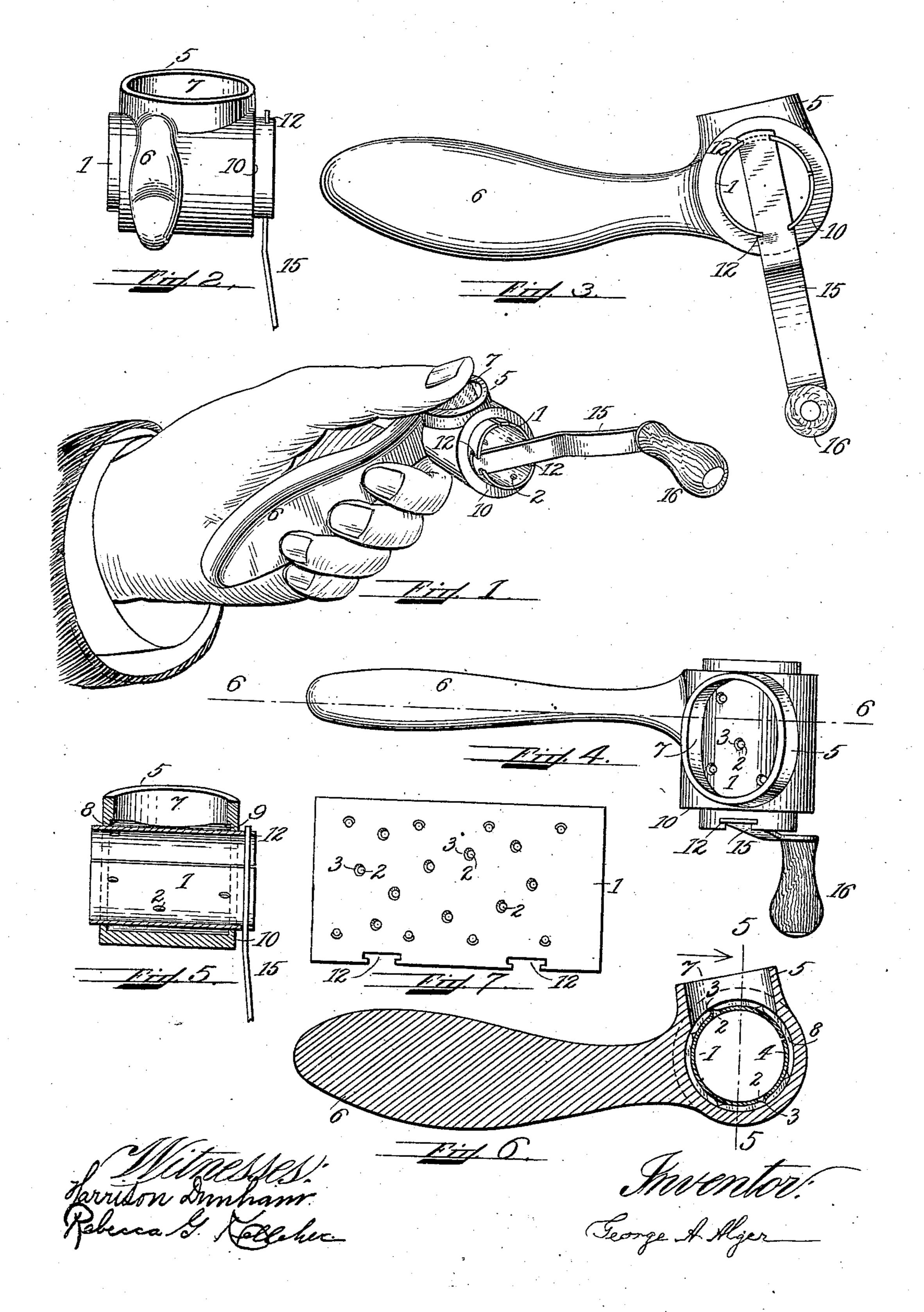
G. A. ALGER.

NUTMEG PULVERIZER.

APPLICATION FILED MAY 10, 1906.



## UNITED STATES PATENT OFFICE.

GEORGE A. ALGER, OF MANCHESTER, NEW HAMPSHIRE.

## NUTMEG-PULVERIZER.

No. 855,423.

Specification of Letters Patent.

Patented May 28, 1907.

