

C. KÜDERLI.
Smut-Mills.

No. 133,993.

Patented Dec. 17, 1872.

Fig: 1.

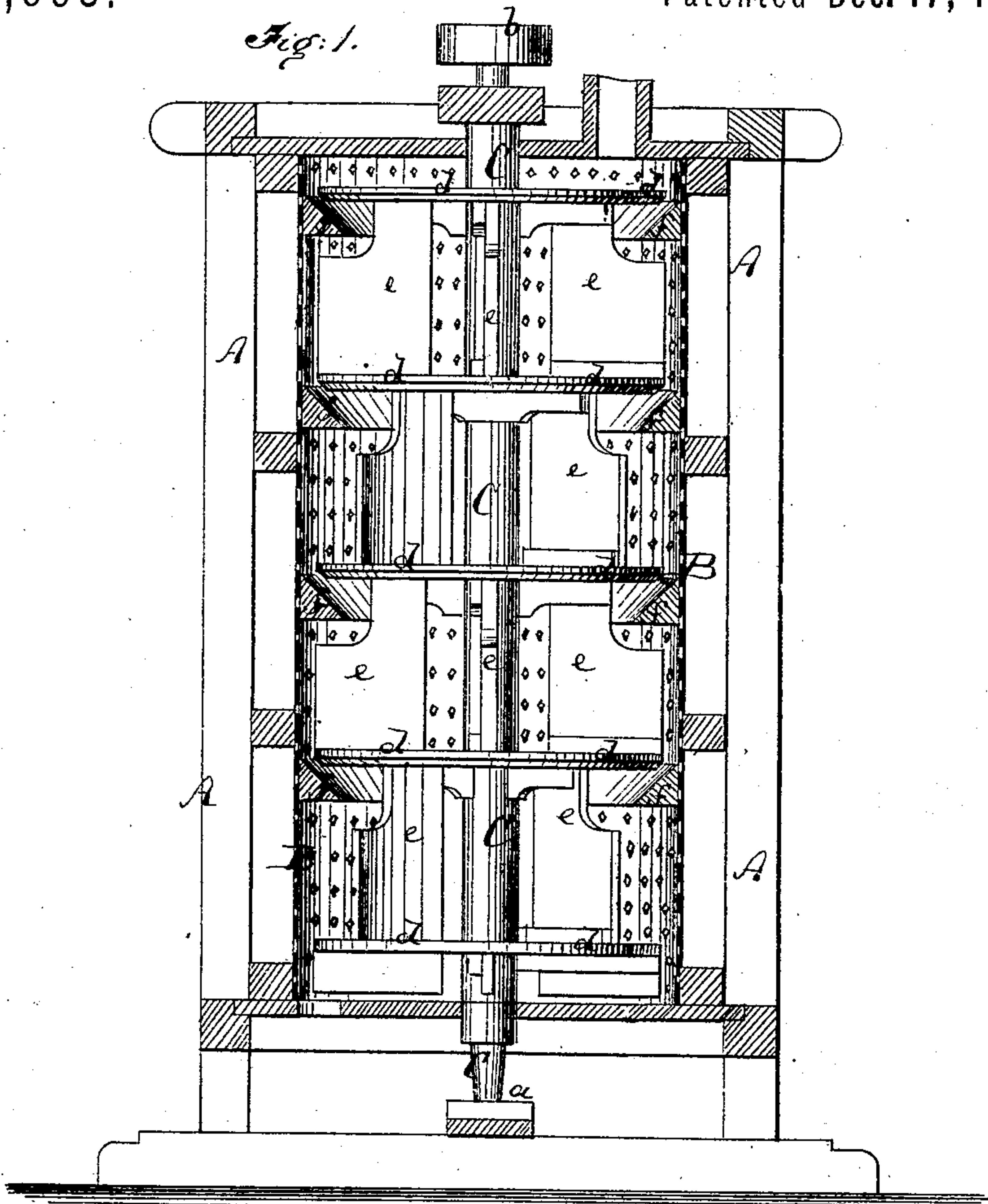
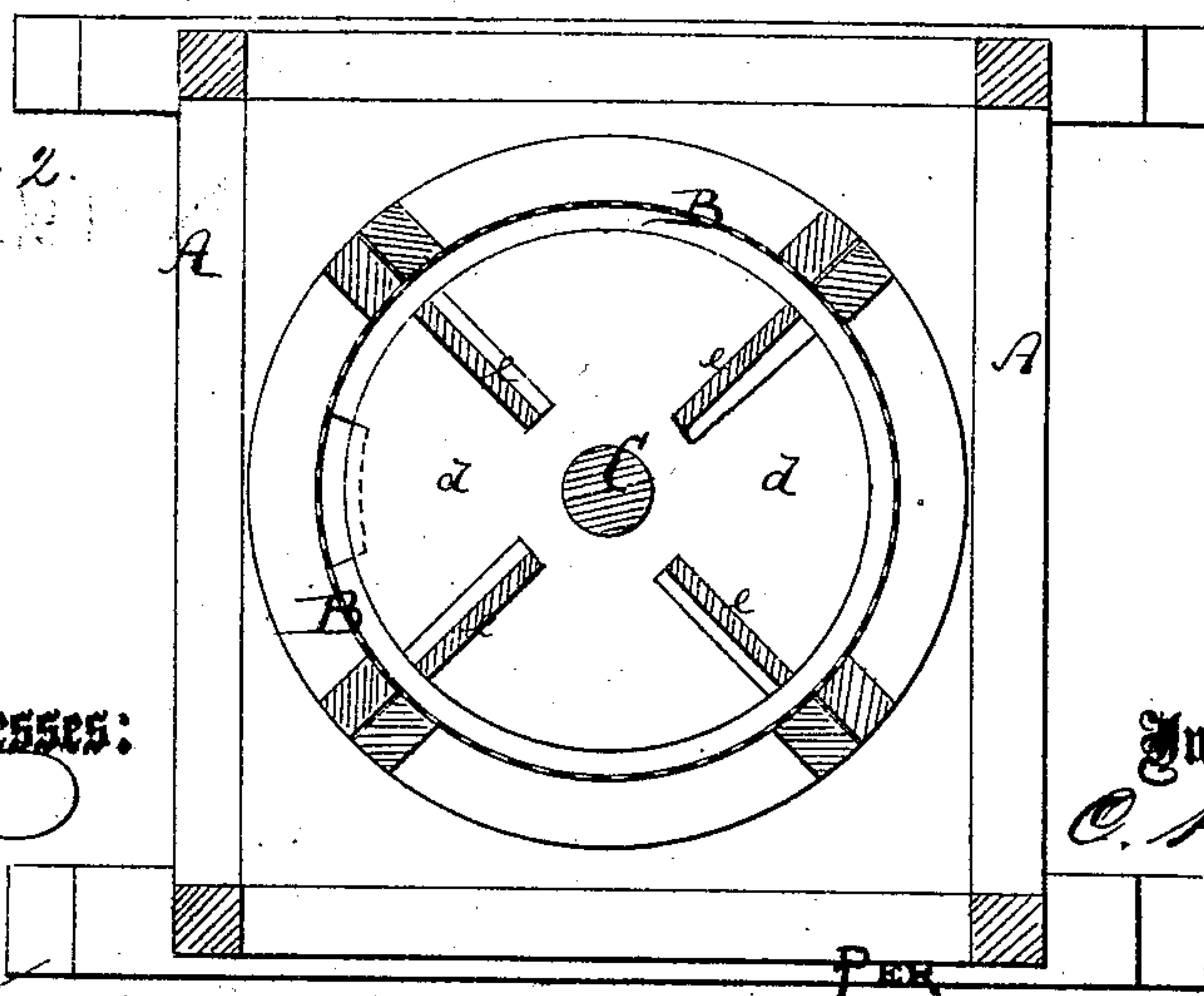


