C. WEAVER.
Millstone-Feeder.

No. 217,436. Patented July 8, 1879.

Fig. 1.

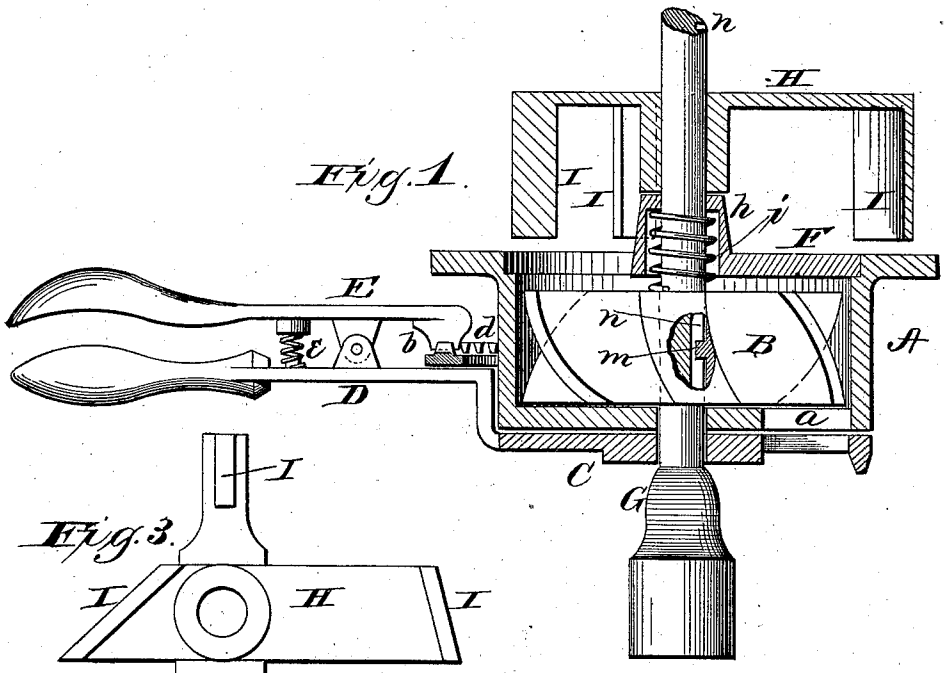
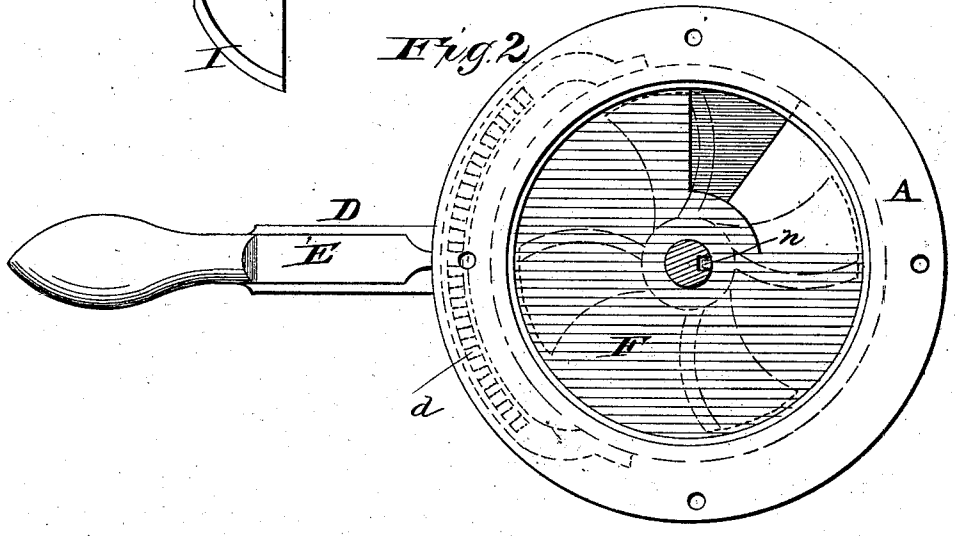


Fig. 3.

Fig. 2.



WITNESSES
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CLEMENS WEAVER, OF EASTON, PENNSYLVANIA.

IMPROVEMENT IN MILLSTONE-FEEDERS.

Specification forming part of Letters Patent No. **217,436**, dated July 8, 1879; application filed February 17, 1879.

To all whom it may concern:

Be it known that I, CLEMENS WEAVER, of Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Mill-Feeders; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a mill-feeder for grinding wheat, rye, corn, or any grinding that is done on a mill; and it has for its object to regulate the amount of grain to suit the stones, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a vertical section of my mill-feeder. Fig. 2 is a plan view of the same, and Fig. 3 is a bottom view of the mixer.

A represents the outside casing, which is fastened to the under side of the hopper, and receives the grain from the same. This casing has a discharge-opening, *a*, in the bottom.

Within the cylinder A is a feed-propeller, B, consisting of a central hub with a series of curved and inclined blades projecting from the same, to carry the grain around to the bottom discharge-opening. The size of this discharge-opening *a* is regulated by means of a rotary gate, C, under the bottom of the casing. This gate is provided with a handle, D, for turning the same, and on top of this handle is pivoted an auxiliary or false handle, E, which holds the gate at any place desired by means of a lug or projection, *b*, on its inner end, taking into a rack, *d*, formed on or attached to the outside of the casing A. A spring, *e*, arranged between the two handles, keeps said lug *b* in engagement with the rack.

On top of the casing A is a half-cover, F, to hinder the feeding of the grain when the stone is not running. This cover is formed with an enlarged hub, *h*, open from the under side, and in this hub is placed a spring, *i*, which rests on the top of the hub of the propeller B, so that, in case a nail or stone should get into the feeder, the propeller can relieve itself.

G represents the damsel, which passes up through the gate, casing, propeller, and cover, as shown.

The top of the balance-rynd which suspends the runner has a square pivot, or in some cases it has a round pivot and a steel pin, on which the damsel is slipped, and the damsel thus obtains a rotary motion from the rynd.

In the hub of the propeller B is a lug or pin, *m*, which works in a longitudinal groove, *n*, in the damsel, and the rotation of the damsel thus gives a rotary motion to the feed-propeller.

On the outside casing, A, is to be placed a tin pipe, to conduct the grain down into the stone.

Instead of the propeller B, I may, in some cases, use a screw-feed.

On the upper end of the damsel G, within the hopper, is placed a mixer composed of two cross-arms, H H, of unequal length, provided at their outer ends with wings or blades I, which are set at different angles—either straight or curved—and at varying distances from the center. This mixer is used to mix all sorts of grain before they enter the feeder.

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

1. The propeller-feed B, rotating with and sliding on the damsel G, and held down by a spring, *i*, having a stationary upper bearing, in combination with the outside casing, A, having bottom discharge, *a*, substantially as and for the purposes herein set forth.

2. The combination of the casing A, with bottom discharge, *a*, rotary gate C, with devices for operating the same, propeller B, cover F, spring *i*, and damsel G, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of January, 1879.

CLEMENS WEAVER.

Witnesses:

DANIEL L. NICHOLAS,

A. J. B. BERGER.