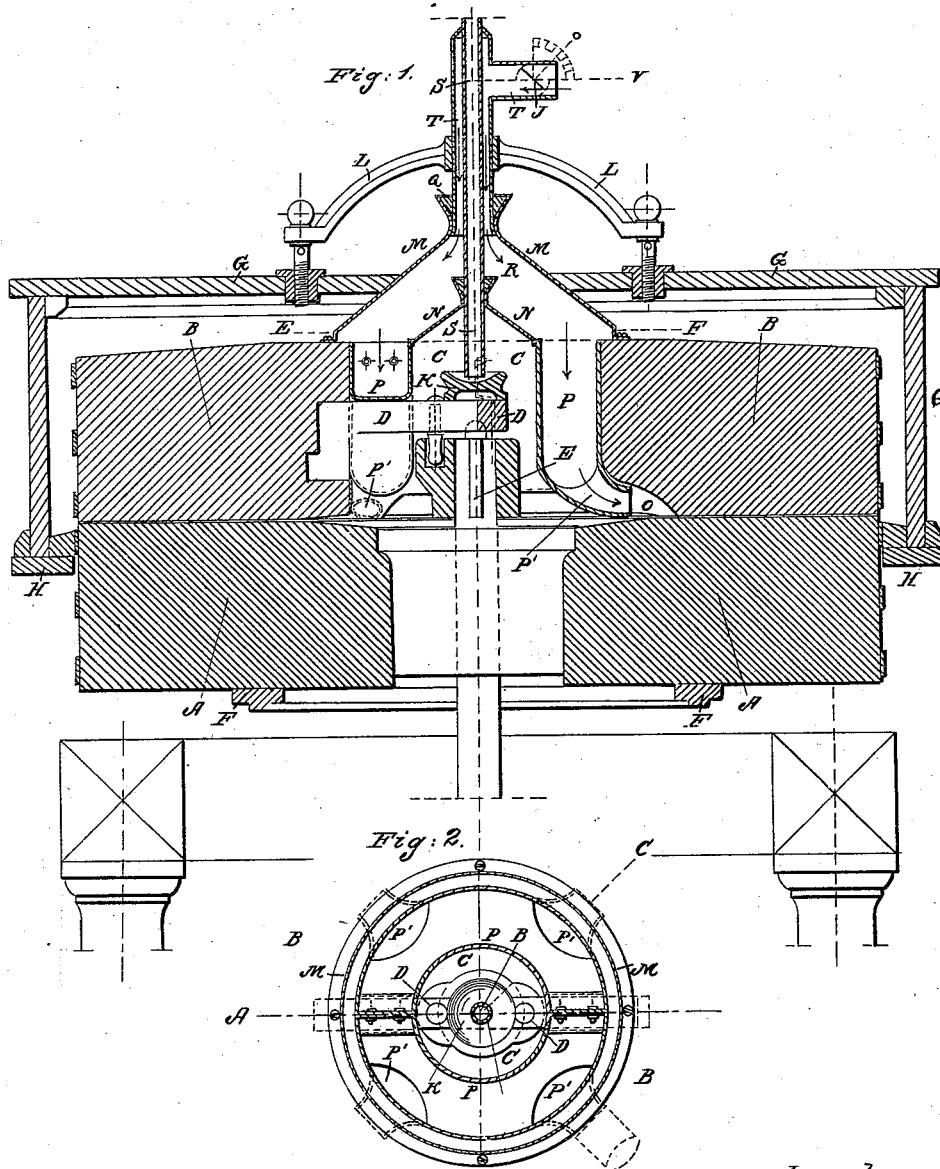


A. D. LAGOGUEY.
Ventilating Millstone.

No. 54,268.

Patented April 24, 1866.



Witnesses:
J. W. Coombs
Attorneys

Inventor:
A. D. Lagoguey
per Brown, Coombs & attys.

UNITED STATES PATENT OFFICE.

