

H. E. DOUGLASS.
Grain-Toller.

No. 223,034.

Patented Dec. 30, 1879.
Fig. 1.

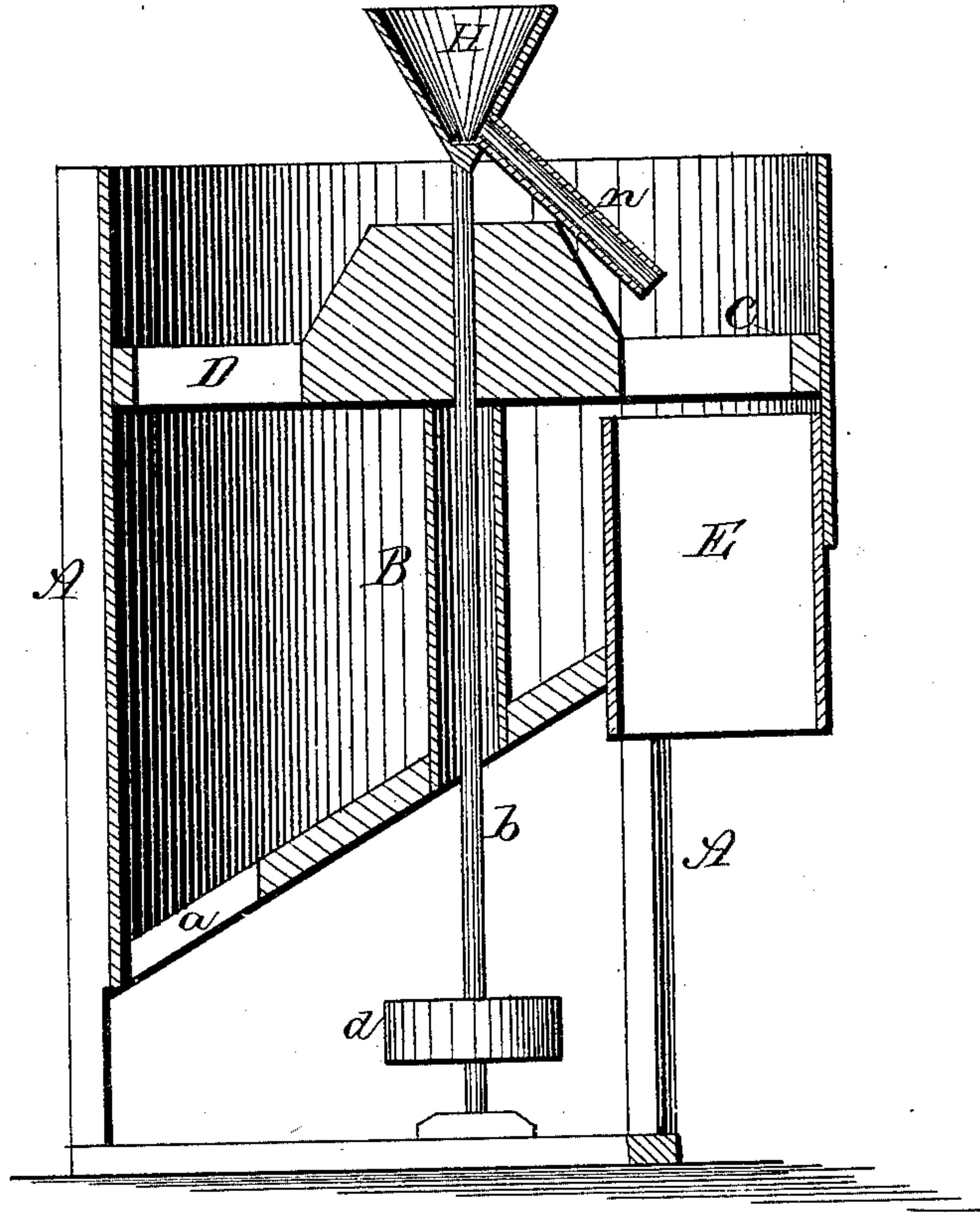
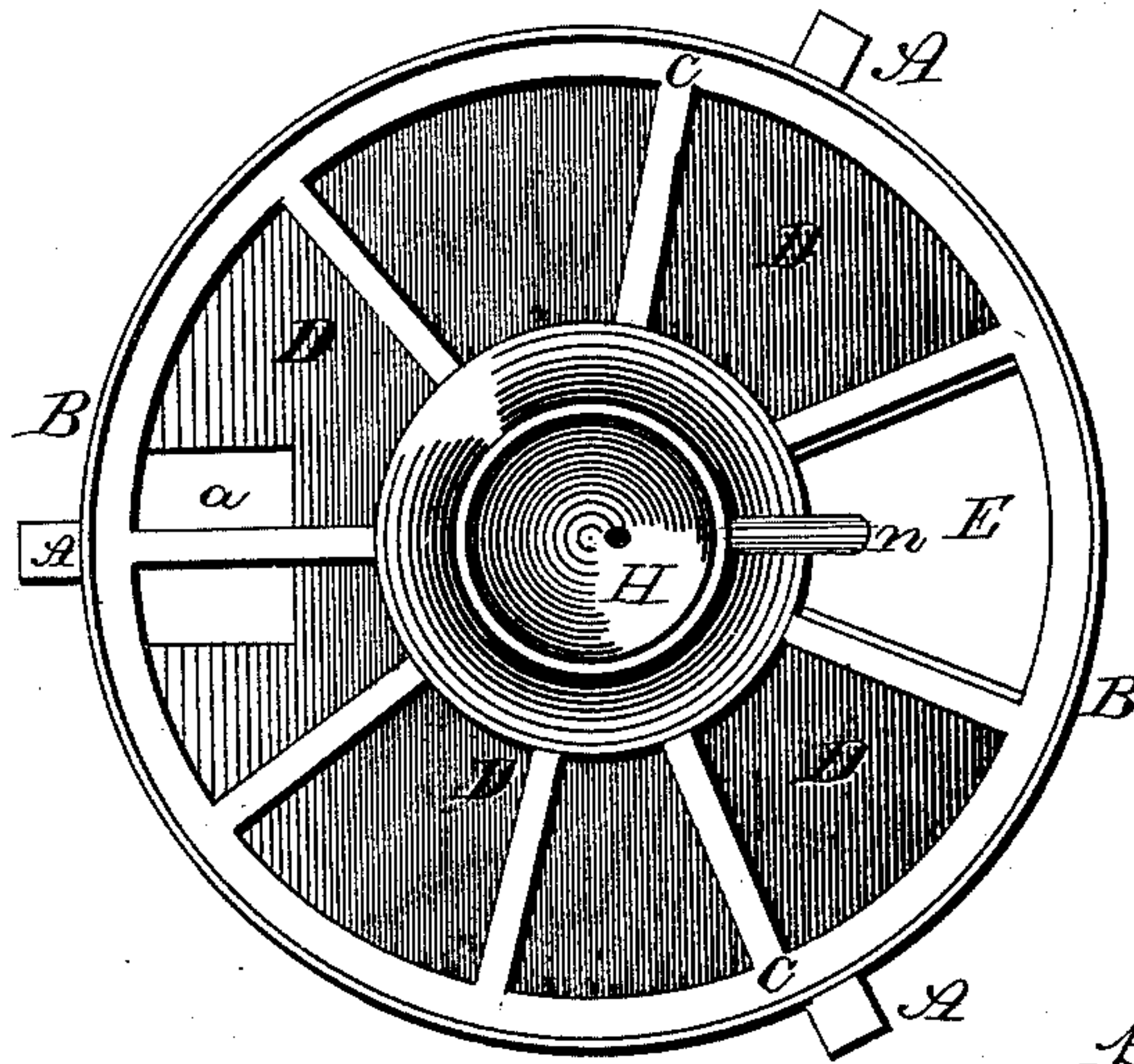


