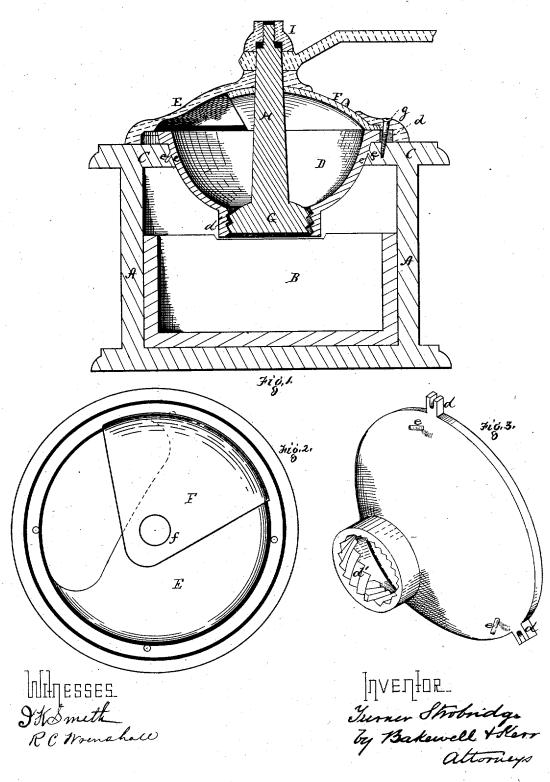
## T. STROBRIDGE.

COFFEE-MILL.

No. 7,583.

Reissued March 27, 1877.



# UNITED STATES PATENT OFFICE.

### al lagero kii ja li Purcia diga ja palgres (Liurk inauresi 1921 jõis este sal õtsiselis. Bear a TURNER STROBRIDGE, OF NEW BRIGHTON, PENNSYLVANIA.

## IMPROVEMENT IN COFFEE-MILLS.

Specification forming part of Letters Patent No. 159,467, dated February 2, 1875; reissue No. 7,174, dated June 13, 1876; reissue No. 7,583, dated March 27, 1877; application filed March 1, 1877.

To all whom it may concern: Be it known that I, TURNER STROBRIDGE, of New Brighton, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Coffee Mills; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which-

Figure 1 is a vertical section of a coffee mill embodying my invention. Fig. 2 is an under view of the cover, and Fig. 3 is a perspective

view of the hopper.

Like letters refer to like parts whenever

they occur.

My invention relates to the construction of coffee and spice mills in such manner that the hopper is inclosed by the box, and may be closed in turn by a sliding gate or cover, whereby a compact and neat mill is obtained.

I will now proceed to describe my invention with reference to the accompanying drawing, so that others skilled in the art may construct

and use the same.

A indicates the box, with its drawer B, of any suitable construction. The top C of the box is cut away, so that the hopper may be suspended therein, by means of a projecting flange or lugs on the hopper. To facilitate the suspension of the hopper, I preferably bevel the opening in top C to correspond with the curve of the hopper, as shown at c. This, also, will diminish the liability of the splitting of the wood when the screws which secure the cover are introduced, (when a cover is used and secured as shown.) D represents the hopper or grinding shell, provided with a flange or lugs, d, by which it is suspended in the box A. The hopper is fastened down, and also prevented from turning, by the screws g. The hopper has the usual grinding-face, d', and a series of projections or points, e, which I provide for the purpose of taking hold upon the beveled edge c of the top C, to assist in preventing any movement of the hopper. The points, if sufficiently numerous, will of themselves prevent a change of position of the hopper, so that screws may be omitted. This will be found the cheapest and most convenient way of suspending the hopper. E is the | ness with which the several parts and the box

cover, having a central opening for the passage of the shank of the grinding-nut, and a sunken or recessed rim for the accommodation of the lugs d or the flange of the hopper, so that the lower edge of the cover rests evenly upon the top C, and at the same time binds upon the hopper. This cover E is provided with a sliding gate or door, F, which is pierced, as at f, for the passage of, or made to rest against, the shank of the grinding-nut, upon which it turns or bears, said gate F resting, by its lower edge, upon the upper edge of the hopper, and sliding or moving within or without the cover E, so as to be out of the way when the opening in the cover is unclosed. G represents the grinding nut, having a tapering shank, H, which passes through the cover, projecting portion of gate F, and the crank, and is secured above by the usual tighteningnut I.

The devices are put together as follows: The cover and gate are placed upon the hopper, the shank of the grinding-nut passed through the hopper, cover, and crank, and secured by the tightening nut. The lugs or screw-openings in the flange of the hopper are made to register with those in the cover, after which the operative parts are dropped into the opening in the top of the box, and secured by a single set of screws, which pass through the cover and lugs or flange of the hopper. The projecting points on the outside of the hopper will bite into the top of the box, and as the cover binds upon the upper edge of the hopper, these will, of themselves, if sufnciently numerous, be sufficient to prevent any movement of the hopper, so that, if desired, the screws need not pass through the flange of the hopper.

The hopper may be suspended, as shown, and the cover replaced by a bridge, to support the shank of the grinding-nut. The grinding shell or hopper and the cover may be secured by a separate set of screws. The lower part of the grinding shell may be formed with lugs or projections, to guide and steady the

grinding-nut.

Among the advantages of my invention are the simplicity of construction, and the readimay be adjusted or set up, whereby time and labor are saved, and a serviceable article produced.

Having thus described my invention, what I claim, and desire to secure by Letters Patent. is—

1. A coffee or similar mill, having a detachable hopper and grinding-shell formed in a single piece, and suspended within the box by the upper part of the hopper or a flange thereon, substantially as and for the purpose specified.

2. In a coffee-mill, the combination, with the box and its top, of a detachable hopper suspended within the box by its upper part, and a bridge supported on the box, substantially as and for the purpose specified.

3. In coffee and spice mills, the combination of the box, having a top, with the hopper suspended therein by means of a projecting flange or lugs, which rest upon, or take into, the top, substantially as described.

4. The combination of the box, having a top, with the hopper suspended therein by means of a projecting flange or lugs, which rest upon, or take into, the top, and a cover, substantially as described.

5: The combination of cover E and grinding shell or hopper D, the latter provided with lugs or a flange, so that the two parts may be secured to the box by a single set of screws, substantially as specified.

6. The hopper and grinding shell D, provided with points or projections c on its outer surface, in combination with cover E, projecting, so as to rest upon the top of the box and bind upon the upper edge of the hopper, substantially as and for the purpose specified.

7. A coffee-mill, having a detachable hopper suspended within the box or case by its upper part, and a sliding cover for closing the top of the hopper, substantially as specified.

8. The combination of the hopper and grinding shell D, grinding out G, having shank H, and cover E, having a sliding gate or door, F, substantially as and for the purpose specified.

In witness whereof I, the said TURNER STROBRIDGE, have hereunto set my hand.

#### TURNER STROBRIDGE.

#### Witnesses:

J. H. LOGAN, J. C. BOYLE.