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To all whom it may concern:

Be it known that I, GEORGE A. ALGER, of Manchester, in the county of Hillsboro and State of New Hampshire, have invented cer-5 tain new and useful Improvements in Nutmeg-Pulverizers, of which the following is a

specification.

My invention relates to an improvement in nutmeg pulverizers and the objects of my 10 improvement are to provide means for readily and easily grating the nutmeg by revolving a cylinder provided with a grating surface arranged to consecutively grate the contacting surface of the nutmeg, so that it may 15 be gradually and evenly pulverized and be screened through perforations in the cylinder.

I attain these objects by means of the mechanism illustrated in the accompanying

drawing in which,

Figure 1, is a perspective view of my invention; Fig. 2, is an end elevation of the same; Fig. 3, is a side elevation of the same; Fig. 4, is a plan of the same; Fig. 5, is a transverse section on the line 5-5 in Fig. 6 25 of the same; Fig. 6, is a longitudinal section of the same on the line 6—6 in Fig. 4. Fig. 7, is a plan of the grating plate used in my invention.

Similar numerals denote similar parts

30 throughout the several views.

1, is a grating plate of sheet metal of suitable size in which are punched the holes, 2 arranged in the manner shown in Fig. 7, which arrangement is hereinafter more par-35 ticularly referred to, when its adaptation is described. By the punch a small part of the metal is removed and the metal around the holes is raised in protuberances, and the protuberances caused by the punch are then 40 pressed or thrown back on one side, even with the surface of the plate and the remaining edges make the curved cutters 3, and then the plate is formed into a cylinder 4, all of which is then hardened by a suitable process. 5, is a stock made of suitable metal with the handle 6 integral with it, or not, as may

be desired and the oval open hopper 7. 10 is the jacket which has the shoulders, 8 and 9 which are only slightly larger in diame-50 ter than the cylinder 4, while the interior surface of the jacket between the shoulders 8 and 9 has a diameter larger than said shoulders and sufficient so that no contact may be made with the edges of the grating protuber-

ances 3 when the cylinder 4 is inserted there- 55 in as hereinafter described.

The cylinder 4 has the two mortises 12 and 12, at diametrically opposite points of one end thereof and is inserted in the jacket 10, the horizontal edges of said cylinder being 60 allowed to pass by each other and, when inserted, the edges spring back in contact with each other by the resiliency of the sheet metal cylinder and are then held by the metallic crank 15 suitably fixed in the mortises 65 12, which metallic crank has a suitable handle 16. The cylinder 4 is allowed to rotate in the jacket 10 while it is prevented from slipping out by the sides of the protuberances nearest the shoulders 8 and 9 which 7° rotate in the larger periphery formed by the interior surface of the jacket 10 above referred to. These grating protuberances are approximately of crescent form.

The pulverizer being held in the hand, as 75 shown in Fig. 1, a nutmeg is placed in the hopper 7 and pressed by the thumb, and by means of its crank and handle the cylinder 4 is revolved in the direction which brings the edges of the cutters in contact with the nut- 80 meg, and in one revolution of the cylinder all of the cutters come in contact with the nutmeg at different points and at different times in the same tangential plane, thus evenly grating the nutmeg which screens 85 evenly through the holes into the interior of the cylinder in fine particles, and can be shaken or allowed to drop out, as desired, from the open end of the cylinder opposite the crank 9, and the open end may be held 90 over any article while the nutmeg is being

grated.

The arrangement of the cutters so that they do not come in contact all at the same time, with the nutmeg and their cutting in 95 one direction, allow a freer movement and require less power than if all were on the same line and also prevent any clogging by the particles as the surface of the nutmeg is grated. The grating is, also thereby ren- 100 dered even and gradual, while the control of the mechanism and its adaptation to immediate use is obvious.

Having described my invention, what I desire to secure by Letters Patent and claim 105

In a nutmeg-grater a handle, a hopper for admitting the nutmeg and a cylindrical

jacket having a contracted end, all in one piece, in combination with a grating cylinder within said jacket but protruding at both ends through the ends thereof yet provided with grating protuberances which prevent it from slipping out through said contracted ends and having also mortises 12 in its end corresponding thereto, and a handle having

parts that are fitted into said mortises substantially as set forth.

In testimony whereof I have affixed my signature, in presence of two witnesses.

GEORGE A. ALGER.

Witnesses:

HARRISON DUNHAM, REBECCA G. KELLEHER.