Fig: 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES KÜDERLI, OF WAUMANDEE, WISCONSIN.

IMPROVEMENT IN SMUT-MILLS.

Specification forming part of Letters Patent No. **133,993**, dated December 17, 1872.

To all whom it may concern:

Be it known that I, CHARLES KÜDERLI, of Waumandee, in the county of Buffalo and State of Wisconsin, have invented a new and Improved Smut-Machine, of which the following is a specification:

Figure 1 is a vertical central section of my improved smut-machine. Fig. 2 is a horizontal section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new smut-machine in which a vertical shaft, having a series of horizontal disks and vertical wings, is caused to revolve within an upright cylinder of perforated material having horizontal inwardly-projecting ribs, so that the disks and wings will throw the wheat or other grain outwardly against the cylinder, while the ribs of the latter will again throw it in toward the shaft, thus reciprocating the grain and insuring the desired result.

A in the drawing represents a frame, of wood or other material, of proper size. B is a vertical cylinder, of perforated sheet metal or equivalent material, and suitable height and diameter, and held stationary by the frame A. C is a vertical shaft passing centrally through the cylinder B and resting with its lower end on a step, *a*, which forms part of the frame A, while its upper part is guided in the upper part of the same frame. By means of a belt

passing around a pulley, *b*, of the shaft C, or by equivalent mechanism, the shaft is revolved. *d d* are a series of disks mounted at certain intervals upon the shaft C; and *ee* are upright wings fitted between the several pairs of disks *d*, as shown. *f f* are ribs, with inclined upper edges, fastened to the inner side of the cylinder B, one rib a short distance under each disk *d*, as shown.

The wheat is fed to the machine from above, through an opening in top of the cylinder, and is, by falling upon the top disk, thrown out by centrifugal force against the cylinder; by the upper rib it is then again directed toward the shaft, but under the top disk, and thrown out once more by the same and by the wings on top of it, and so forth, the action being necessarily thorough and satisfactory.

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

The stationary and reticulated cylinder B having the ribs *f* with inclined upper edges, in combination with the horizontal disks *d* and intermediate vertical wings *e*, arranged on a rotating-shaft C, as and for the purpose described.

CHARLES KÜDERLI.

Witnesses:

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