

O. W. STOW.
Coffee or Spice Mill.

No. 225,243.

Patented Mar. 9, 1880.

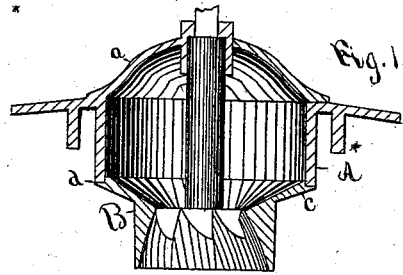


Fig. 1.

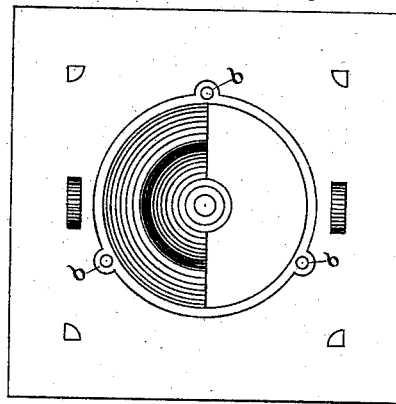


Fig. 2.

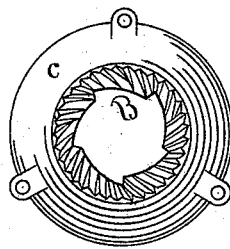


Fig. 3.

Witnesses:

W. B. Thomson

P. J. Marsley

Inventor

Orson W. Stow

By James Shepard Atty

UNITED STATES PATENT OFFICE.

ORSON W. STOW, OF PLANTSVILLE, CONNECTICUT.

COFFEE OR SPICE MILL.

SPECIFICATION forming part of Letters Patent No. 225,243, dated March 9, 1880.

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 in the peculiar construction and combination of the parts which form the bridge, hopper, and grinding-shell, 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; and Figs. 2 and 3 are under-side views of detached parts of said mill.

Instead of making the hopper gradually flaring from the top down, I make the sides A of the hopper nearly straight, but a little largest at the bottom, so as to allow for draft in molding. At the top edge of the sides there is the cross-bar or bridge *a*, in which the bearing for the spindle of the grinding-nut is formed. This bridge being at the top, and the sides A being largest at the bottom, may be readily cast in one and the same piece with said sides. The top of the box may also be cast in the same piece with the hopper-sides and bridge; or the hopper may be otherwise secured to the box-top.

Projecting from the lower edge of the sides A there are pins *b b b*, preferably cast in, but they may be inserted after casting, if desired.

The grinding-shell B, I form with a concentric flange, *c*, dishing upon its upper side, so as to form the bottom of the hopper, and of a size at its upper edge which will enter the lower open end of the sides A for a short distance. Below the upper edge the flange is enlarged to correspond in size with the exterior of the sides A, thereby forming a shoulder, *d*. This grinding-shell is placed within the sides A, and with the shoulder *d* resting against the lower edge of said sides, and with the pins *b* passing through holes in the flange of the grinding-shell made to receive them

when the ends of said pins are upset, to hold the parts A and B together, and the hopper and grinding-shell are then complete. The other parts, all of which are old, may then be put in place in the ordinary manner.

It is, of course, evident that mechanical means other than the pins *b* may be employed to secure the two parts of the hopper together.

By thus making the hopper in two parts I am enabled, first, to cast the bridge or cross-bar in one and the same piece with the sides of the hopper, thereby securing it both firmly and cheaply; and, second, the grinding-shell and bottom part of the hopper, being cast separately and requiring no drilling, may be made of harder iron than the other parts, thereby making the mill more durable.

I claim as my invention—

1. In a box-mill, the sides of the hopper, formed straight and with the inside diameter at the bottom as large as at the top, and having the bridge cast on the upper edge, the whole formed of one and the same piece of metal, substantially as described, and for the purpose specified.

2. In a box-mill, the hopper, made in two parts—viz., the cast-metal sides, formed with the inside diameter at the bottom as large as at the top, and the separately-formed cast-metal flaring flange, the dishing side of which constitutes the bottom—said parts being mechanically secured together, substantially as described, and for the purpose specified.

3. In a box-mill, the hopper-sides A, having the inside diameter at the bottom as large as at the top, in combination with the grinding-shell having a flaring flange on its upper edge, which forms the bottom of the hopper, fitted into the lower end of the hopper-sides, substantially as described, and for the purpose specified.

ORSON W. STOW.

Witnesses:

E. B. HOLCOMB,
A. M. LEWIS.