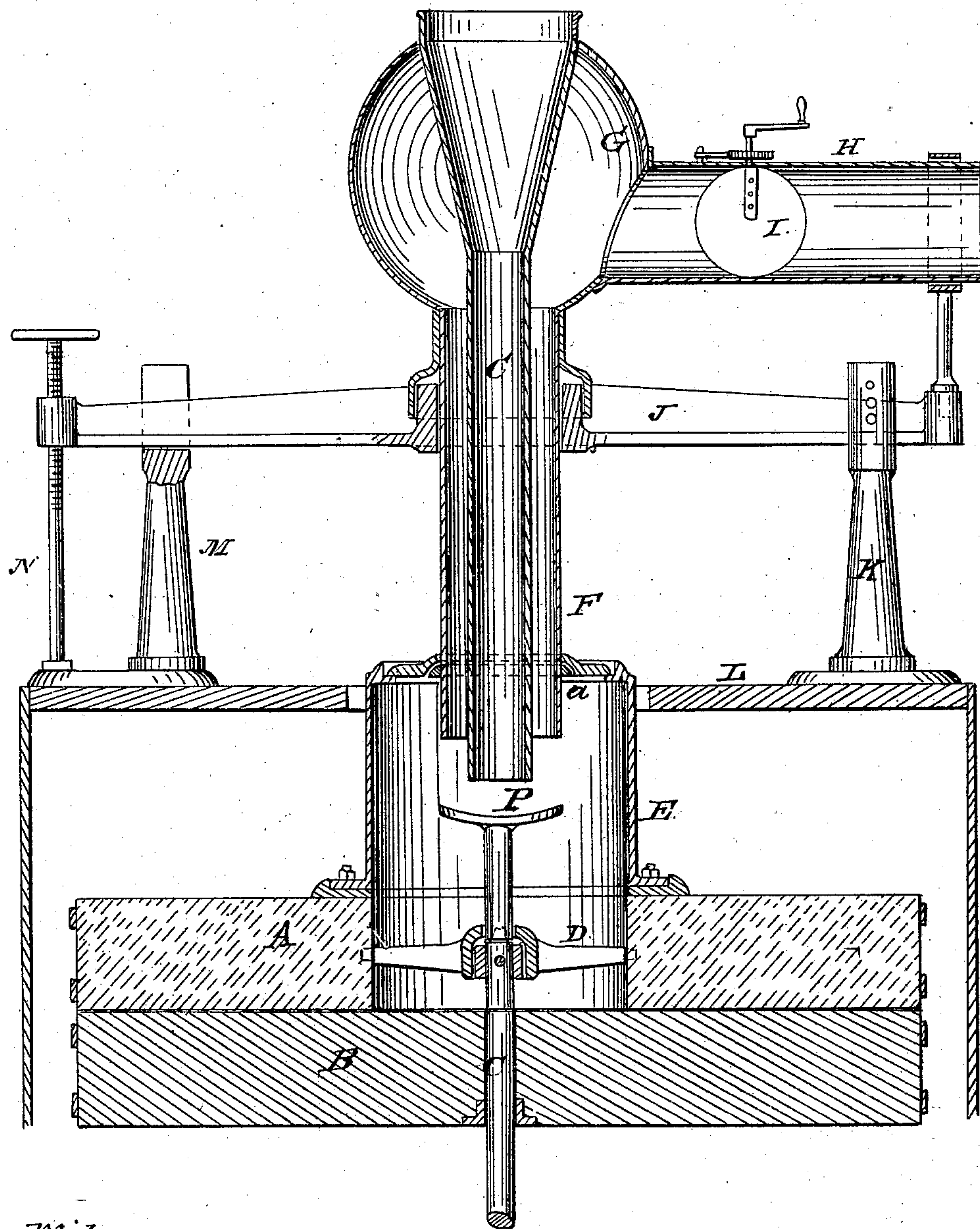


C. CERISIER.
Ventilating Millstones.

No. 98,555.

Patented Jan'y 4, 1870.



Witnesses
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per
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att'y

United States Patent Office.

CONSTANT CERISIER, OF MUNG-SUR-LOIRE, FRANCE.

Letters Patent No. 98,555, dated January 4, 1870.

IMPROVEMENT IN VENTILATING MILLSTONES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, CONSTANT CERISIER, of Mung-sur-Loire, in the Empire of France, have invented a new and useful Improvement in Ventilating Millstones; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, which drawing represents a vertical central section of this invention.

This invention relates to the arrangement of an air-vessel, which communicates, on one side, with an air-pump or reservoir, containing air under pressure, and on another side with a chamber, secured to and revolving with the runner of a grinding-mill, and through which extends the pipe for the introduction of the grain between the two millstones, said air-vessel being supported by a balance-lever, which can be adjusted by means of a set-screw, in such a manner, that by means of the air-vessel, the pressure of the current of air, passing down to the millstones, is equalized, and, by means of the balance-lever, the position of the air-pipe in relation to the chamber attached to the runner, can be readily so adjusted that it does not interfere with the motion of said runner; and furthermore, by raising and lowering the air-pipe, the effect of the blast can be regulated.

In the drawing—

The letter A designates the runner, and B, the bed-stone of a grinding-mill, said runner being connected to the spindle C by means of drivers D, in the usual manner.

To the top of the runner is secured the chamber E, through the top of which extends a pipe, F, which connects with the air-vessel G, and this air-vessel communicates, by a pipe, H, with a reservoir containing air under pressure.

A suitable damper or valve, I, serves to regulate the supply of air.

The joint between the pipe F and the top of the air-chamber is rendered air-tight by means of a packing-ring, a, which, however, does not interfere with the revolving motion of said chamber, and the pipe F is steadied and adjusted in its position by means of a

balance-lever, J, which has its fulcrum at or near one of its ends, in a post, K, rising from the curb L, while its opposite end is guided in a slotted standard, M, and made adjustable by a set-screw, N, as shown in the drawing.

The post K is provided with two or more holes, so that the fulcrum of the balance lever J can be raised or lowered, and thereby, and by adjusting the set-screw N, the distance to which the pipe F projects into the chamber E, can be changed, and the effect of the blast on the grain can be regulated.

The grain is introduced to the millstones through a pipe, O, which extends through the centre of the air-vessel G and pipe F, and, on leaving said pipe, the grain drops upon a cup, P, whereby it is evenly distributed.

By the action of the air-vessel G, the force of the blast is rendered uniform, and, as the current of air passes down through the pipe F, through the grain in the chamber E, and out between the grinding-surfaces of the stones, it serves to cool said grinding-surfaces, and it prevents the grain, while being ground, from becoming heated.

The pressure of the air in the air-vessel G must be kept up to such a degree that the current of air discharging from the pipe F is capable of overcoming the current created by the centrifugal force of the runner.

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

1. The spherical air-vessel G, in combination with the air-supplying pipe H and conducting-pipe F, for admitting air, equalizing its pressure, and conducting it under such equalized pressure to the millstones, as herein set forth.

2. The balance-lever J, pivoted, at one end, to the post K, and carrying, at the other end, the single set-screw N, in combination with the pipe F, air-vessel G, and pipe H, substantially as and for the purpose described.

CONSTANT CERISIER.

Witnesses:

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