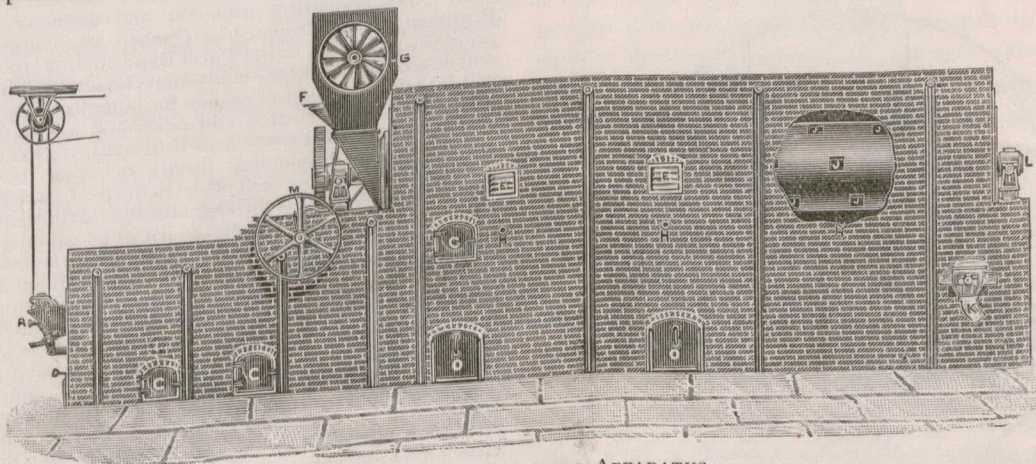


MANUFACTURES AND MATERIALS

THE CUMMER DRYING APPARATUS.

The F. D. Cumer & Son Co., of Cleveland, Ohio, has made the subject of mechanically drying different materials its sole study for ten years. The Cumer Company manufactures two styles of rotary dryers, and each style in eight different sizes. Each dryer is sold accompanied by a guarantee.

The accompanying cut shows a side elevation of the Cumer style 'F' dryer. The machine is used for drying materials that will not support high temperatures. This dryer (which consists of a revolving cylinder of special design, through which the material being dried passes) is arranged so that direct heat is being dried passes) is arranged so that direct heat is employed, mingled with large volumes of pure air. Absolute control is had over the temperatures to which the material being dried is subjected, in its different stages of dryness. No steam is used, and the drying is all done mechanically. The dry product is delivered at a low temperature and without injury. With this



THE CUMMER DRYING APPARATUS.

dryer, as high as twelve pounds of water are being evaporated per pound of combustible consumed. Soft black coal is the fuel used, and perfect combustion is obtained. The firing is all done mechanically. The whitest of materials are being dried by the Cumer dryers without any discoloration or injury.

The style 'Salamander' dryer resembles the style 'F', but is designed for drying materials that are not easily injured, such as clay, rock, phosphate, sand, marl, infusorial earth, *etc. (*Ores of all kinds.)

The Cumer Direct Heat Tunnel System is most efficient for drying brick, terra cotta, cement briquettes and similar products. Like the other dryers made by this company, it is a great economizer of space, fuel and labor. No steam pipes or boilers are required in connection with this system.

The F. D. Cumer & Son Co. have dryers in operation in all parts of the world (many in Canada), drying different materials, and will, upon application at its Cleveland office, 413 The Arcade, be glad to arrange for any one interested to see a dryer working.

The National Brick Manufacturers Association of the United States at their recent convention recommended the adoption of standard sizes for brick. The size adopted for common brick was $8\frac{1}{4} \times 2\frac{1}{4}$ inches, and for pressed brick, $8\frac{3}{8} \times 4 \times 2\frac{3}{8}$ inches. The association also adopted, as a standard size of Roman brick, $12 \times 4 \times 1\frac{1}{2}$ inches, and for a Roman brick, $12 \times 4 \times 2\frac{3}{8}$ inches.

SLATE IN CANADA.

The slate quarried in Canada comes chiefly from the Cambrian rocks in Quebec, although agillites of various colours are known to exist in other parts of the Dominion. British Columbia has had two companies operating quarries by horse and hand power in recent years; one at Nanaimo, in Vancouver, and one at New Westminster. In Quebec at one time there were three concerns working quarries in Richmond County; one at New Rockland and two at Richmond, which produced principally roofing slates. In recent years, however, only one large concern has supported the industry, says the Engineering and Mining Journal.

One of the reasons why Canadian production has been small is because slate can be imported very cheaply from the Vermont region in the United States, notwithstanding the duty.

During the years 1894 to 1898, the total production of slate in Canada was \$271,411; the imports, \$119,366; the exports, \$13,097, and the approximate consumption \$377,680.

To encourage the home industry the Canadian government has imposed a duty of 25 per cent. on all im-

portations of roofing slate (not exceeding 75c. per square), school slates and pencils, and 30 per cent. on mantels and other manufactures of slate. Notwithstanding this tariff, however, the domestic output has diminished 46 per cent. during the past five years and the consumption has fallen off nearly as much. On the other hand, a small export trade was built up, but in the last two years little or nothing has been done in this line.

The total production of slate in Quebec in 1898 was 3432 short tons, valued at \$37,374, as against 5208 tons, valued at \$37,600 in 1897. The New Rockland Slate Company is the only one working slate quarries in Quebec. The company opened its property 35 years ago, and in 1898 it employed 85 men regularly; 50 in the quarry and 35 in the shops for preparing the slate for market. The average yearly output of roofing slate is used in Ontario. The National Slate Company, a small concern, abandoned its quarry in 1898, leaving the New Rockland Slate Company the only one in the field.

Of the total imports into Canada in 1898 the United States furnished \$21,762, or 87 per cent.; Germany, \$2,573, or 10 per cent.; Great Britain, \$362, or 2 per cent., and China and France the balance. The United States shipments consisted of 1150 squares of roofing slate, valued at \$3475, or \$2.30 per square; 302,744 pieces of school slates, worth \$10,334; mantels, valued