures given in the British Board of Trade returns, show discrepancy shown in the above tables; in fact the figures given in the returns published by Canadian shippers amounting in one year (1906) to as much as \$104.73; the average price per ton, calculated from the British Board of Trade returns, being \$246.98; while the figure arrived at from the statements furnished to the Mines Branch statistical department was \$351.71.

A comparison of the figures given in Tables 1 and 2 will show how greatly these two sources of information vary in their statements both as regards tonnage and value.

The cause of the wide difference in value of the English and American shipments, given in the two tables—differences which render any sort of comparison futile—is probably to be found in the various grades of mica shipped to the different countries.

Shippers, being bound by no compulsory system of classification or grading other than may be agreed upon between themselves and the buyers, may, in one instance, forward a consignment of more or less roughly trimmed mica of comparatively low unit value, while to another purchaser only high-grade sheets are sent, the difference in value of equal weight shipments being accordingly very great, while both consignments would be similarly classed in the Trade Returns as "mica," without distinction as to quality.

It is worthy of remark that, while the yearly average unit value of the Indian mica imported into the United Kingdom in the five years shows a maximum variation of \$119.44, that of the Canadian mica similarly imported reaches the high figure of \$691.97 (mean value calculated from Tables 1 and 2).

The comparatively small difference in the case of the Indian mica is doubtless due to the standard quality of the mineral, which varies little in colour and general character (elasticity, brittleness, etc.) whereas the amber mica possesses all these attributes in greatly varying degree—its price varying accordingly.

It is due to the fact that the Indian mica can always be depended upon to be of the same standard quality, that buyers in the United Kingdom have generally preferred this variety to the amber, which can seldom be relied upon, even in a single shipment, to be of uniform grade and colour.

Canadian producers, while realizing this, yet appear reluctant to fall in with the wishes of the English market, and cannot agree to the request of prospective purchasers in the United Kingdom to furnish shipments which are uniform in quality with samples submitted by them.

There can be no doubt that, could a satisfactory system of sorting be devised and agreed upon amongst mica dealers, the market relations and conditions between Canada and Great Britain would be materially improved.

For the purpose of further emphasizing the discrepancy between tables calculated from returns furnished by shippers on the one hand and by Foreign Trade returns on the other, an additional table (5), of exports of Canadian mica to the United States, is given: the figures here given are taken from "Trade and Navigation."

TABLE 5.

Exports of Mica from Canada to the United States.*
Average Value.

Calendar Year.	Tons.	Value	per Ton.
1905	351	\$150,767	\$429.62
1906	735	519,479	706.77
1907	468	372,798	796.58
1908	132	115,005	871.25
1909	325	229,689	706.74

*Trade and Navigation.

The following table (6) gives the total annual production of mica in Canada for the same period:—

TABLE 6.

Total Annual Production of Mica in Canada.*

Calendar Year.	Tons.	Value.
1905	...	\$178,235
1906	574	303,913
1907	774	312,599
1908	436	139,871
1909	369	147,782

*Mines Branch returns.

The fact that, in some cases, the total annual production falls short of the combined exports to Great Britain and to the United States for the year, is due to the practice made by some producers of accumulating large stocks of mica: these reserves, in many cases, remain on the mine, and so do not figure in the production returns.

*At the present time, large quantities of mica are being held in reserve, which owners are not disposed to ship at current prices.

*Editorial Note:—Since this report was written the market has become much stronger. It is now decidedly active.

TREATMENT OF ELECTROLYTIC MUD.

The mud is washed free from sulphate of copper, slowly dried in steel trays and then heated to a dull red to get rid of the tallow and alter the mechanical conditions of the graphite with which the starting sheets were originally coated. Before the practice of heating the mud was adopted in electrolytic refining in Australia, says Mr. G. H. Blackmore, it was found impossible to get the copper out of the mud except after days of boiling with sulphuric acid, and even then as much as 40 per cent. of it remained in the residue.

QUARTZ IN TUBE MILLS.

Quartz from the mine is now largely used in tube mills. It is an effective grinder, but does not make a good lining. In feeding a mixture of quartz and pebbles, the pebbles make up the lining, whilst the quartz stays in the charge, so that the advantages of both materials are gained.