

(No Model.)

J. J. JOHNSTON.

SPICE MILL.

No. 265,819.

Patented Oct. 10, 1882.

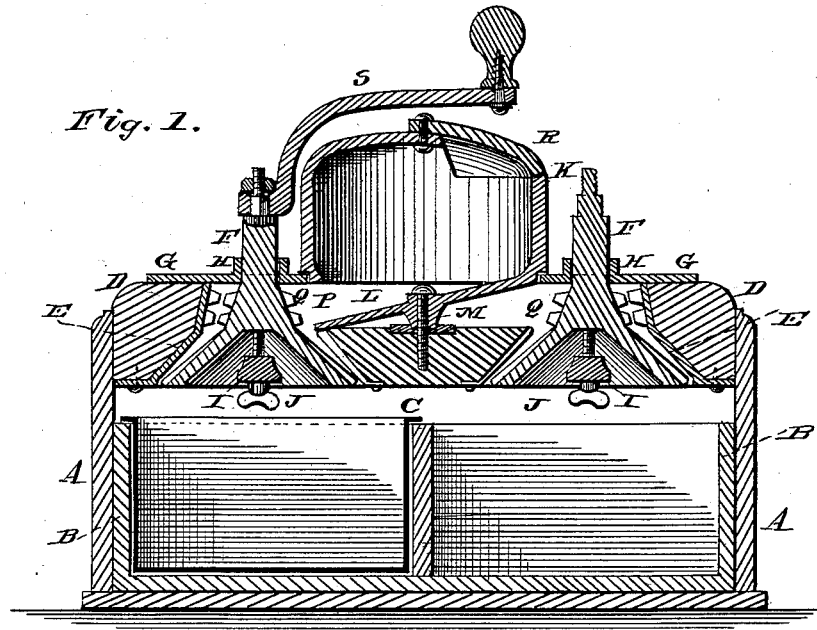
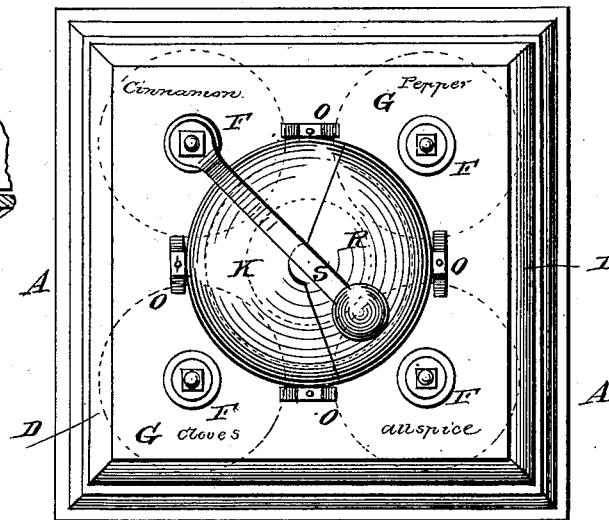
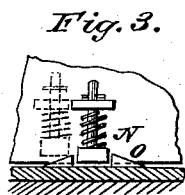


Fig. 2.



WITNESSES

Wm. G. Dietrich,
P. C. Dietrich.

INVENTOR

James J. Johnston

UNITED STATES PATENT OFFICE.

JAMES J. JOHNSTON, OF COLUMBIANA, OHIO, ASSIGNOR TO THE UNITED STATES IMPROVEMENT COMPANY, (LIMITED,) OF SAME PLACE.

SPICE-MILL.

SPECIFICATION forming part of Letters Patent No. 265,819, dated October 10, 1882.

Application filed February 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. JOHNSTON, of Columbiana, in the county of Columbiana and State of Ohio, have invented a certain new and useful Improvement in Spice-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in spice-mills; and it consists of a box, pivoted hopper, four burrs, and four shells, detachable receiving-vessels, and drawer, constructed, arranged, and operating as will hereinafter more fully and at large appear.

To enable others skilled in the art with which my invention is most nearly connected to make and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a vertical section of a spice-mill containing my improvements. Fig. 2 is a top view of the same. Fig. 3 is a detail view.

Reference being had to the accompanying drawings, A represents the box of the mill, and B the drawer, which is divided into four compartments, each furnished with a detachable receiving-vessel, C. In the upper part of the box A is secured a block, D, in which are fitted four shells, E, having four burrs, F, which shells and grinding-burrs are of ordinary construction—that is to say, of the construction common to the ordinary coffee-mill. The shells are secured in the block D by means of ordinary wood-screws, as shown in Fig. 1. On the upper side of the block D is secured a plate, G, having four openings or bearings, H, for the axis of the grinding-burrs F. On the under side of the block D are secured cross-pieces I, having temper-screws J, which serve as the lower bearings for the burrs F, and also serve the purpose of adjusting the burrs for fine or coarse grinding.

The hopper K is fitted to an opening in the plate G, and is furnished with an inclined bottom, L, pivoted at M to the block D, as indi-

cated in Fig. 1. On the side of the hopper K is a spring-pawl, N, which drops into a space between lugs O on the plate G. The hopper K is furnished with a single outlet, P, and the shells E have a corresponding inlet, Q. The hopper has also a pivoted lid, R.

S represents an ordinary detachable handle for revolving the burrs F, and is adapted to all four burrs.

It is a matter of observation and experience that in grinding spices in a mill that the last article ground becomes impregnated with some of the previous ground spice, notwithstanding the care taken to clean the mill by rotation of the burr. To obviate this difficulty I have constructed a mill, as hereinbefore described, with a single hopper susceptible of being rotated so that its outlet P can be changed to the inlet Q of any one of the four grinding departments of the mill, which are marked "Allspice," "Cloves," "Cinnamon," and "Pepper," they being the four spices most generally used for household purposes. If the housewife has been grinding pepper and wishes to grind cinnamon, she removes the handle S of the burr of that grinding department and places it upon the burr intended for grinding cinnamon, and rotates the hopper K until the outlet P comes opposite to the inlet Q of the grinding department for cinnamon, and thus the hopper and handle may be changed from one grinding department to the other. The ground product from each grinding department falls into the vessel C directly under it and in its proper compartment of the drawer B.

Having thus described my improvement, what I claim as new is—

A spice-mill consisting of the box A, pivoted hopper K, four burrs, F, and four shells, E, detachable receiving-vessels C, and drawer B, constructed, arranged, and operating substantially as hereinbefore described, and for the purpose set forth.

JAMES J. JOHNSTON.

Witnesses:

T. D. D. OURAND,
DE WITT C. ALLEN.