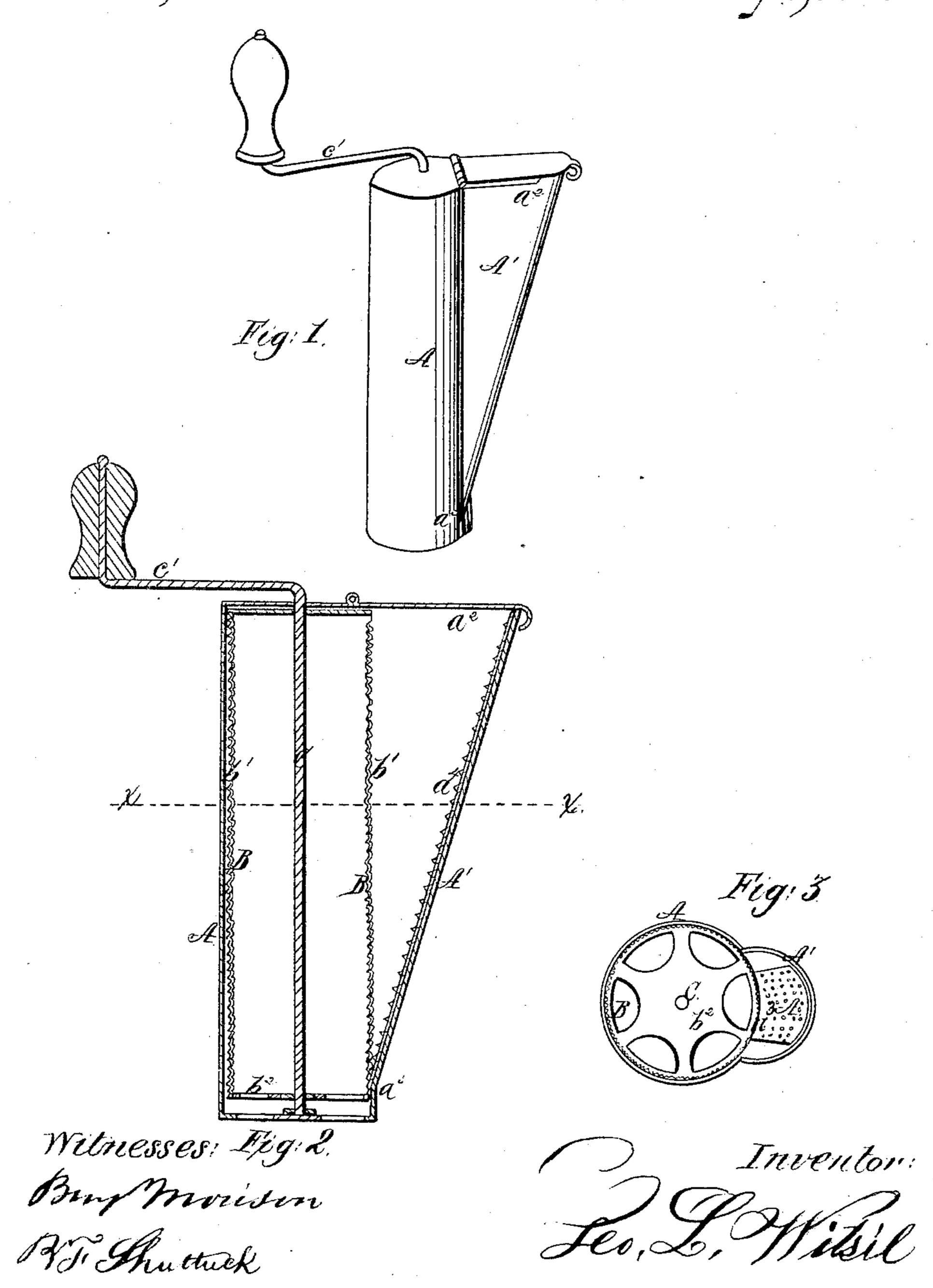
Muitme of Grater.

