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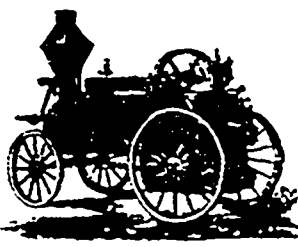
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Chemical Laboratory, Dalhousie College,
Halifax, N. S., July 31st, 1891.

Within the last few months I have pur-
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GERMAN BAKING POWDER,

and have subjected same to Chemical Analy-
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Fresh, Wholesome Materials, properly pro-
portioned. This Baking Powder is well
suited for family use, and has been employed,
when required, in my own house for many
years

GEORGE LAWSON, Ph. D., L. L. D.
Fellow of the Institute of Chemistry of
Great Britain and Ireland.

MINING.

THE MICA INDUSTRY OF THE UNITED STATES.

By L. J. CHILDS.

From the Engineering and Mining Journal.

The production of cut mica in the United States in 1889 amounted to 49,500 pounds, valued at \$50,000. In addition to this, 196 short tons of scrap or waste mica were sold for grinding purposes, with a value of \$2,450. The production in 1880, as given in the tenth census report, was 81,669 pounds of cut mica, valued at \$127,825.

A review of the annual production during the past nine years shows that the industry advanced in importance until 1885. Since then the tendency has been downward, though the fluctuations in the production of the different regions have caused much irregularity in the annual totals. The following table does not include statistics of scrap and waste mica, as there had been no attempt prior to 1889 to determine the amount of this waste which has been utilized:

PRODUCTION OF CUT MICA.

Years.	Amount lbs.	Value.	Years.	Amount lbs.	Value.
1880	81,669	\$127,825	1885	92,000	\$161,000
1881	100,000	250,000	1886	40,000	70,000
1882	100,000	250,000	1887	70,000	142,250
1883	114,000	235,000	1888	48,000	70,000
1884	147,410	368,525	1889	49,500	50,000

During the years 1883 and 1884, when mica mining was in its most flourishing condition, the manufacturers of stoves consumed probably 95 per cent. of the product, and the fancy grades and large sizes of sheet mica which were then used found a ready sale at highly profitable prices. Under this stimulus of large profits many surface deposits or pockets were opened by farmers or other individuals of small means, who worked them occasionally when other business was dull and realized a considerable profit on their production. As long as the demand for large sizes continued, this intermittent sort of mining could be carried on with a degree of success, but when the fashion in stove panels changed, and small sheets were used in place of the large ones, the demand for the latter fell off to a great extent. Mica suitable for cutting into large sheets was much less abundant than that available for small sizes; therefore lower rates had always prevailed for the latter, and careful, steady and systematic methods were necessary to produce such grades profitably. When the demand changed from large to small sizes the majority of miners were unprepared through lack of capital or for other reasons to adopt such methods. The result was a great reduction in the number of producing mines, and consumers were compelled either to raise the price of mica or look to foreign sources for their supply. Another factor in increasing importation came into existence with the extended manufacture of dynamos and other electrical apparatus, in which a great deal of mica is used. The foreign article, especially that produced in Canada, was, on account of its superior cleavage, preferred to the domestic for this purpose, but since miners have become more fully acquainted with the qualities desired for electrical uses, it has been proved that the United States can produce mica for this purpose equal to any found abroad. The foreign supply, after gaining a foothold in American markets, has more than held its own, and as its tendency has always been toward a reduction in prices, there has been little inducement for the outlay of capital in mica mining.

Only a small number of mines were operated in 1889, and a few of those were worked steadily throughout the year. However, there was a fair amount of development work done in the different mica regions, and it is expected that the introduction of more systematic methods of mining will greatly increase the importance of the industry.

Occurrences.—The localities in which mica occurs in an available form are not very numerous, and it is only in New Hampshire and North Carolina that the industry has assumed much importance. In the West the most important deposits are located in the Black Hills, in the neighborhood of Hartsville, Wyo., and in the Cribbeneville district of New Mexico.

The available deposits of mica occur in bands of coarsely crystalline granite. In these bands the three constituents of the granite (mica, feldspar and quartz) have in a measure crystallized in separate masses, and the mica is found in bunches or pockets irregularly distributed throughout the mass. The deposits are of great interest aside from their commercial importance on account of the number of rare minerals which are nearly always present. Among these are beryl, tourmaline, garnet, columbite and samarskite. In some cases one or more of these minerals are present in sufficient quantity and of such fine quality as to give value to the deposit. Some of the finest tourmalines in the world have been found at Mount Mica, near the town of Paris, Maine, in the mica deposit at that place. Tin ore is also an accompaniment of the mica deposits in the Black Hills region.

Treatment of the Crude Product.—Mica is used in two forms, sheet mica and ground mica, and the manner in which it is treated when taken from the mine depends upon the form in which it is to be used. If it is to be sold as scrap for grinding, all that is necessary is to remove the adhering fragments of quartz and feldspar and such parts of the mica as may contain foreign ingredients. If it is to be used in the sheet form the process is much more complicated, the blocks being first split into sheets thin enough to cut easily, then marked with a pattern of the size desired cut along the lines marked, and the different sizes wrapped in paper and packed for shipment. There is a great amount of waste about this operation. The amount of sheet mica obtained does not usually exceed from 4 per cent. to 8 per cent. of the block mica treated.

(To be Continued.)

DRAUGH

A communication should be addressed to Editor, W. Forsyth.

Mr. Wm. editor, has returned tour through and the United checkerists wi was very bene point of view, get much pract in this war is taken in so kind.

We noted s when in Toroi Duggan, who c pion blind-folk ion, to a mal stake of from the present w made no reply is difficult to s to claim the thus tacitly d Mr. Forsyth's lows:—

Mr. Rennie, C Mail. "Sir months ago challenge to j Championship he is still anx I will play his stake of from \$ in his vicinity if the match c "I would s consist of ten played in To be arranged and the match than Monday, (Sgd.)

Toronto, 17 J

We are su that occurred Mr. Harbord substitution o for "fameless been so serious editors of the the Glasgow palpably a reader's blun

Regarding offered for th blem 231 w good solution Sydney, Oly and "Alpha therefore, sen —a copy of Review.

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