

A. SMITH.
GRAIN SCOURER.

No. 110,301.

Patented Dec. 20, 1870.

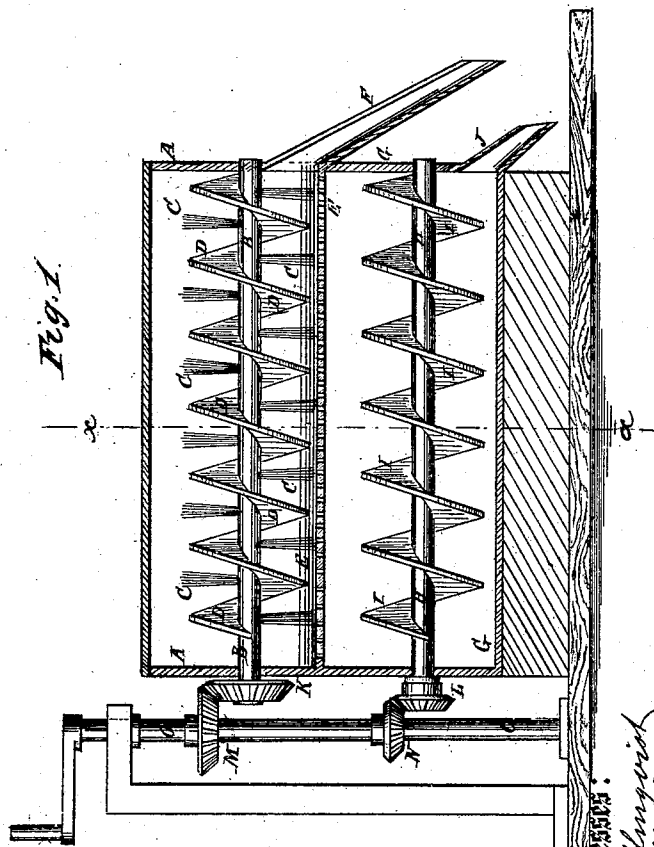


Fig. 1.

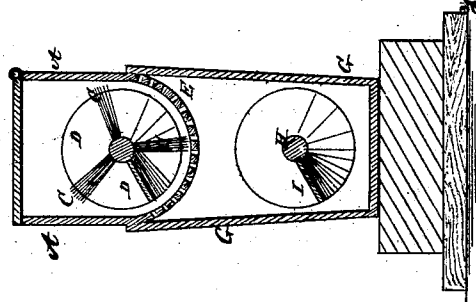


Fig. 2.

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United States Patent Office.

AUSTIN SMITH, OF VALMONT, COLORADO TERRITORY.

Letters Patent No. 110,301, dated December 20, 1870.

IMPROVEMENT IN GRAIN-SCOURERS.

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, AUSTIN SMITH, of Valmont, in the county of Boulder and Territory of Colorado, have invented a new and useful Improvement in Grain-Scourer; and I 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 drawing forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved machine.

Figure 2 is a vertical cross-section of the same, taken through the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish a simple, convenient, inexpensive, and effective machine for cleaning and scouring wheat for grinding; and

It consists in the construction and combination of the various parts of the machine as hereinafter more fully described.

A is the frame-work, box, or casing of the machine.

B is a shaft, the ends of which revolve in bearings in the ends of the frame-work or casing A.

To the shaft B is attached a spiral brush, C, of broom-corn or other suitable material.

The shaft B may also have a spiral thread or flange, D, attached to it if desired, but generally this will not be necessary.

E is a semi-cylindrical sheet-metal bottom, which is perforated with numerous holes for the dust scoured from the grain to escape through.

The holes in the bottom E I prefer to make with a

square punch diagonally with the shaft B, and with their rough edges upward.

The cleaned grain escapes from the machine through the spout F, by which it is conducted to the burs or to some suitable receiver.

The dust may be allowed to fall to the floor into some suitable receiver, or into a box, G, placed beneath the perforated bottom E, and in which works a shaft, H, having a spiral thread or flange, I, attached to it, by which the dust is conveyed into the spout J, by which it is conducted to some suitable place or receiver.

To the ends of the shafts B and H are attached small bevel gear-wheels, K L, respectively, the teeth of which mesh into the teeth of the bevel gear-wheels M N, attached to the vertical shaft O, which may be driven by any convenient power.

It may be observed that the rough edges of the perforated bottom E tend to prevent the grain from being carried around by and with the spiral brush C, and thus facilitate the operation.

Having thus described my invention,

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

1. The spiral brush C and concave screen E, combined with the spiral flange D, arranged as and for the purpose described.

2. The rotating-scouring brush and concave screen, combined with a spirally-flanged shaft H I, arranged thereunder, in the receiving-chamber, as and for the purpose described.

AUSTIN SMITH.

Witnesses:

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