T. H. DARLING.

COFFEE AND SPICE MILL.

No. 184,596. Patented Nov. 21, 1876.

Fig: 1.

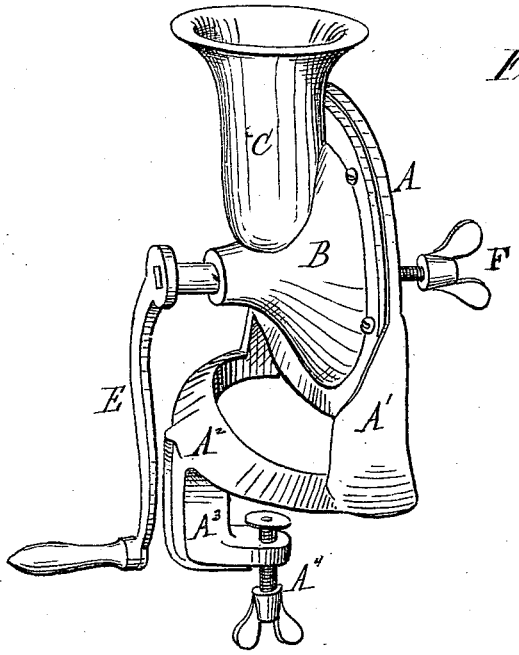
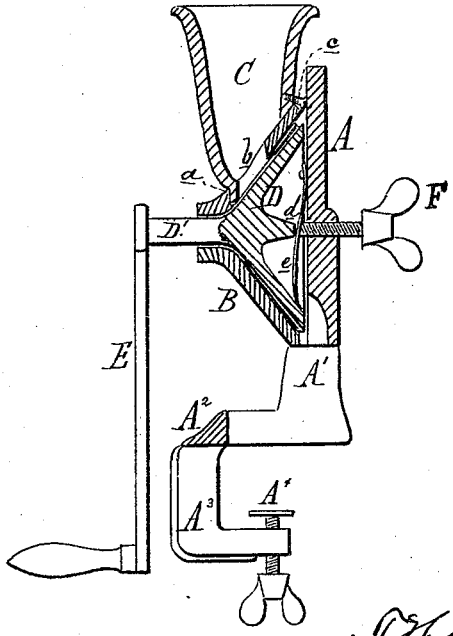


Fig: 2.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS H. DARLING, OF BLUE ISLAND, ILLINOIS.

IMPROVEMENT IN COFFEE AND SPICE MILLS.

Specification forming part of Letters Patent No. **184,596**, dated November 21, 1876; application filed July 18, 1876.

To all whom it may concern:

Be it known that I, THOMAS H. DARLING, of Blue Island, in the county of Cook and State of Illinois, have invented an Improvement in Hand-Mills for Grinding Coffee and Spices, of which the following is a specification:

My invention relates to certain improvements in hand-mills for grinding coffee and spices; and consists, first, in so arranging the mill and clamp that a cup can be placed under the discharge-spout to catch the ground material; secondly, in interposing a leaf-spring between the grinding-cone and the set-screw to produce an equality of grade in grinding.

Figure 1 is a perspective view. Fig. 2 is a transverse vertical section.

In the drawing, A represents a circular back plate, cast with legs A^1 A^1 united by a semicircular brace, A^2, to rest on the table, and from the center of which a curved clamp, A^3, reaches under the edge thereof, and the whole is securely clamped thereto by a set-screw, A^4. The legs A^1 elevate the mill proper high enough above the table to permit of the introduction of a tea-cup or a saucer under the spout. B is the conical front plate, having a serrated grinding-surface on the inside. C is the hopper, having a pendent lug, *a*, which is inserted in the front edge of the throat *b* of the outer plate, to which it is secured by a single screw, *c*, tapped into it through the back of the latter, as seen in Fig. 2. D is the grinding-cone cast with a spindle, D′, the outer end of which, after passing through the front plate, has riveted to it a crank, E. There is an axial extension, *d*, at the back of the cone, between which and the temper-screw F, a leaf-spring, *e*, is interposed. The upper end of this spring is riveted to the back plate, and the lower end impinges upon the bottom edge of the cone, to press it forward against its opposing grinding-face, and thus overcome the tendency of the cone to "cock up" under the weight of the crank. Keeping the lower edge of the cone up to its work insures uniformity of grade in grinding—not otherwise obtainable, where the grinding-cone is journaled at the front alone.

What I claim as my invention is—

1. The combination, with a grinding-mill, of a clamp for securing the mill to a table, arranged to elevate the said mill, so as to allow a cup to be placed under the discharge-spout on the table, substantially as and for the purposes set forth.

2. The combination, with a grinding-mill, of the legs A^1, the circular brace A^2, and clamp A^3, constructed and arranged substantially as and for the purposes set forth.

3. In a grinding-mill, substantially as described, the leaf-spring interposed between its grinding-cone and the temper-screw, as and for the purpose set forth.

THOMAS H. DARLING.

Witnesses:

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