

(No Model.)

F. K. BRIERLY.  
COFFEE MILL.

No. 284,271.

Patented Sept. 4, 1883.

*Fig. I.*

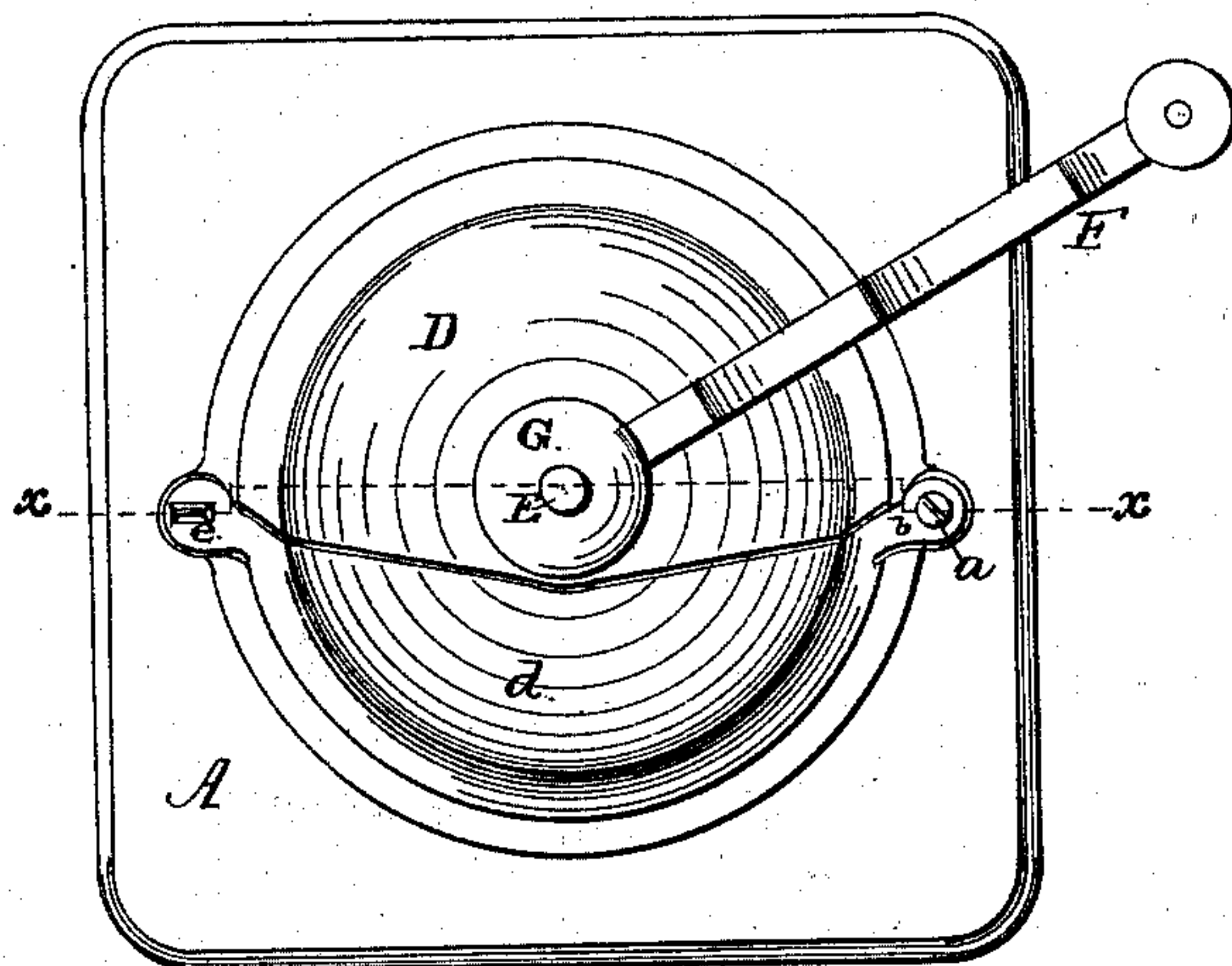


Fig. 2.

