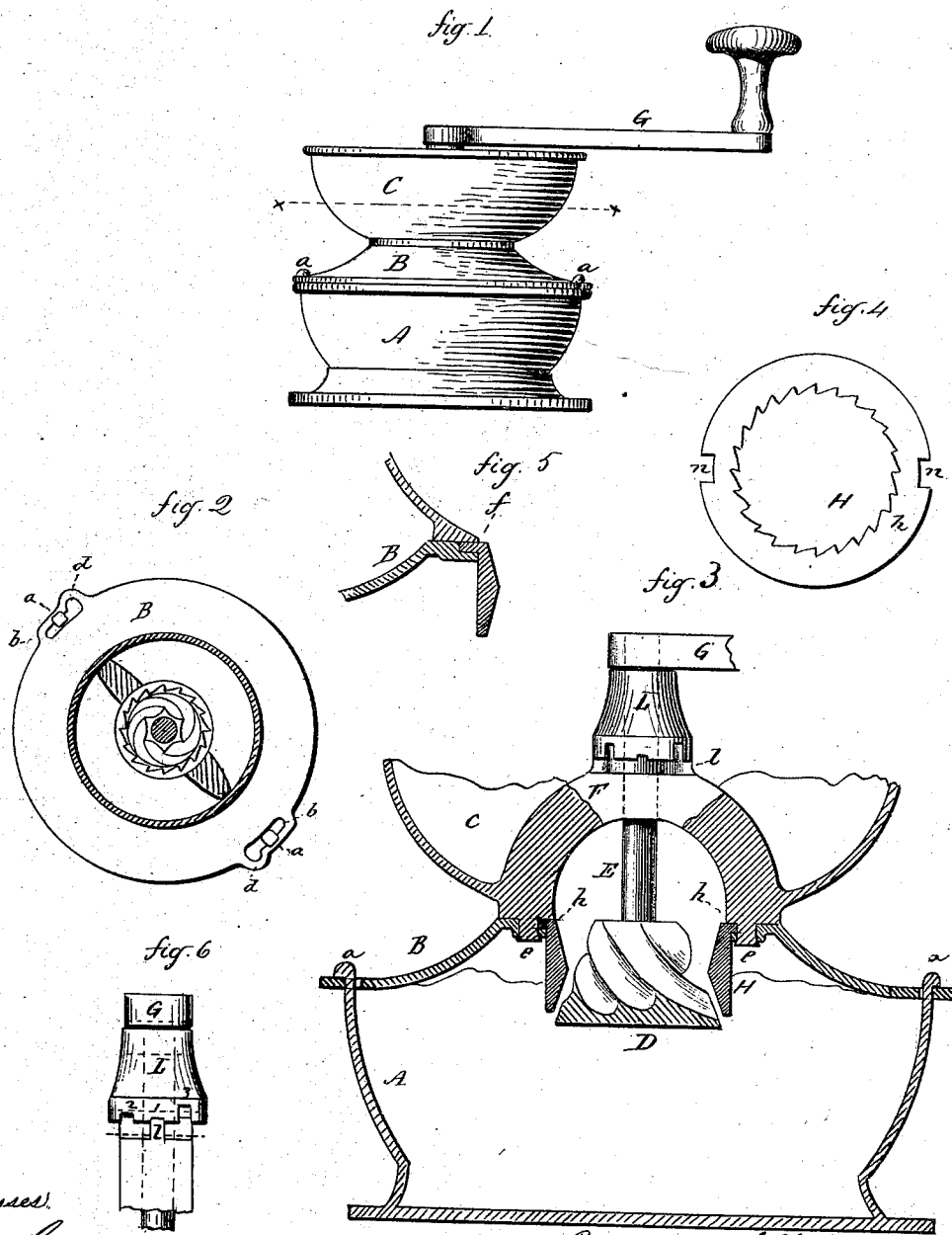


R. L. WEBB.
Coffee-Mill.

No. 168,307.

Patented Sept. 28, 1875.



Witnesses:
A. Shuman conf.
Clara Droughton

Rodolphus L. Webb
 Inventor
 By *att'y*: *John S. Paul*

UNITED STATES PATENT OFFICE.

