(No Model.)

R. L. WEBB.

COFFEE MILL.

No. 254,414. Patented Feb. 28, 1882.

fig. 1

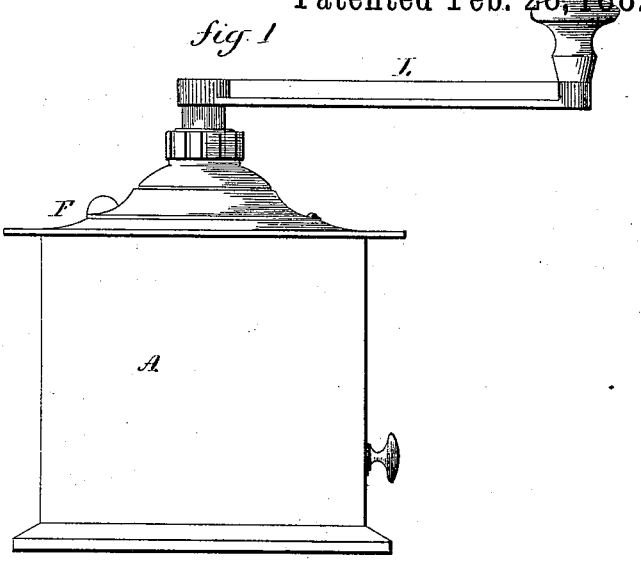


fig. 2

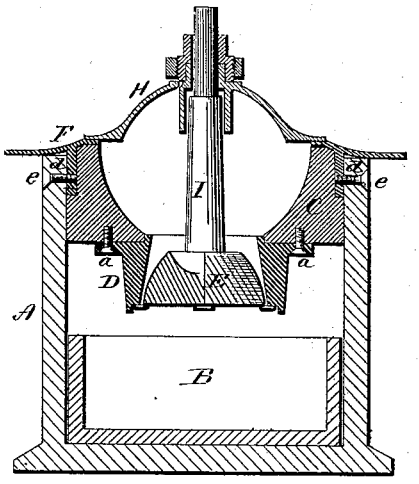


fig. 3

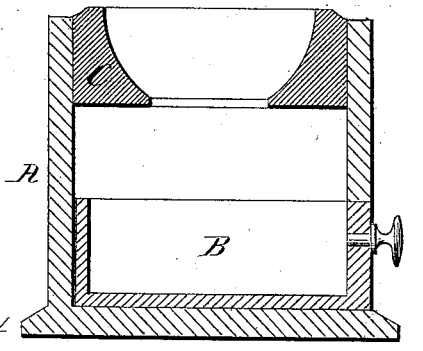
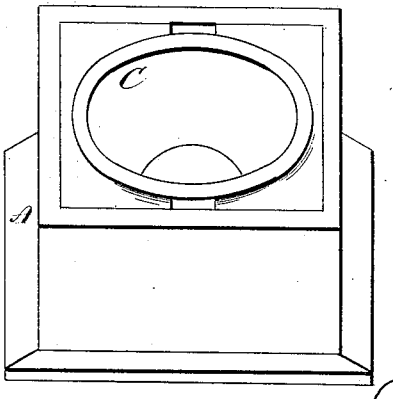


fig. 4



Witnesses:
J. H. Shumway
Jno. A. Earle

Rodolphus L. Webb
Inventor,
By Atty's
Jno. A. Earle

UNITED STATES PATENT OFFICE.

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

COFFEE-MILL.

SPECIFICATION forming part of Letters Patent No. 254,414, dated February 28, 1882.

Application filed December 15, 1881. (No model.)

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, a side view; Fig. 2, a vertical central section; Fig. 3, a vertical central section with the grinding mechanism and top removed, and in Fig. 4 a top perspective view of Fig. 3.

This invention relates to an improvement in that class of coffee-mills commonly termed "box" mills.

In the more general construction of this class of mills the hopper is made of metal, the runner-shell attached to it below or made a part of it, the top of the box attached to or made a part of the hopper, and all the parts secured to the box through the top. This construction presents the entire strain of the working parts upon the connection between the top and box—necessarily a small bearing between the two—so that it frequently occurs that the connections between the top and box become detached, rendering the mill useless unless conveniences for repair are at hand. Another serious objection to this class of mills arises from the fact that the coffee to be ground is generally placed in the hopper directly from the roaster, hot and somewhat moist. The action of the hot berry and the moisture arising therefrom upon the metal chemically acts upon the surface of the hopper, producing oxidation to an extent to soon affect the coffee. To obviate this difficulty the hopper has been coated with copper, tin, or otherwise, or, as in the case of the well-known French mill, the hopper is made of wood, which more completely obviates this last difficulty than any device known; but in the case of the French mill the wood hopper is attached to or made a part of the top and secured to the box by means of the top, as in the case of the metal top and hopper, so that in this French mill the first difficulty above mentioned exists.

The object of this invention is principally to attach the hopper to the box independent of the cover, as well as to make practical the use of a wood hopper; and the invention consists in the construction of a box mill, as hereinafter described, and particularly recited in the claims.

A represents the box, of usual form, and provided with the usual drawer, B, to receive the ground material.

C is the hopper, preferably made from a block of wood, fitted closely inside the walls of the box and secured directly to the walls by glue, nails, screws, or other suitable device.

D is the runner-shell, secured to the under side of the hopper by screws *a*, or otherwise. The shell is of the usual internal form, and within it stands the runner E in the usual relation.

F is the top of the box, preferably made from cast metal, and with ears *d* to extend down into the box, and by which it is secured to the box by the insertion of screws *e* through the sides of the box into the ears, as seen in Fig. 2. The opening through the top F corresponds to the opening in the top of the hopper, and it should be constructed upon its under side to set close down upon the top of the hopper, or the hopper should be arranged in the box so as to come close up to the under side of the top, the top covering the upper edge of the walls of the box and the body of the hopper.

H is a bridge across the top for the support of the runner-spindle I and the crank L in the usual manner, too well known to require detailed description as to its adjustment.

By making the hopper C of wood all deleterious effects of the metal upon the coffee are avoided, the mill possessing the great advantages of the well-known French mill.

By constructing the hopper to fit the interior of the box the strain produced by the operation of the runner with its shell is brought directly upon the sides of the box and independent of the top. The top may be removed without detaching the hopper. The hopper, when fitting closely the interior of the box, greatly strengthens the box, and practically becomes part of the box, as if made solid with it.

While preferring to make the hopper of wood, for the reasons before stated, it may be made

of metal. In making the hopper of metal the runner-shell may be cast as a part of it, while if made of wood the shell should be attached substantially as before described. I therefore do not wish to be understood as limiting my invention to the hopper as made from wood.

It will be understood from the foregoing that I do not broadly claim a hopper secured to the sides of the box independent of the top, as such, I am aware, is not new; but

What I do claim, and desire to secure by Letters Patent, is—

1. A box mill having a hopper, C, arranged in the box at its upper edge and secured to the sides of the box, combined with a top having an opening corresponding to the opening in the hopper, constructed to fit upon the upper surface or body of the hopper, and secured to the box independent of the hopper, substantially as described.

2. The combination, in a box mill, of a wood hopper, C, arranged within the box and supported by the sides of the box, combined with a runner-shell upon the under side of the hopper, and a metal top having an opening corresponding to the opening in the hopper, and constructed to fit the body of the hopper and extend and secured to the sides of the box independent of the hopper, substantially as described.

RODOLPHUS L. WEBB.

Witnesses:
C. S. LANDERS,
S. B. HARPER.