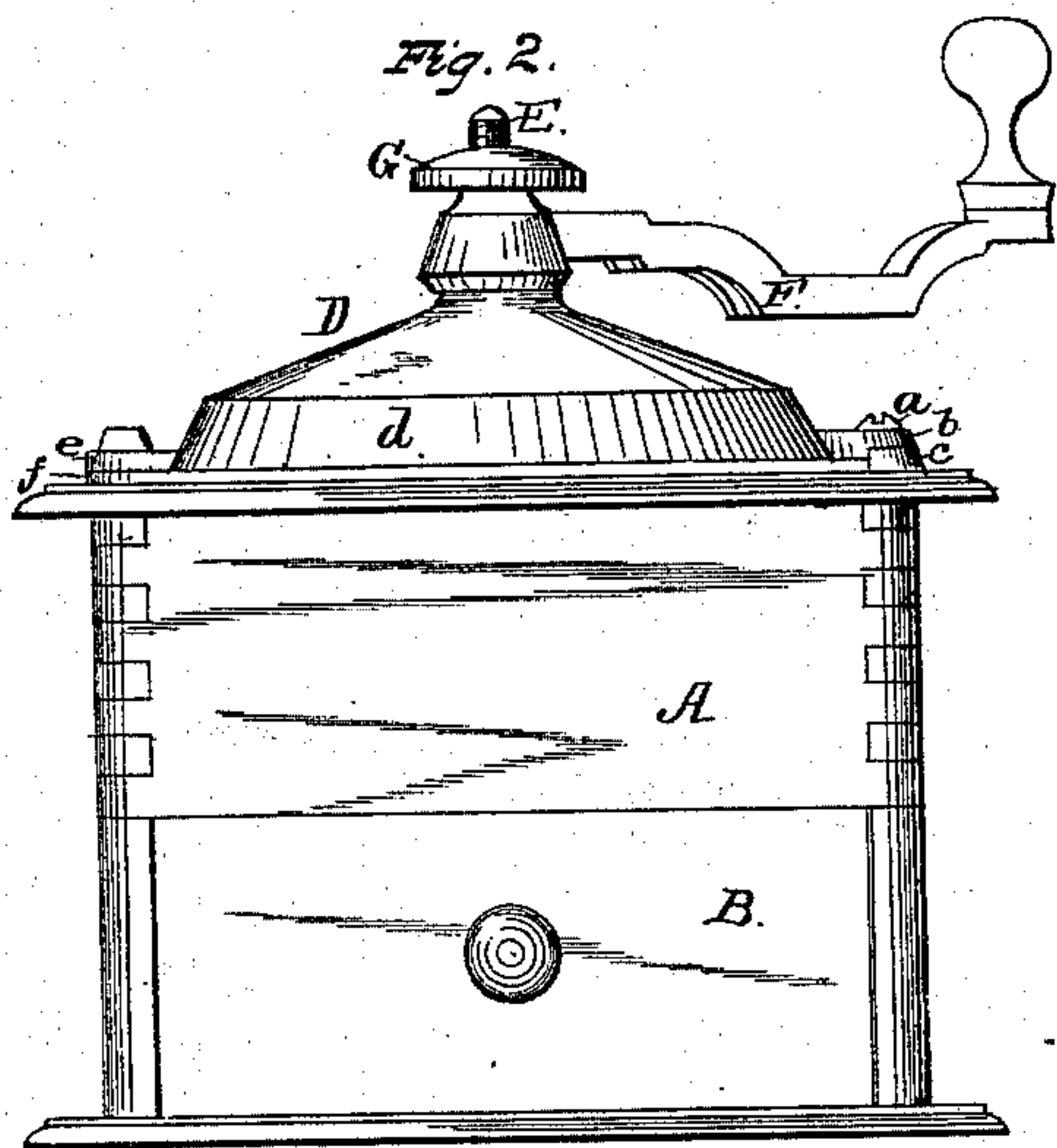
