(No Model.)

H. G. SAMMONS.

COFFEE MILL.

No. 576,160. Patented Feb. 2, 1897.

Fig. 1

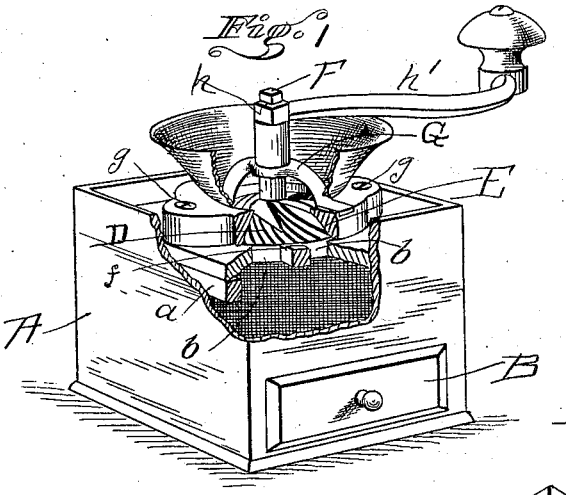


Fig. 3

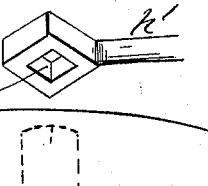


Fig. 2

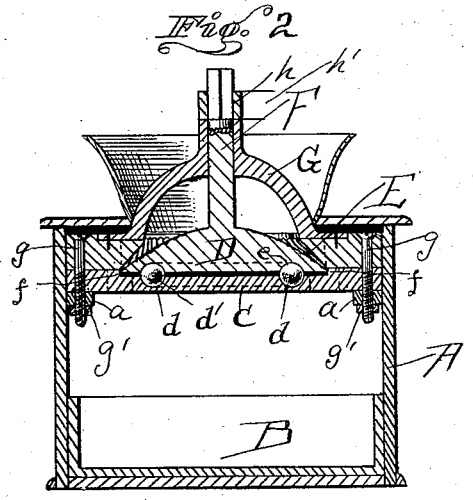


Fig. 4.

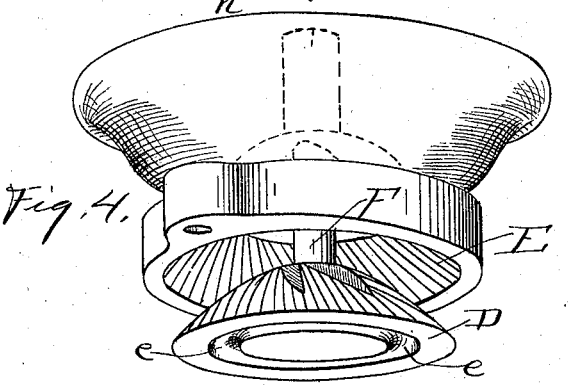
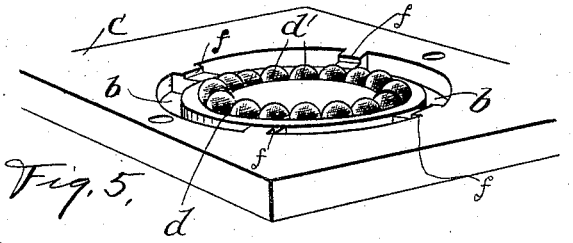


Fig. 5.



Witnesses.
W. Cross.
J. A. Jeffers

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UNITED STATES PATENT OFFICE.

HUGH G. SAMMONS, OF CANTON, OHIO.

COFFEE-MILL.

SPECIFICATION forming part of Letters Patent No. 576,160, dated February 2, 1897.

Application filed June 16, 1896. Serial No. 595,774. (No model.)

To all whom it may concern:

Be it known that I, HUGH G. SAMMONS, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Coffee-Mills; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view showing parts broken away and the cover or lid removed. Fig. 2 is a vertical section. Fig. 3 is a view showing a portion of the crank. Fig. 4 is a detached view of the hopper, grinding-shell, and the grinding-disk. Fig. 5 is a detached view of the grinding-disk support, showing the location of the ball-bearings.

The present invention has relation to coffee-mills; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claim.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the box or casing, which may be constructed in the ordinary manner, reference being had to properly attaching the different parts belonging to the mill proper.

To the box or casing A is detachably connected the drawer B, said drawer being constructed in the ordinary manner.

To the box or casing A are connected the bars *a*, which bars are located a short distance below the top of the casing, as illustrated in Figs. 1 and 2. The bars *a* are for the purpose of supporting the base C, said base being substantially of the form shown in Fig. 5, and, as shown, it is provided with the openings *b*, which openings are for the purpose of allowing the ground coffee to fall into the drawer B. The base C is provided with the annular groove *d*, which annular groove receives and holds the antifriction-balls *d'*, said antifriction-balls being arranged as illustrated in Fig. 5.

The grinding-disk D is formed in the shape of a cone, and is provided with the ordinary milled face. The bottom or base of the grinding-disk is provided with the annular groove *e*, which annular groove is to come directly over the groove *d* and the antifriction-balls *d'* when said grinding-disk is properly adjusted. For the purpose of assisting in holding the grinding-disk in proper position the shoulders *f* are provided, which shoulders come against the periphery of the grinding-disk. The grinding-shell E is formed with a central opening having a milled face corresponding substantially with the milled face of the grinding-disk, said grinding-shell being held in proper position by means of the clamp-bolts *g*, which clamp-bolts pass through the base C and the bars *a*, as illustrated in Fig. 2. The bottom or lower ends of the bolts *g* are provided with the nuts *g'*, said nuts being for the purpose of holding the grinding-shell E against upward movement, and at the same time providing a means for adjusting the grinding-shell E, or, in other words, allow said grinding-shell to move away from the grinding-disk when the nuts *g*, are loosened or turned downward upon the bolts *g*.

The grinding-disk D is provided with the shank F, the top or upper end of which is angular to receive the angular aperture *h*, formed in the crank *h'*. For the purpose of holding the grinding-disk, together with its shank, in proper position the yoke G is provided, which yoke is securely attached to the grinding-shell E in any convenient and well-known manner; or, if desired, the yoke may be formed integral with the grinding-shell.

It will be understood that by providing the grooves *d* and *e* and placing the antifriction-balls *d'* in the position illustrated in the drawings the grinding-disk will be easily rotated and at the same time will be held against lateral displacement, thereby providing a coffee-mill that will be easy in operation and at the same time well calculated for the purpose designed.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of a box or casing provided with a drawer, the bars *a*, secured to the casing, the base C, provided with openings and the annular groove *d*, the grinding-

disk D, provided with the annular groove *e*, the antifriction-balls *d'* located in the grooves, the shoulders *f*, the grinding-shell E, and the clamp-bolts *g*, passed through the base C, and the bars *a*, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HUGH G. SAMMONS.

Witnesses:
F. W. BOND,
J. A. JEFFERS.