

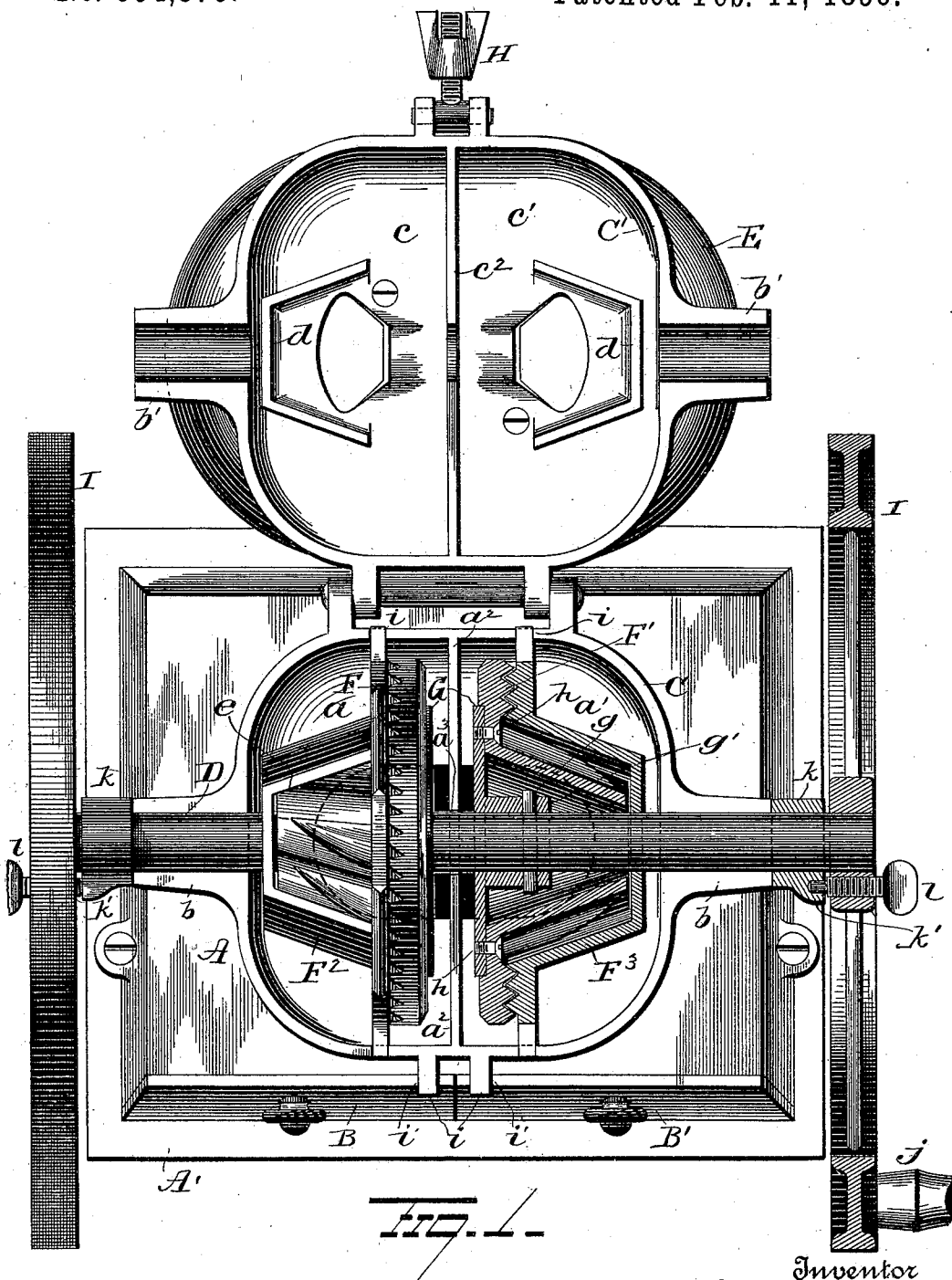
(No Model.)

2 Sheets—Sheet 1.

F. H. ROBBINS.
SPICE MILL.

No. 554,376.

Patented Feb. 11, 1896.



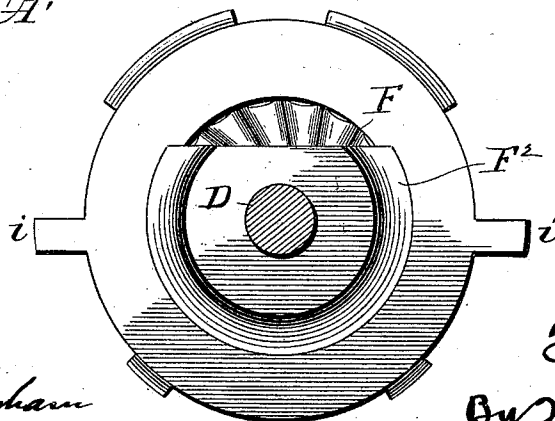
Witnesses
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2 Sheets—Sheet 2.

