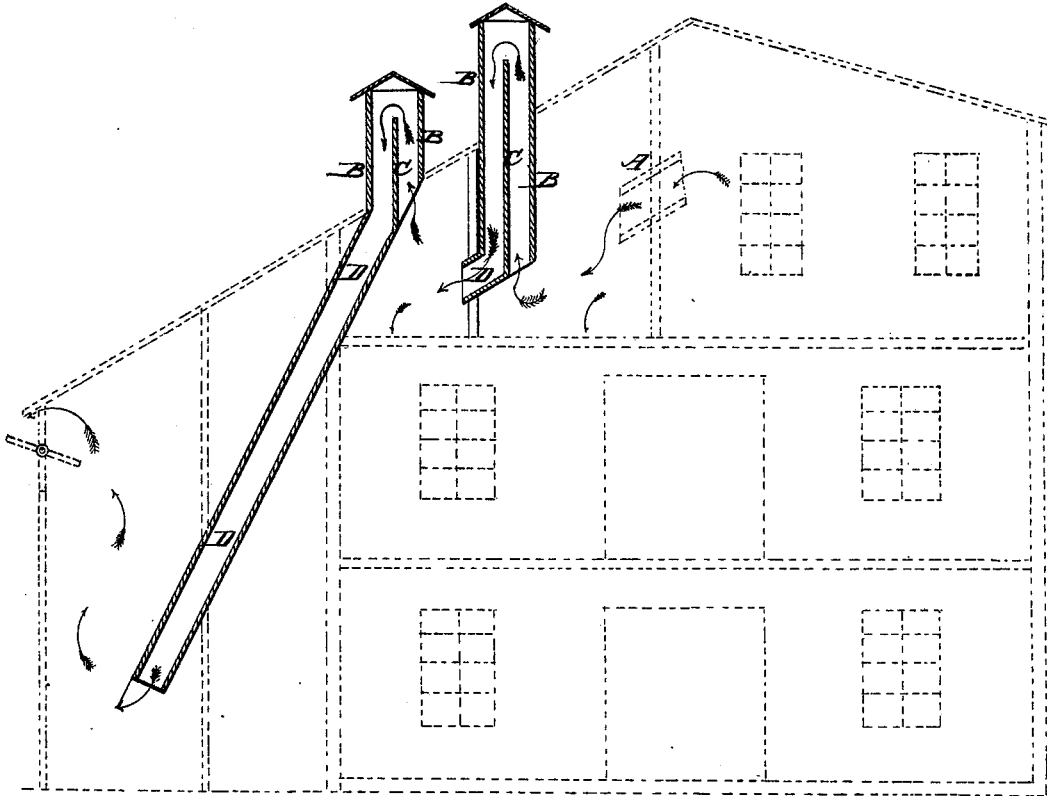


J. B. HOLMES.
Ventilators for Blow and Dust Rooms.
No. 206,949. Patented Aug. 13, 1878.



WITNESSES:
Francis McArdle,
C. Sedgwick

INVENTOR:
J. B. Holmes
BY *Mumford*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN B. HOLMES, OF GRAYVILLE, ILLINOIS, ASSIGNOR TO HIMSELF AND
ROSS McCALL LANTERMAN, OF SAME PLACE.

IMPROVEMENT IN VENTILATORS FOR BLOW AND DUST ROOMS.

Specification forming part of Letters Patent No. 206,949, dated August 13, 1878; application filed
March 22, 1878.

To all whom it may concern:

Be it known that I, JOHN BULL HOLMES, of Grayville, in the county of White and State of Illinois, have invented a new and Improved Ventilator and Offal - Grader for Blow and Dust Rooms, of which the following is a specification:

The figure in the drawing is a vertical section of my improved ventilator.

The objects of the invention are, first, to increase the grading capacity of the blow or dust room of a flour-mill without changing its size; secondly, to save all the material worth saving, and at the same time to grade it; and, thirdly, to direct the escaping dust downward and outside the mill, so that it may not fall on the roof and cause it to decay.

The blast laden with dust is introduced into the blow-room from the machine through a spout, A, in the usual way, and the blow-rooms have heretofore been ventilated by a cupola rising above the roof and made with slotted sides, through which the air and the lightest particles of dust escaped. Another way of ventilating has been to suspend muslin or other thin fabric around the sides of the blow-room, through which the air and the finest particles of dust escaped.

With my improvement I use the cupola in mills provided with them by tightly closing their top and sides, and placing in them a partition, C, extending nearly to their tops. One part of the double spout thus formed opens into the blow-room, and with the other part is connected a spout, D, leading into the dust-room, where the remaining offal settles, being very poor and light, and from which the air may be allowed to escape through a double spout similar to that hereinbefore described.

The air and dust may be carried through several rooms, through a series of double spouts, B C D, before the air is allowed to escape, the heavier particles settling upon the floor of each room as the blast becomes more and more deadened, so that the dust or offal will be graded and the grades that are suitable can be reground.

The object is to cause the blast to pass up and then down to partially deaden it, so that the heavier particles carried by it may each time be allowed to settle upon the floor.

I am aware that a funnel has been used instead of a dust-room; but the latter is necessary to afford space for grading the offal and a proper expansion of the laden blast; hence my device is only used in connection with a blow-room, that is absolutely necessary in large mills where many purifiers are employed. My object is ventilation, the grading of the "fall," and the saving of usually wasted material.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with two or more blow and dust rooms in a flour-mill, of one or more cupolas, B, extending above the roof, tightly closed at top and sides, and provided with partitions C extending nearly to the top, one part of the double spout thus formed being connected with blow-room and the other with a spout, D, leading downward to the dust-room, as and for the purpose specified.

JOHN BULL HOLMES.

Witnesses:

LESLIE DURLEY,
FRANCIS M. LANTERMAN.