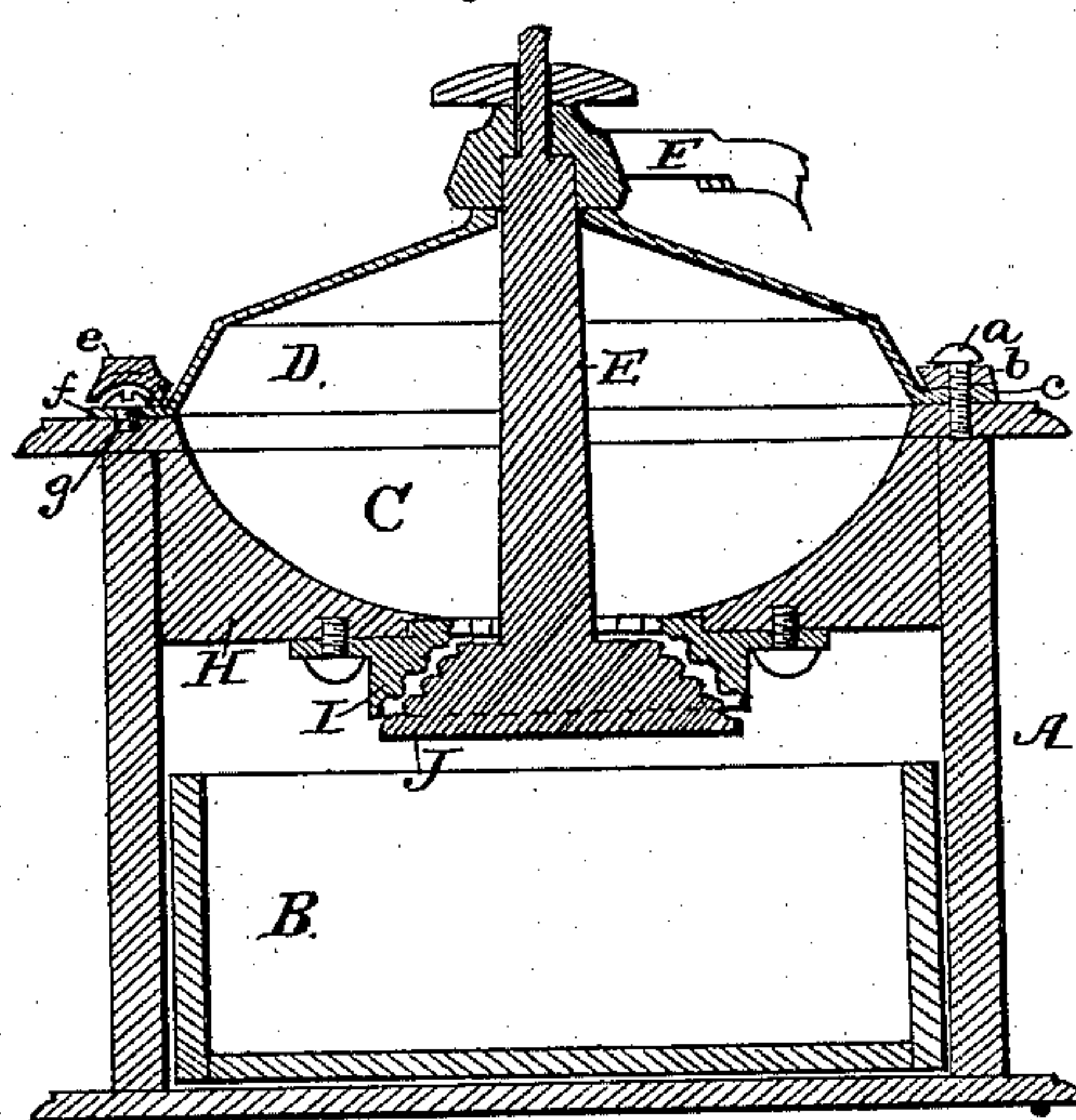


