

(No Model.)

T. WEAVER & G. N. & A. G. M. SHETTER.

COFFEE MILL.

No. 249,127.

Patented Nov. 1, 1881.

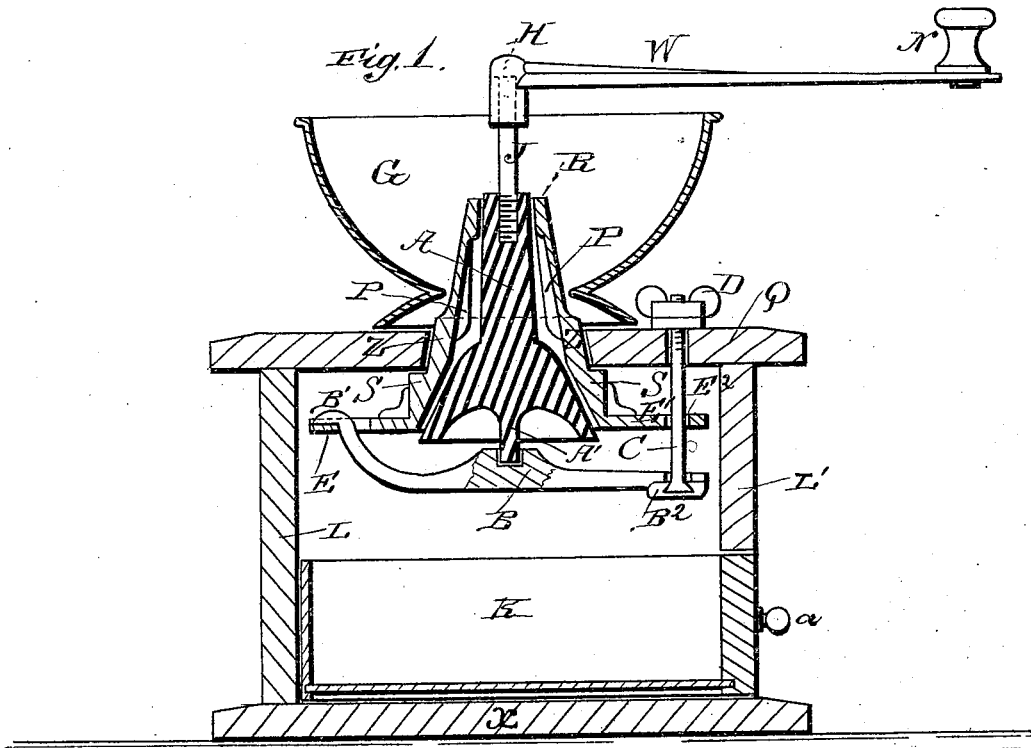
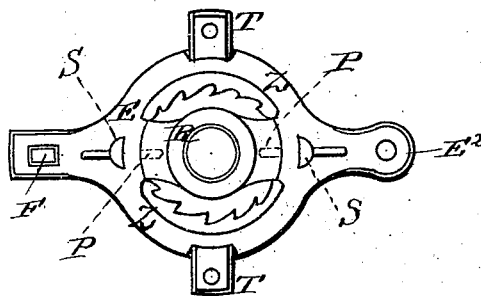


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

THEOPHILUS WEAVER, OF HARRISBURG, AND GEORGE N. SHETTER AND ARCHIBALD G. M. SHETTER, OF LEWISBERRY, PENNSYLVANIA; SAID WEAVER ASSIGNOR TO SAID G. N. SHETTER AND A. G. M. SHETTER.

COFFEE-MILL.

SPECIFICATION forming part of Letters Patent No. 249,127, dated November 1, 1881.

Application filed June 3, 1881. (No model.)

To all whom it may concern:

Be it known that we, THEOPHILUS WEAVER, of Harrisburg, county of Dauphin, and State of Pennsylvania, and GEORGE N. SHETTER and ARCHIBALD G. M. SHETTER, of Lewisberry, York county, and State of Pennsylvania, have invented a new and useful Improvement in Coffee-Mills, of which the following is a specification.

Our invention relates to portable family mills in which a limited quantity of coffee is ground from time to time as used; and its object or principal feature of improvement is in the construction and combination of parts, by which a better adjustment of the grinding-burr is obtained, in such manner that it may work free from contact with the inclosing mill-ring, and thus grind the coffee-grains to uniform fineness of grounds, and that the teeth of the mill or grinding surfaces may not wear out so rapidly. We attain said results by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section of our mill, and Fig. 2 is a top view of the burr and mill-ring.

Similar letters refer to similar parts in both the views.

In general description we set forth that we aim by our mill to make coffee-grounds of as equal size as possible, and that we seek to avoid powdery or small grounds among coarser grounds. Our mill is therefore made to have a certain or regulated action in grinding, its grinder or burr being definitely guided above and below to run centrally in the mill-ring. Said ring is spanned above by a bow, in which is an eye, which is the bearing for the shaft at the top of the said grinding-burr. Said ring has extensions at its lower margin, in which is attached and guided a bridge-tree, on which the spindle at foot of said burr rests and turns. Said bridge-tree is also definitely guided by a bolt passing through its end, through said ex-

tension of ring, and through the mill-top board, on which latter it is set by a thumb-nut.

Referring to the drawings, A is the grinder or burr. A' is its spindle. N W is the winch, which is attached to said burr by screw J. R Z represent the mill-ring, the ring proper being spanned by the bow R, in which is the upper bearing for the grinder-shaft A. On the inner sides of said bow R are vertical ledges P, which are detents to arrest coffee-grains and to crowd them to be readily seized by the coarser teeth or furrows at the upper part of the mill-ring and the grinder. On the outside of said ring, at its mid-height, are four lugs, S S T T, one in each quarter of the circle, and all in the same plane. They are arranged to set against the under side of the board Q, and the lugs T T are made with eyes to receive wood-screws, by which the ring is attached to said board. On the lower margin of said mill-ring are the oppositely-arranged arms E and E'. The first-named arm, E, has in it the angular eye F, and the other arm has in it the round eye E². Eye F is made to form a lap-joint with the hook B' at the end of the bridge-tree B, and the eye E² admits snugly through it the stem of the bolt C, which, by its swaged head, engages the end, B², of said bridge-tree, and is set at its opposite end by the thumb-nut D, as shown. The spindle A' of the grinder is rested in a cavity in said bridge-tree in such manner that the grinding-surfaces are free of each other, as shown. The said bridge-tree B is kept by the bolt C and by the arms E E' to always present the cavity therein for the spindle A' centrally in the axis of the mill-ring Z. The adjustment of the grinder A is therefore certain and definitely regulated. The joint at B' E is a lap-joint, and allows the free end of said bridge-tree to accommodate itself as the guided end B² is raised or lowered.

The mill-box L L' Q X, drawer K, and hopper G are made in the usual form. The winch W is made to unscrew below the level of the

said hopper's top to favor compact packing for shipment.

Having fully and clearly described our invention, what we desire to secure by Letters
5 Patent of the United States is—

The combination of the bridge-tree B, the mill-ring Z, provided with arms E E', the bolt C, the thumb-nut D, and the grinder A, whereby the first named may adjustably support the
10 last named centrally in said mill-ring, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our invention we have hereunto set our hands and affixed our seals this 24th day of May, 1881.

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Witnesses:

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