Fig. 2.



Witnesses:

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Inventor:

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per
F. A. Lehmann,
att'y.

UNITED STATES PATENT OFFICE.

HENRY E. DOUGLASS, OF NEW BRIGHTON, PENNSYLVANIA.

IMPROVEMENT IN GRAIN-TOLLERS.

Specification forming part of Letters Patent No. **223,034**, dated December 30, 1879; application filed October 2, 1879.

To all whom it may concern:

Be it known that I, HENRY E. DOUGLASS, of New Brighton, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Tolling Grain; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in devices for automatically tolling grain, or separating from the bulk of grain a certain portion, as is customary at mills, in payment for the grinding; and it consists in a rotary hopper provided with a spout, from which, when rotating, a required fractional quantity of grain falls at every revolution into a stationary compartment proportioned to the quantity of grain to be taken off, while the remaining portion falls into other compartments and is separated from the former, as will be fully described hereinafter.

The accompanying drawings represent my invention.

Figure 1 is a vertical section of my invention. Fig. 2 is a plan view of the same.

In the frame A is supported an open cylinder, B, the closed bottom of which is cut obliquely. Within the cylinder is a circular horizontal frame, C, resembling a wheel, its diameter being that of the inside of the cylinder. Instead of having spokes at regular intervals, like a wheel, the circular frame is divided into compartments D, of unequal dimensions, which compartments bear certain relations to the surface of the frame C. If, for instance, the surface of one compartment occupies one-seventh ($\frac{1}{7}$) part of the whole surface of the frame, the remaining part would be six-sevenths, ($\frac{6}{7}$) and, when rotating, the one-seventh of the grain fall-

ing from the spout *n* would enter the compartment of that size, while the remainder drops into the others.

The frame C being open, the grain passes freely through it to the inclined bottom, at the lowest part of which is an opening, *a*, from which it may be led to any convenient place.

Attached to the inside of the cylinder, under and in contact with the frame C, is a spout, E, of the form of the compartments D, which spout passes through the slanting bottom of the cylinder; hence all the grain dropped into any one of the compartments placed over this spout becomes separated from the rest.

The frame C, being movable, may be so adjusted that either one of the various compartments occupies the space over the spout E; consequently any desired fractional part of the whole into which the frame C is divided may be taken from the bulk of the grain dropped into the hopper while rotating.

The hopper H is placed upon a vertical rod, *b*—that is, passing through the center of the frame C downward—and is pivoted upon the frame A. The hopper is of the form of a funnel, to which a spout, *n*, is attached in a position to discharge the grain continuously into the compartments, and is rotated by means of a pulley, *d*, on the lower part of the rod *b*.

Having thus described my invention, I claim—

The rotating hopper H, spout *n*, rod *b*, and pulley *d*, in combination with the stationary frame C, arranged substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of September, 1879.

HENRY E. DOUGLASS.

Witnesses:

A. J. DOUGLASS,
JOHN GLASS.