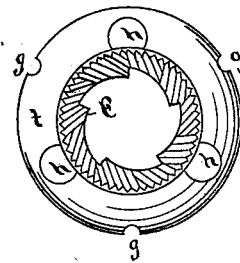
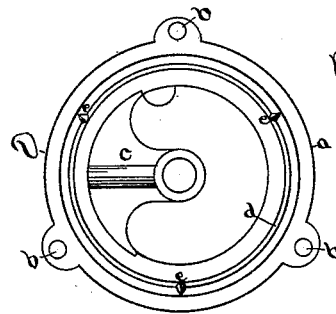
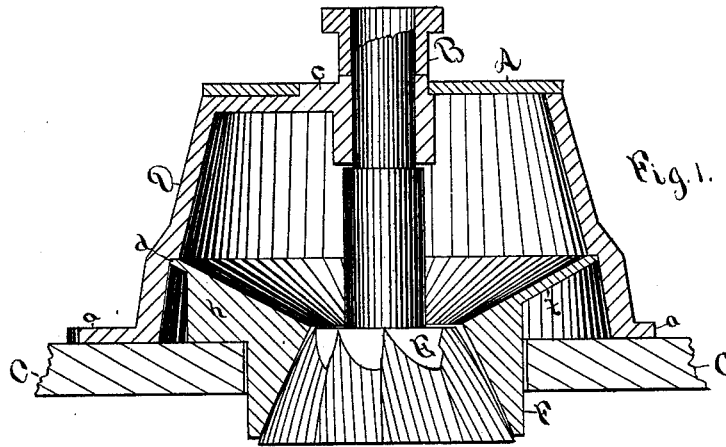


O. W. STOW.
Coffee-Mill.

No. 213,707.

Patented Mar. 25, 1879.



Witnessed:
H. B. Thomson.
P. J. Marshall.

Inventor
Orson W. Stow.
By James Shepard Atty.

UNITED STATES PATENT OFFICE.

ORSON W. STOW, OF PLANTSVILLE, CONNECTICUT.

IMPROVEMENT IN COFFEE-MILLS.

Specification forming part of Letters Patent No. **213,707**, dated March 25, 1879; application filed January 30, 1879.

To all whom it may concern:

Be it known that I, ORSON W. STOW, of Plantsville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Coffee or Spice Mills, of which the following is a specification:

My invention consists of the hopper having an internal shoulder near its base, in combination with the box-top, the flanged grinding-shell fitted to said shoulder, and also provided with a seat for resting upon the box-top, and mechanism for securing the parts together; also, in combination with the above, of projections and recesses formed on the hopper and flanged grinding-shell to prevent one from turning on the other, as hereinafter described.

In the accompanying drawings, Figure 1 is a central vertical section, partly in elevation, of a box-mill which embodies my invention. Fig. 2 is an under-side view of the hopper with all other parts detached, and Fig. 3 is a like view of the grinding-shell.

The cover A and adjusting device B, herein partially shown, are not new with me; hence no description of them is necessary; and other parts may be substituted for them, if desired, or the cover may be omitted. The box C is also old.

I make the hopper D with a flange or seat, *a*, at the bottom edge, for resting upon the top of the box C, and provide said flange with screw-holes *b b b*, through which screws may be passed into the box-top to secure the hopper in place.

At the top of the hopper there is an arm, *c*, in which the bearing for the spindle of the grinding-nut E is formed.

Near the bottom of the hopper I form an internal shoulder, *d*, and upon the sides I form lugs or projections *e e e*, which serve as dowel-pins.

F designates the grinding-shell, the top of which is provided with a concentric flange, *f*, the top of which fits the inside of the hopper, and is designed to rest against the shoulder *d* thereof.

Notches *g g g* are made in the edge of said flange, to coincide and engage with the lugs *e* on the inside of the hopper, so that when the two are placed together the shell cannot turn within the hopper.

The upper side of the flange on the grinding-shell is dishing, to form the bottom of the

hopper for feeding the contents thereof toward the middle.

The under side of the flange is provided with a seat or seats, *h h h*, which also are designed to rest upon the top of the box. From these seats downward the exterior of the grinding-shell is substantially cylindrical.

The parts being thus formed, the grinding-shell is placed in position within the hopper, the grinding-nut, adjusting device, crank, &c., are put in place, and the whole placed upon the top of the box with the cylindrical part of the shell entering a hole in the middle of the top. The hopper is then secured to said box-top by screws, when the shell is confined firmly within the hopper, the shoulder *d* holding it down and pressing the seats *h* against the box-top.

The grinding-shell, formed with a dishing flange at the top, and in a separate piece of metal from the hopper, substantially as herein described, and the hopper with the bridge or arm *c* cast on its top edge are shown and claimed in another application of even date herewith.

By my invention I produce a mill with an elevated hopper, which may be very conveniently attached to the box in a cheap and substantial manner.

I claim as my invention—

1. In a box-mill, the combination of the following elements, viz: first, the hopper having the shoulder *d* near its base; second, the box-top; third, the flanged grinding-shell fitted to said shoulder, and also provided with a seat for resting upon the box-top; and, fourth, fastening mechanism to secure the hopper to the box-top and bind the flanged grinding-shell in its place between the box-top and hopper, substantially as described, and for the purpose specified.

2. In a box-mill, the combination of the hopper having the shoulder *d* near its base, the box-top, the flanged grinding-shell fitted to said shoulder, and having, also, the seat for resting upon the box-top, the projections *e*, and notches *g*, one on the hopper and the other on the flange, and mechanism for securing the hopper and box-top together, whereby all of the parts are held in place, substantially as described, and for the purpose specified.

Witnesses: ORSON W. STOW.
E. B. HOLCOMB,
A. M. LEWIS.