

H. P. CROUSE.
Feed Regulator for Grinding Mills.

No. 44,942.

Patented Nov. 8, 1864.

Fig. 1.

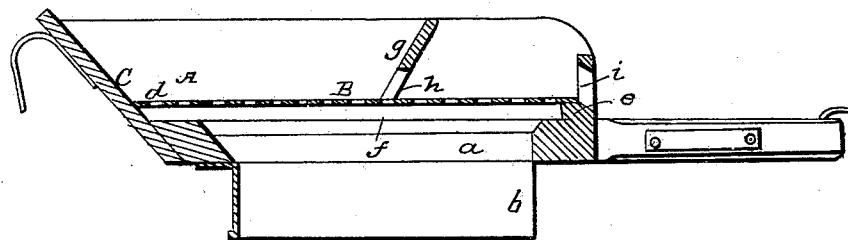
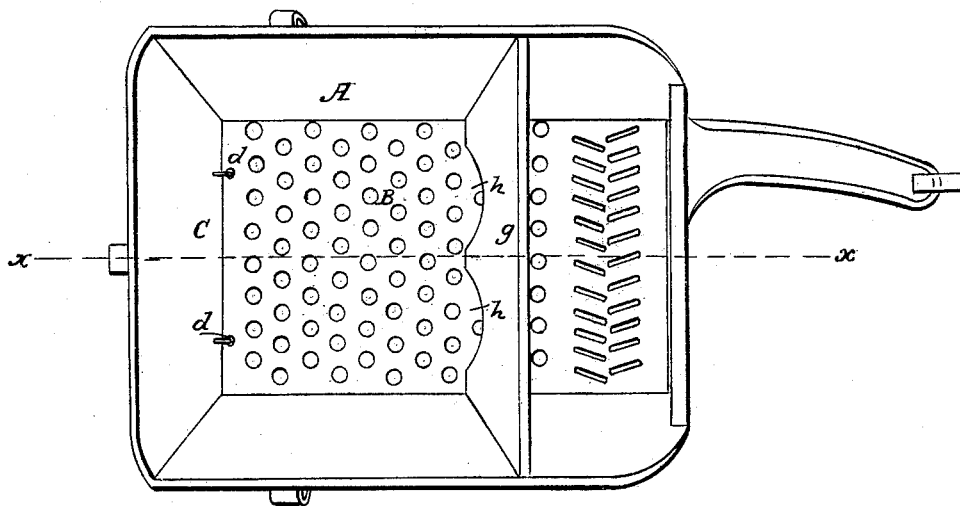


Fig. 2.



Witnesses:

C. L. Telford
Thos. Smith

Inventor:

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per M. M. C. G.
Atty.

UNITED STATES PATENT OFFICE.

HENRY P. CROUSE, OF HARTLAND, MICHIGAN.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. 44,942, dated November 8, 1864.

To all whom it may concern:

Be it known that I, HENRY P. CROUSE, of Hartland, in the county of Livingston and State of Michigan, have invented a new and Improved Shoe for Millstones; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention consists in providing the shoe of the hopper of a pair of millstones with a screen, arranged in such a manner as to effectually separate sand, cockle, and other impurities from the grain before the latter passes into or between the stones.

The machines now used for cleansing grain previous to the grinding thereof do not perform their work thoroughly; some sand and other impurities will escape, especially if the grain be quite foul. My improvement will separate these impurities from the grain, in consequence of the latter passing through or over the shoe in small quantities, just previous to entering into the eye of the stone.

A represents a shoe, which is hung or suspended underneath the hopper of a pair of millstones. This shoe may be constructed and hung in the usual way.

The novel parts are as follows: First, an oblong slot or opening, *a*, in the bottom of the shoe, underneath which there is an oblong spout, *b*, to conduct the impurities from the shoe into any receptacle prepared to receive them; second, a screen, *B*, is placed within the shoe, one end of which is attached to the rear end of the shoe by joints *d d*, the opposite end resting on a shoulder or ledge, *e*, at

the front part of the shoe, a space, *f*, of a requisite depth being allowed between the screen *B* and the bottom of the shoe.

To the screen *B* there is attached a transverse strip, *g*, which is inclined, and forms a partition or barrier within the shoe. This partition or barrier has two openings or notches, *h h*, made in its lower edge, and in the front end of the screen there is made an opening, *i*.

The shoe *A* has the usual shake motion communicated to it by means of the ordinary damsel, and the grain falls from the hopper upon the screen *B*, and passes down said screen, owing to an inclination given the shoe toward the partition or barrier *g*, which arrests the progress of the grain and causes it to be evenly distributed over the screen, the grain passing through the openings or notches *h h*, and out through the opening *i* in the front end of the shoe, and falling into the eye of the stone. The sand, cockle, smut, chess, &c., pass through screen *B*, and are discharged through the opening *a* and spout *b*. The oblong holes *j* in the front part of the screen are designed for the chess to pass through.

This device performs its work well. The shoe cannot become choked or clogged or rendered inoperative by small sticks or like impurities.

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

A shoe for the hoppers of millstones, provided with a screen, *B*, having a partition or barrier, *g*, attached to it, with openings or notches *h h* in its lower edge, in connection with the opening *a* in the bottom of the shoe, and the opening *i* in the front end of the same, and either with or without the oblong spout *b*, substantially as described.

HENRY P. CROUSE.

Witnesses:

W. GREEN,
JAMES WILLIAMS.