

H. N. LEAS.
Ventilating Millstones.

No. 198,128.

Patented Dec. 11, 1877.

Fig. 1.

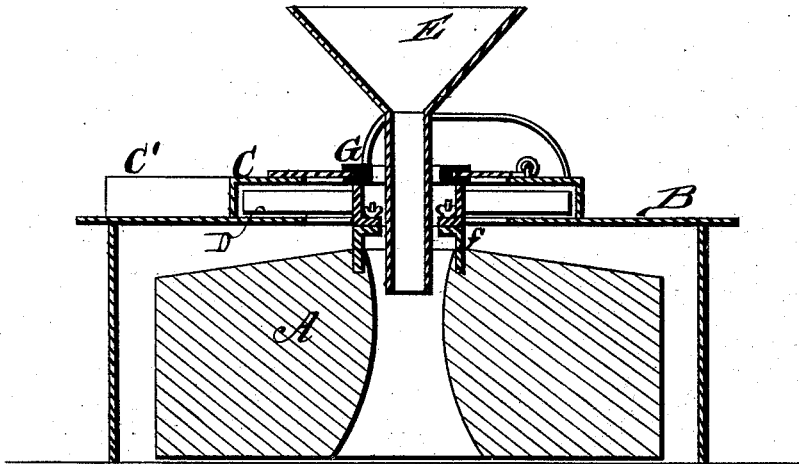
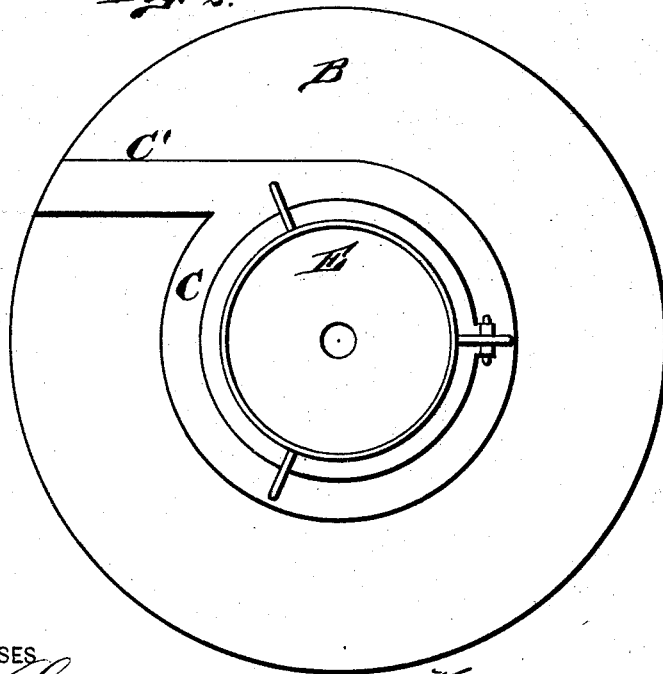


Fig. 2.



WITNESSES

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HARVEY N. LEAS, OF KOKOMO, INDIANA.

IMPROVEMENT IN VENTILATING MILLSTONES.

Specification forming part of Letters Patent No. **198,128**, dated December 11, 1877; application filed August 11, 1877.

To all whom it may concern:

Be it known that I, HARVEY N. LEAS, of Kokomo, in the county of Howard and State of Indiana, have invented a new and valuable Improvement in Millstone-Ventilators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a vertical sectional view, and Fig. 2 is a plan view thereof.

This invention relates to that class of ventilators for mills in which the fan is operated by the runner-stone; and the novelty consists in the fan being operated directly from the runner by means of a band fastened in the eye of the stone, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the runner-stone, with curb B surrounding the same. On top of the curb B is a fan-case, C, with outlet C', with an exhaust-chamber running through the curb to the fan-case, to draw off warm air, steam, &c.

G is a weighted valve, of leather or other suitable material, fastened to the curb, and resting loosely on the ring *f*, which is fastened in the eye of the millstone, to prevent the entrance of air.

The fan-case is arranged, in the center, concentric with the curb, as shown in figures. The fan is connected to the ring *f*, and operated directly from the running burr without the interposition of shafts and pulleys, as in the old way. In this form of my invention an

exhaust-chamber with regulating valve or slide is used, as also the weighted valve on top of the ring *f*.

Cold air enters, as usual, at the eye of the stone, and at the ordinary chop-spout, and intermingles with the warm air and flour-dust. During its progress upward the flour-dust settles, and the air or steam is drawn off through the fans into the open air, or carried off by suitable spouts. Buckets may be placed under the delivery of the fan to catch water dripping from the fan.

This device removes all the hot air and steam produced in the process of grinding. The burrs grind cooler, producing a superior grade of flour. There is no steam to enter the spouts, elevators, or bolts, no raising of dust or steam into the miller's face, eyes, or lungs, no steam to coat the hands with dough, and no waste of flour from dust rising from burrs while grinding.

I am aware that heretofore the fan has been driven by means of the bail or driver of the running stone; but this has its objections in the way of construction and expense.

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

In a millstone-ventilator, the fan operated directly from the runner by means of a ring or band, *f*, fastened in the eye of the stone, as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HARVEY N. LEAS.

Witnesses:

WILLIAM L. WILLIS,
HERMANN ROST.