(No Model.)

G. F. SCHENKEL & J. G. REES.

SPICE MILL.

No. 424,226. Patented Mar. 25, 1890.

Fig. 1.

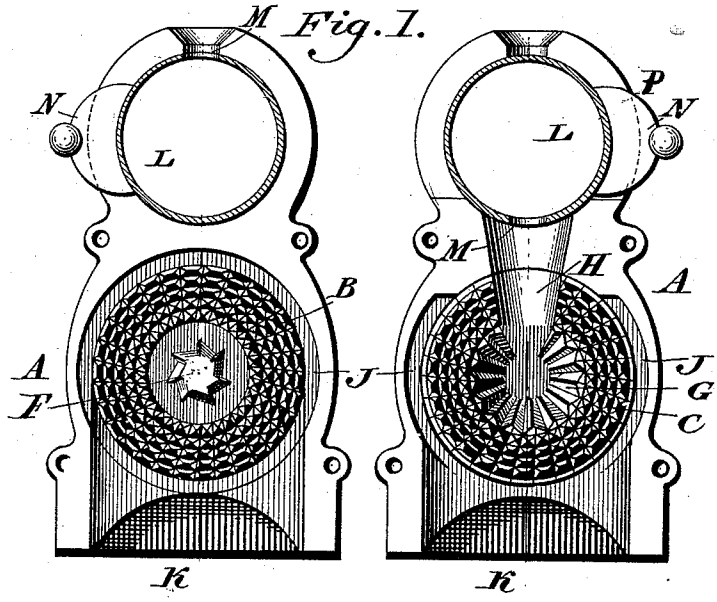
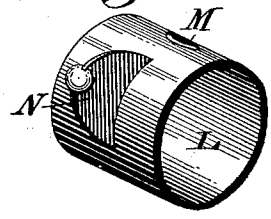


Fig. 2.



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GEORGE F. SCHENKEL AND JOHN G. REES, OF PHILADELPHIA, PENNSYLVANIA.

SPICE-MILL.

SPECIFICATION forming part of Letters Patent No. 424,226, dated March 25, 1890.

Application filed October 24, 1889. Serial No. 328,042. (No model.)

To all whom it may concern:

Be it known that we, GEORGE F. SCHENKEL and JOHN G. REES, citizens of the United States, both residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Spice-Mills, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention consists of improvements in grinding-mills, more especially for spice, the construction adapting the mill to be used particularly for table purposes, providing, as it were, an individual mill, whereby the spice, &c., may be ground at the table, as required, the novel features being hereinafter fully set forth and claimed.

Figure 1 represents views of the interior of the sections of a grinding-mill embodying our invention. Fig. 2 represents a perspective view of the rotary valve detached.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the casing of the mill, the same having therein the runner B and bed C, said runner having its shaft D provided with the crank-handle E for operating purposes. At the center of the bed there projects a breaker or cracking burr F, the same entering the toothed recessed portion G of the bed C. In the bed at the upper part thereof is a throat H, the same leading from the hopper of the mill to the breaker, so as to direct the spice, &c., to the latter. The teeth of the runner and bed are pyramidal and extend in circular order, the teeth of the runner entering the spaces between those of the bed, and vice versa, there being also radiating grooves in said runner and bed so that the ground material may reach the periphery of said runner and bed, it being noticed that as the teeth are pyramidal they are self-sharpening.

J designates a groove, which is formed on the interior of the casing and surrounding the peripheries of the runner and bed, whereby when the ground material leaves said peripheries it enters said groove J, and is directed by the same to the discharge-opening K in the base of the casing.

The rotary valve L is cylindrical and has a horizontal axis, and is mounted in the upper part of the casing and provided in its periphery with an opening or port M and a handle N, which latter projects from the periphery and plays in a vertical recess P in the casing.

The operation is as follows: The valve L is rotated or moved so that the opening M is in communication with the open upper end of the casing. Spice, &c., may now be poured into the said valve, after which the same is rotated so that the opening M is below and in communication with the passage in the casing leading to the throat H, it being noticed that the top of the casing is closed by the blank wall of the periphery of the rotary valve L, as shown at right hand in Fig. 1, it being also noticed that the spice, &c., are prevented from being displaced at the top of the casing. The spice, &c., are now directed to the breaker F, and as the latter is rotated with the bed B said material is primarily broken or cracked and from thence directed to the runner and bed B C, whereby it is ground and passes through the spaces between the teeth and also the radial grooves, and as it acquires the proper fineness it is directed into the peripheral groove J, and from thence it drops into discharge-opening K at the bottom of the casing, it being evident that as the mill is operated it may be readily held over the material to be spiced, thus providing a convenient hand-mill for the purpose stated.

The breaker F and bed G are conical, the widest portions thereof being at the place of connection with the runner B, by which arrangement, as the spices is cracked or broken, it is readily distributed to the runner B and its bed C.

The casing is made in sections by a vertical division, so that access may be conveniently had to the interior thereof.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a grinding-mill, the combination of a two-part casing having an annular bearing in its upper portion and a vertical recess be-

tween the parts, and an oscillating valve located in said bearing and provided with a projecting handle, said parts being combined substantially as described.

2. A grinding-mill consisting of two-part casing with an annular bearing in the upper portion, an oscillating valve in said bearing, a runner having its shaft journaled in one of said parts and provided with a cracking-burr, a bed with a toothed recessed portion in the other part, a throat or channel leading directly from the oscillating valve to the surface of the cracking-burr, and a discharge-passage leading from the bed and runner, said parts being combined substantially as described.

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