(No Model.)

M. LEPAGE.

COFFEE MILL.

No. 333,870. Patented Jan. 5, 1886.

Fig. 1,

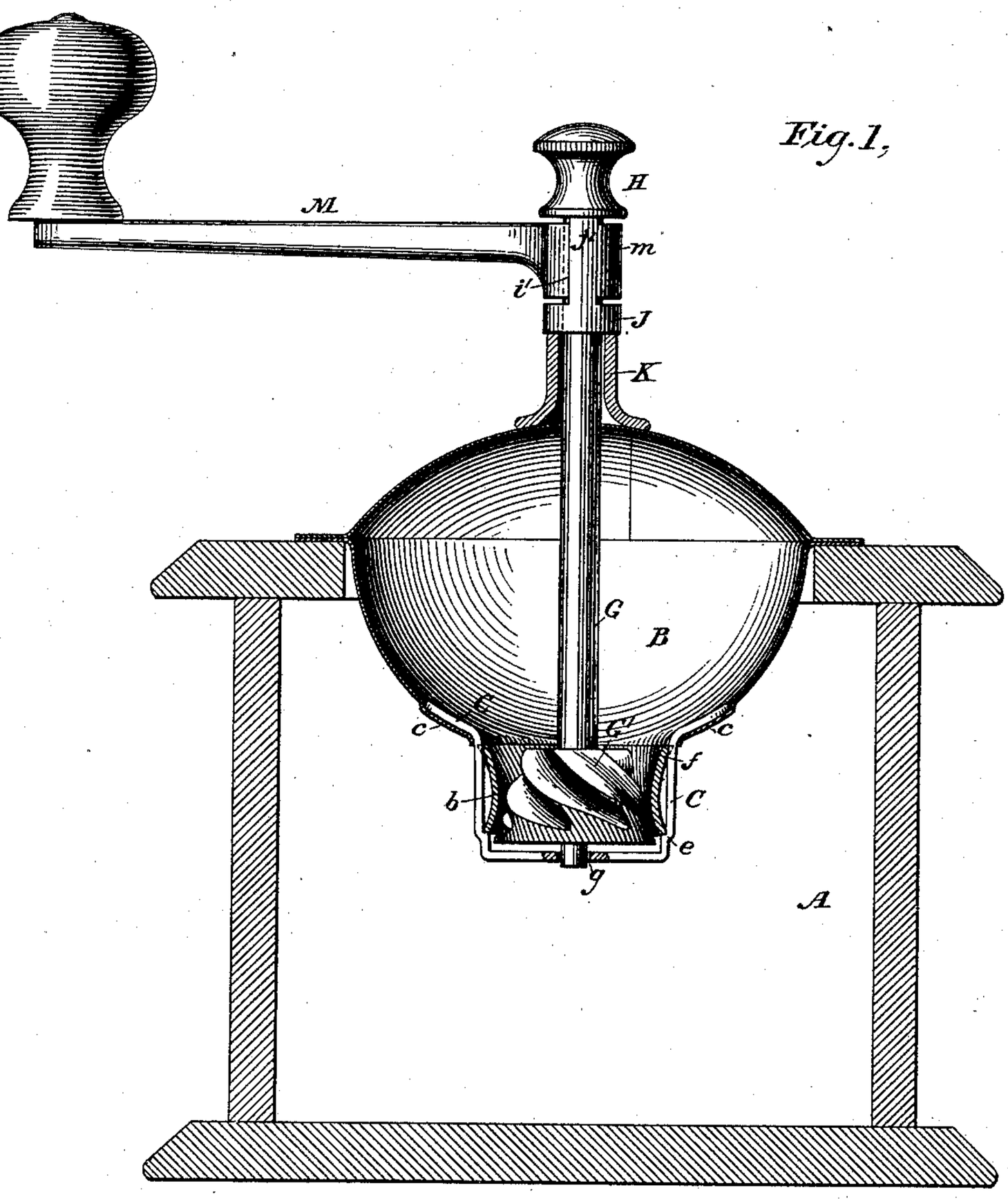
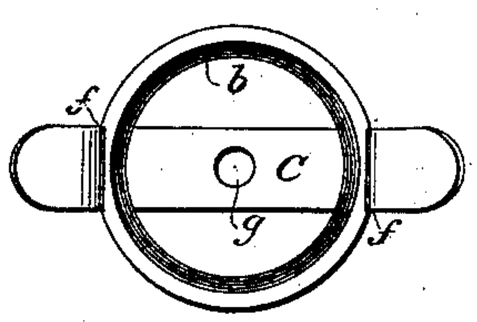


Fig. 2.



