H. Z. COLES.

Oatmeal-Cutter.

No. 198,571. Patented Dec. 25, 1877.

Fig. 1.

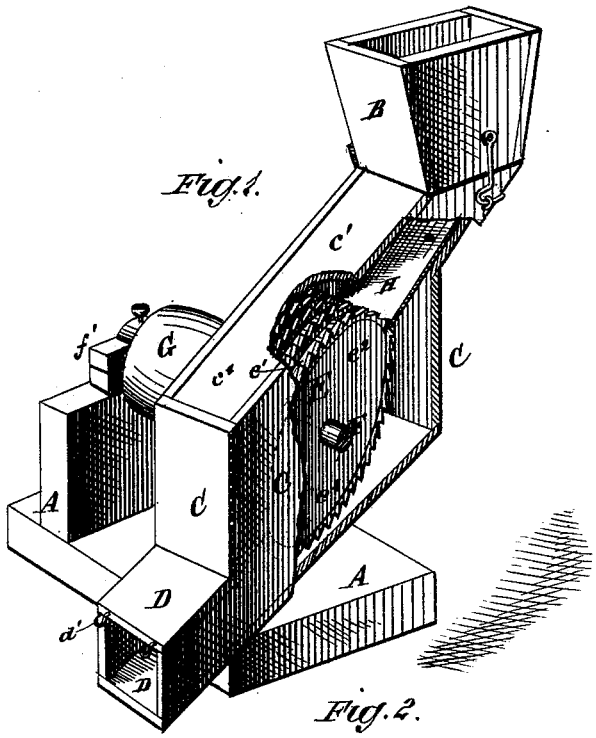
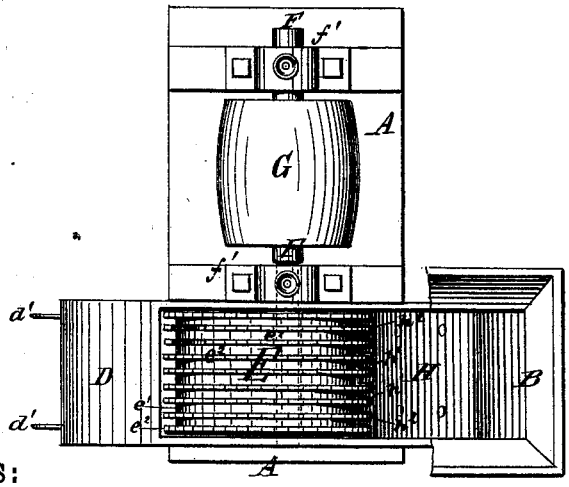


Fig. 2.



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HERBERT Z. COLES, OF CORTLAND, OHIO.

IMPROVEMENT IN OATMEAL-CUTTERS.

Specification forming part of Letters Patent No. **198,571**, dated December 25, 1877; application filed November 6, 1877.

To all whom it may concern:

Be it known that I, HERBERT Z. COLES, of Cortland, in the county of Trumbull and State of Ohio, have invented a new and Improved Oatmeal-Cutter, of which the following is a specification:

The object of my invention is to improve the quality of the cut in machines for cutting meal out of oats; and it consists in the combination, with a cutting-cylinder formed of a series of toothed circular disks, of a stationary cutting-plate provided with a series of notches corresponding in number to the circular cutters, the latter entering the said notches to effect the cutting of the oats at their point of contact with the said plate, as will be hereinafter described.

In the accompanying drawings, Figure 1 represents a perspective view of an oatmeal-cutting machine constructed according to my invention, parts being broken out to show the construction. Fig. 2 is a top view of the same, the cover and a portion of the hopper being removed.

Similar letters of reference indicate corresponding parts.

A is the frame of the machine. B is the hopper; C, the cutting-box; D, the discharge-spout, where a bag for receptacle may be attached to the hooks d'. The cutting-box C is provided with a sliding cover, c', which may be removed when the hopper B is unhooked, and turned back on its hinge. E is the cutting-cylinder. This is secured on a shaft, F, working in bearings f' on the frame A, and provided with the pulley G, by which and a belt the cylinder may be revolved. The cylinder E is composed of a series of toothed circular steel disks, e^2, and untoothed circular disks e^1, of a smaller diameter, the disks e^1 and cutters e^2 being placed on the shaft F, alternating with each other in such a manner that a space of about the depth of the cutter-teeth is formed around the cylinder E between each pair of cutters e^2. H is a metallic plate, fastened in an inclined position toward the cylinder E, so as to guide the oats from the hopper to the cylinder, while acting at the same time as the stationary jaw of a shear, between which and the teeth of the disks e^2 the oat is cut up into meal. To accomplish this purpose, the plate H is provided with notches h^2, one for each cutter, thus forming projections h^1 between each pair of notches. The cutters revolve with their teeth in these notches, and the projections h^1 of the plate H enter the spaces on the cylinder E between the cutters e^1 with such a tight fit that the oats fed from the hopper B down the plate H cannot escape without being cut up between the cutters and the plate H, and the meal thus produced is carried by the cutter-teeth down into the box C, from whence it is discharged, through the spout D, into bags or other receptacles.

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

The combination, with box or casing, of cylinder consisting of untoothed disks e^1 and larger toothed disks e^2, and the inclined plate H, having projections h^1 and notches h^2, as shown and described, for the purpose specified.

HERBERT Z. COLES.

Witnesses:
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