Patented Feb. 11, 1896.

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UNITED STATES PATENT OFFICE.

FRANCIS H. ROBBINS, OF MANSFIELD, OHIO, ASSIGNOR TO JAMES A. NIMAN
AND MARY J. ROBBINS, OF SAME PLACE.

SPICE-MILL.

SPECIFICATION forming part of Letters Patent No. 554,376, dated February 11, 1896.

Application filed June 4, 1894. Serial No. 513,399. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS H. ROBBINS, of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Spice-Mills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in spice-mills, and more particularly to such as are adaptable for domestic use, the object of the invention being to produce a spice-mill having two grinding-burs on a single shaft adapted to be operated simultaneously or singly, and in such manner that two kinds of spice can be ground simultaneously or singly without danger of the two spices becoming mixed or of one affecting the flavor of the other.

A further object is to construct a double or twin spice-mill in such manner that the grinding mechanism shall be inclosed by a common casing or shell, which shall be simple in construction.

A further object is to produce a double or twin spice-mill having a double hopper and a right and a left hand bur.

A further object is to produce a twin spice-mill which shall be simple in construction, comparatively cheap to manufacture and which shall be effectual in all respects in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth and pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the machine with the cover wide open, a portion of the machine proper being in horizontal section. Fig. 2 is a vertical section, and Fig. 3 is a detached view showing shaft D in section and parts F F' in elevation.

A represents a hollow base, which is secured to a suitable base-plate A' of wood or other suitable material, and is adapted for the reception of two drawers B B', into which the ground spices are adapted to pass. On

the hollow base A the shell of the mill is located, said shell comprising two parts C C', the part C being preferably made integral with the hollow base A and the part C' being hinged to the part C. The portion C of the shell is divided into two compartments $a a'$, by means of a central partition a^2 , the compartment a being adapted to communicate with and discharge into the drawer B, and the compartment a' being adapted to communicate with and discharge into the drawer B'. The portion C of the shell is also made with lateral arms $b b$, which constitute bearings for a shaft D, said shell also having a bearing at its center in a recess a^3 made in the edge of the partition a^2 . The upper portion C' of the shell is also made with arms $b' b'$, adapted to form hoods over the shaft. The upper portion, C', is also divided into two compartments $c c'$ corresponding with the compartments $a a'$ by means of a partition c^2 , said partition c^2 having a recess at its center for the accommodation of the shaft D.

Two flanges $d d$ project within each compartment $c c'$ and are adapted to properly direct spice from a hopper E to the respective burs F F' through openings e in shells F² F³, in conjunction with the serrated faces of which said burs operate. The hopper E is divided into two compartments $f f'$ by means of a partition f^2 , said compartments being adapted to communicate with the compartments $c c'$, as above explained.

For securing the burs F F' to the shaft D disks G are secured to said shaft by means of pins g passing through flanges or collars g' projecting from said disks, or in any other suitable manner, said disks being placed on the shaft a short distance apart and adapted to lie parallel with the respective faces of the partition a^2 in the lower portion, C, of the shell or casing. To the disks G G the respective burs F F' are secured by means of screws h or otherwise. The shells F² F³, in conjunction with which the burs operate, are provided at diametrically-opposite points with lugs $i i$, which rest in notches i' in the lower portion C of the casing and are thus retained in position. The upper and lower portions or the shell or casing will be secured together at their free edges by means of a suitable catch

or locking device H. When the burs are in place within the shell it will be observed that one bur will be a right-hand bur and the other a left-hand bur.

5 On each end of the shaft D a wheel I is secured and one (or both) of said wheels is provided with a handle *j* by means of which to operate it. Between each wheel and the ends of the journal-bearings of the shaft D collars *k*
 10 are loosely mounted on said shaft and made with sockets *k'* for the reception of the plain end of screws *l l* passing through screw-threaded perforations in the hubs of the wheels. By means of these collars and screws
 15 the burs may be adjusted so that one or the other will cause the spice to be ground to any desired degree of fineness. When the burs are adjusted to grind the spices with different degrees of fineness, the mill may be used to
 20 grind spices of different kinds, one requiring to be ground fine and the other coarse, or the burs may be so adjusted as to grind with the same degree of fineness.

My improvements are very simple in construction and effectual, in all respects, in the
 25 performance of their functions.

Slight changes might be made in the details

of construction of my invention without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself 30 to the precise details of construction herein set forth; but,

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

35 In a spice-mill, the combination with an outer casing comprising two parts or shells, of a shaft, a pair of disks secured on the shaft, burs secured to these disks, shells conforming to and co-operating with the burs and held 40 in one of the parts or shells of the casing, partitions formed in each of these parts or shells of the casing whereby to divide the mill into two parts, and means at each end of the shaft for adjusting it endwise in either direction, 45 substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANCIS H. ROBBINS.

Witnesses:

JNO. C. BURNS,

A. B. KEITH.