Witnesses

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MATTHEW LEPAGE, OF WOODHAVEN, ASSIGNOR TO THE LALANCE & GROSJEAN MANUFACTURING COMPANY, OF NEW YORK, N. Y.

COFFEE-MILL.

SPECIFICATION forming part of Letters Patent No. 333,870, dated January 5, 1886.

Application filed April 16, 1885. Serial No. 162,452. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW LEPAGE, a citizen of the United States, residing in Woodhaven, in the county of Queens and State of New York, have invented certain new and useful Improvements in Coffee-Mills, of which the following is a specification.

The invention relates particularly to the class of coffee-mills employed for domestic purposes.

The object of the invention is to simplify the construction, thereby lessening the expense of the mill, and at the same time rendering it more durable.

The invention consists in providing simple and efficient means for supporting the upper or outer grinding-surface and the lower end of the shaft of the inner or lower grinder. A brace or strap is secured to the wall of the hopper, instead of to a separate supporting-plate, as has heretofore been the custom. This enters the hopper, and is secured to its inner wall. It is provided with shoulders for supporting the stationary or upper hopper, and it enters suitable recesses formed in the edge of the same, thereby preventing it from turning. The ends of this strap extend inside the hopper, and are secured to the inner surface. This construction secures a more firm and rigid support than can be obtained by fastening the brace to the outside, for the downward pressure exerted thereon is resisted by the broad bearing-surface of the brace upon the hopper.

No claim is herein made upon the means for attaching the handle, nor for adjusting the position of the grinders, as these features are essentially old.

In the accompanying drawings, Figure 1 is a vertical section of the mill, showing in full the adjusting device. Fig. 2 is a plan view of the stationary grinder and strap.

Referring to the figures, A represents the supporting and inclosing box of the mill, and B the hopper. The outer grinding-surface, *b*, is placed at the base of the hopper, and is supported in its proper position by means of a strap or brace, C. The ends of the strap extend within the lower end of the hopper, and are turned outward, so as to bear against its inner surface. They may be riveted to the metal of the hopper or fastened in any other convenient manner. They are preferably let into corresponding recesses, *c c*, formed in the lower edge or flange of the hopper. The lower end of the cylindrical grinder *b* rests against suitable shoulders, *e*, formed upon the vertical portions of the strap C, and the upper edges of the same have recesses *f* just beneath the recesses *c*, into which the corresponding portions of the strap or brace fit tightly. These prevent the stationary grinder from turning in its support. In this manner the outer grinding surface or cylinder is securely held in position. The middle portion of the strap is horizontal, and at its central point there is formed an opening, *g*, designed to receive the lower end of the shaft G, carrying the grinder G′, which is fitted within the outer grinder above the strap C. The lower end of the shaft G extends loosely through the opening *g*, which serves to retain it in position. The upper end of the shaft carries a nut, H, turning upon a screw-thread. A sleeve, J, encircles the shaft below the nut, and the lower end of the sleeve rests upon a collar, K, which is supported from the upper portion of the hopper. The sleeve J carries two upright projections or lugs, one of which is shown at *j*′, and the nut rests upon the ends of these projections. When the nut is screwed upon the shaft, it is evident the latter will be raised, thus lessening the distance between the grinding-surfaces, and by loosening the nut the space between the grinders will be increased. The handle M is secured rigidly to the shaft by a rivet passing through the hub *m*, or in any other convenient manner, and, when turned, carries with it not only the shaft and adjusting-screw, but also the sleeve J.

It should be noticed that the length of the lugs *j*′ and *j*² is such that the handle may be moved vertically with reference to the same a sufficient distance to permit of the required adjustment of the grinder.

I claim as my invention—

1. The combination, substantially as hereinbefore set forth, with the hopper of a coffee-mill and its stationary grinder, of a support

for said grinder, consisting of a strap the ends of which pass within the lower end of said hopper.

2. The combination, substantially as hereinbefore set forth, in a coffee-mill, of a hopper formed with recesses in its lower edge, a movable and a stationary grinder, the latter formed with recesses in its upper edge, and a strap constituting a guide for the movable grinder, and having shoulders for supporting the stationary grinder, the ends of said strap being secured in recesses within the hopper, substantially as described.

In testimony whereof I have hereunto subscribed my name this 14th day of April, A. D. 1885.

MATTHEW LEPAGE.

Witnesses:

JAMES COCHRAN,

CHARLES A. TERRY.