RODOLPHUS L. WEBB, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
LANDERS, FRARY & CLARKE, OF SAME PLACE.

IMPROVEMENT IN COFFEE-MILLS.

Specification forming part of Letters Patent No. **168,307**, dated September 28, 1875; application filed
July 6, 1875.

To all whom it may concern:

Be it known that I, RODOLPHUS L. WEBB, of New Britain, in the county of Hartford and State of Connecticut, have invented a new Improvement in Coffee-Mills; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, side view; Fig. 2, transverse section on line *xx*; Fig. 3, vertical section; Figs. 4, 5, 6, detached views.

This invention relates to an improvement in that class of mills for grinding coffee and similar purposes commonly called "box-mills"—that is to say, a vertical mill with a receptacle beneath to receive the ground material after it has passed through the grinding process, the object of the invention being to simplify and cheapen the construction, and yet produce a durable mill; and the invention consists in the details of construction, as fully hereinafter specified.

A is the base or box, which is made of substantially circular form and cast complete, as seen in Fig. 3, up to the cover B. The box is constructed with two headed lugs, *a*, projecting upward from its edge. The cover B is made practically a part of the hopper C. This cover is constructed with segmental slots *b*, corresponding to the lugs *a*, and enlarged at one end so as to pass on over the heads of the lugs *a*, and so that when set onto the lugs a partial turn, as denoted in Fig. 2, will secure the hopper to the box, from which it may be removed by returning the cover until the enlarged parts *d* of the slots come to the lugs, in which condition the cover may be taken off. D is the runner, attached to a vertical shaft, E, and supported on a saddle, F, in the hopper, in the usual manner, and to this shaft the crank G is attached to rotate the runner. H is the stationary runner-cylinder, which is constructed internally of the usual form, to correspond to the runner, and so that as the runner, which is of conical shape, is drawn up into the cylinder, the grinding will be finer, or, if lowered, the grinding will be coarser, substantially as in

common construction of mills. The hopper C is constructed with studs *e*, which pass through corresponding perforations in the cover, and there riveted, so as to firmly secure the cover and hopper together, as seen in Fig. 3. Between the hopper and the cover an annular recess, *f*, is formed, into which a flange, *h*, on the runner-cylinder sets, and is placed there before the hopper and cover are secured together, so that the runner-cylinder is held in place by the same means which secures the hopper and cover together, and, in order to prevent the turning of the cylinder with the runner, the flange is constructed with notches *n* corresponding to the studs *e* or to other projections in the annular recess, which interlock with said studs or projections, and the cylinder is thereby held as a permanent part of the hopper. To adjust the runner vertically relative to its cylinder, to regulate the degree of fineness of the grinding, a sleeve, L, is placed over the shaft beneath the crank G, the lower edge of which is constructed with several notches, 1 2 3, more or less, the notches being of different depths, and on the saddle is formed a projection, *l*, (see Fig. 6,) corresponding in width to the said notches, so that if the sleeve be turned to bring the notch 1 onto the projection *l*, the sleeve will be held in that position and prevented from turning with the crank. The head of the crank rests upon the top of this sleeve.

Suppose the notch 1 to be of the least depth. This set upon the projection *l*, as in Fig. 6, will consequently raise the crank and the runner to their highest position and cause the finest grinding. If from this position the sleeve be turned until the deepest notch 3 be brought onto the projection *l*, the sleeve will consequently be lowered to that extent, and with it the crank and runner, and the coarsest grinding produced. Intermediate notches will produce intermediate results.

I claim—

1. A box-mill case, consisting of the box A, the cover B, and the hopper C, the box constructed with the headed lugs *a*, and the cover with corresponding slots, whereby the two parts are secured together, substantially as set forth.

2. The combination of the cover B and hopper C, constructed with the intermediate recess *f*, with the runner-cylinder H, constructed with the flange *h*, and so as to interlock between and with the said hopper and cover, substantially as described.

3. In a vertical mill, the combination of the

runner-shaft, the notched sleeve L, and corresponding projection *l* on the saddle, substantially as and for the purpose specified.

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Witnesses:

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