Fig. 3.



*Attest:*

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Atty



# UNITED STATES PATENT OFFICE.

FITZROY K. BRIERLY, OF NEW BRIGHTON, PENNSYLVANIA.

## COFFEE-MILL.

SPECIFICATION forming part of Letters Patent No. 284,271, dated September 4, 1882.

Application filed May 16, 188 (No model.)

*To all whom it may concern:*

Be it known that I, FITZROY K. BRIERLY, a citizen of the United States, residing at New Brighton, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Coffee-Mills, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 represents a top plan view of a coffee-mill to which my improvements have been applied. Fig. 2 is a front elevation of the mill, and Fig. 3 a vertical section taken through the line *x x* of Fig. 1.

My invention relates to grinding-mills, it being particularly designed for reducing coffee; but it will be obvious that other substances may be ground therein.

My improvement consists in the following construction and arrangement of devices, which will be first fully described, and then pointed out in the claims.

Referring to the drawings, A represents the frame or box of the coffee-mill, and which may be of any desired construction. It is provided with the usual receiving-drawer, B, for the ground coffee. The hopper is formed from the concave block H in the upper part of the mill, and the concavo-convex sections or castings D and *d*, one of which, *d*, constitutes the cover or door through which the coffee is placed in the hopper to be ground. (See Fig. 1.) The stationary casting D is preferably fastened to the frame A by screws or bolts, the screw *a* forming the hinge upon which the cover or lid turns. The parts of the castings D *d*, where the hinge is located, have overlapping and underlapping extensions *b c*, as shown by the drawings, the impinging faces of which are inclined in such manner that when the lid turns upon the screw or bolt *a* in opening, the incline raises the cover in its pivotal movement from contact with the top of the box-frame A. In general, the lids of coffee-mills of this class have had their hinge-joint screwed directly to the wooden box—a joint which soon wears loose, rubbing the top of the box and marring the appearance of the coffee-mill. On the opposite side of the cast-

ings D *d* from the extensions *b c* are other extensions, *e f*, cast with the castings. The latter receives the screw *g*, the head of which forms a catch, over which the depression in the under side of the extension *f* drops when the lid *d* is closed. The inclined extensions *b c* of the hinge also prevent the tendency of the lid or cover *d* from coming open during the grinding movement of the mill. Through the apex of the casting D is pierced a hole, which receives the upper portion of the grinding-shaft E. The crank-handle F has its bearing upon shaft E, and is keyed thereto. This bearing comprises two holes of different diameters, with a shoulder between them, as shown in Fig. 3, and into which the shaft E is fitted. Its upper end is screw-threaded for the reception of the adjusting-nut G. This form of bearing steadies the crank-handle and allows the regulating-nut to perfectly adjust the grinder.

The lower walls of the hopper, as stated, are formed from a block, H, fitted to the interior of the frame A, and turned out neatly into a saucer-shaped receptacle. To the central bottom aperture of the block is fitted the stationary grinding-shell I by bolts or screws or otherwise. Through this aperture passes the vertical grinding-shaft E, (adjustable, as described,) to the lower end of which is fitted the rotary conical grinder J; but it will be understood that any form of construction of grinding or reducing faces may be used.

When it is desired to obtain access to the grinder or hopper, either for inspection, repair, or renewal, the screws which secure the castings D *d* only have to be removed, and the nut G taken off, when the whole interior may be readily got at.

Having described my invention, what I claim as new is—

1. In a coffee-mill, a hopper provided with a cover having an inclined pivotal hinge-bearing, substantially as described, whereby the cover tends to remain closed during the grinding movement or agitation of the mill.

2. In a coffee-mill, the box A and castings D and *d*, each of which has an inclined face, in combination with a screw or bolt, *a*, pass-



ing through the inclined faces, substantially as and for the purpose described.

3. In a coffee-mill, the combination of the box A, screw or bolt *a*, the screw *g*, and the  
5 castings D and *d*, one of which, D, is stationary, and has an inclined face-extension, *c*, and the other, *d*, being movable, and has an inclined extension, *b*, and a catch depression, whereby the movable portion *d* may form a

cover for the hopper, opening and closing as is described.

In testimony whereof I affix my signature in presence of two witnesses.

FITZROY K. BRIERLY.

Witnesses:

JOSEPH WILSON,

WILLIAM G. HARKER.