A. D. LAGOGUEY, OF PARIS, FRANCE.

IMPROVEMENT IN MODE OF VENTILATING MILLSTONES.

Specification forming part of Letters Patent No. 54,268, dated April 24, 1866.

To all whom it may concern:

Be it known that I, ALEXANDRE DÉSIRÉ LAGOGUEY, of Paris, in the Empire of France, have invented a new and useful Improvement in Ventilating Millstones; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical section of a pair of millstones furnished with my improvement. Fig. 2 is a horizontal section of the apparatus constituting my invention, taken in the line E F of Fig. 1.

Similar letters of reference indicate corresponding parts in both drawings.

In the manufacture of flour it has been found that a certain amount of heat is generated by the friction of the millstones upon the grain during the process of grinding, and that the heat thus produced causes the loss from the flour of a portion of its gluten, which fills or clogs up the grooves in the stones, thus involving not only a loss in the product of flour, but the expenditure of much time and labor in cleansing or dressing the stones. This invention is designed to obviate these evils by a more perfect method of ventilation than any heretofore employed; and to this end it consists in the novel combination and arrangement of parts for conducting and distributing a forced circulation of air between the stones.

To enable those skilled in the art to understand the nature and operation of my invention, I will proceed to describe it with reference to the drawings.

The mill itself may be of ordinary construction, A being the lower or stationary millstone, and B the upper or revolving one.

D is the damsel, and C the eye of the upper stone, B. These stones are inclosed within a casing, G, in the usual manner, and firmly secured upon the top of the said casing by bolts or otherwise is an arch or frame, L, which supports the stationary vertical tubes S and T, which are concentric with the axis E of the millstones. The tube S passes entirely through the tube T and conducts the grain to the cup K, from whence it passes between the stones. The pipe T conducts the cold air downward from a fan or blast-producing apparatus, con-

nected at V to the space between the two metallic cones, M and N, and is provided with a valve, J, by which the amount of air passing through it may be regulated at pleasure.

The cone M is firmly secured upon the rotating stone B, and, in consequence, rotates therewith. Its upper end encircles the lower end of the stationary tube T, and is furnished with a stuffing-box, Q, which prevents the escape of air between the stone M and tube T. The other cone, N, also rotates with the stone to which it is connected by being secured upon the upper edge of the inner side of the air-box P, and is of less diameter than the cone M, and placed within and below the same, with its upper end encircling the tube S, the air being prevented from escaping downward between the said upper end and the tube S by means of a suitable stuffing-box, R.

Below the lower edges of the cones M and N, and situated within the eye of the revolving stone B, is an annular air-conducting box, P, the sides of which are formed of metal, and which opens at the top into the space between the said cones, and is closed at the bottom, except where it opens into the curved spouts P'. There may be any desired number of these curved spouts P', and their ends project outward into the space O, formed by beveling or chamfering the stone around the lower edge of the eye thereof.

The revolving stone B being put in motion and the grain fed downward through the tubes S, as hereinbefore mentioned, the operation of the invention is as follows: The fan or other blast-producing apparatus connected at V being put in motion forces a current or blast of air downward through the tube S, the strength of the current, or, in other words, the amount of air passing through the said tube, being regulated by the position of the valve J, required for different speeds of the stone B and for grinding different kinds of grain. The air passes from the tube T, through the space between the cones M and N, and through the annular air-conducting box P, out through the curved spouts P', by which it is distributed in the space O, so as to readily enter between the millstones, and, by keeping up a continual circulation in contact with the grain and flour during the operation of grinding, prevents them

from becoming heated, and consequently prevents the loss of gluten and the filling up or clogging of the grooves in the stones, as hereinbefore mentioned.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the two cones M N, air-conducting box P, spouts P' P', pipes T S, and stuffing-boxes Q R, the whole arranged in relation with each other and applied to a pair of

millstones, substantially as and for the purpose herein specified.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

LAGOGUEY.

Witnesses:

DUMA,

A. SHOSTS.