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Fatented May 6, 1862.



United States Patent Office.

GEORGE L. WITSIL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED NUTMEG-GRATER.

Specification forming part of Letters Patent No. 35,192, dated May 6, 1862.

To all whom it may concern:

Be it known that I, GEORGE L. WITSIL, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Nutmeg-Grater; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view; Fig. 2, a central vertical section; and Fig. 3 a transverse section, showing a top view of the part below the dotted line x of Fig. 2, like letters indicating the same parts when in the different figures.

The object of this invention is the production of a more reliable, rapidly effective, and easily operated and controlled hand device for grating nutmegs and distributing the pro-

duct.

It consists in the combination of a vertical rotary grating - cylinder supported within a smooth cylindrical vertical case which has one side opening into a conical or tapering chamber rigidly attached thereto and adapted for receiving and holding securely within it whole or fragmentary pieces of nutmegs while the same are being operated upon by the rotating cylinder, the said different parts being arranged in relation to each other, substantially in the manner hereinafter described and set forth.

In the drawings, A is the smooth vertical cylindrical case, A' the conical or tapering chamber, and B the vertical rotary grating-

cylinder.

The case A and the grating-cylinder B are in this instance made of sheet or tin plate, the cylinder being about four inches long and one and one-eighth of an inch in diameter. Its periphery b' is roughened by punching it outward with numerous holes by means of a sharp-pointed punch in the usual well-known manner. The upper end of the said cylinder B is closed, while its lower end is fitted with a skeleton disk, b^2 , so as to allow any particles of the spice which may be forced through its grating-holes to fall out through the disk. A shaft, c, is fixed through its center, so as to produce journals, the upper jour-

nal being fitted with a crank-handle, c', as seen in Figs. 1 and 2.

The cylindrical portion of the case A is made of such a diameter as will just permit the rotary motion of the cylinder B within it without touching at its periphery, a skeleton disk being attached to its lower end, so as to support the cylinder on its lower journal and at the same time allow the grated product to pass out freely through the said disk.

The conical or tapering chamber A' is made about seven-eighths of an inch wide, and projects or extends outward from the case about one and one-eighth of an inch at its upper end, a^2 , and tapers regularly downward to a point or thin edge, a^3 , near the lower end of the grating-cylinder B, the part of the case A which it incloses being cut away so as to leave the said tapering chamber A' open to the grating-cylinder B, from the top of the same nearly to its bottom, substantially as seen in Fig. 2.

Directly opposite to the grating-cylinder B there is attached to the tapering chamber A' a series of ribs, or a roughened plate, a^4 , for the purpose of preventing the nutmeg from being rotated therein during the action of the

grating-cylinder B.

Operation: The conical chamber A' being supplied with nutmegs, either whole or in fragmentary pieces, or both together, as may be desired, the case is to be grasped firmly in one hand, and with the other hand applied to the crank - handle above rotary motion given to the grating-cylinder B in either direction, when the contained nutmegs will be rapidly reduced or grated, the product falling through the skeleton disks at the lower end of the machine.

It will be seen that as the diameter of the grating-cylinder is very small in relation to its length and the length of the crank the operation of grating is effected with greater ease and facility than by any other rotary grater known, while the advantage is afforded, also, of a sufficient length or depth of chamber to operate upon two or more nutmegs at one time in their whole state, and that small fragments of nutmegs introduced and falling into the lower portion of the tapering chamber A' will be as effectually reduced or grated. In

fact, the machine will serve as well to reduce the smallest fragments—hitherto generally thrown away—as to reduce the whole nuts—a feature of importance, which it is believed cannot be found so well adapted in any other nutmeg-grater.

The operation of the machine is so easy that the product can be distributed during the same with more ease and facility than

with any other rotary grater in use.

Having thus fully described the construction and operation of my improved grater

and pointed out its utility, what I claim as new therein of my invention, and desire to secure by Letters Patent, is—

A nutmeg-grater consisting of the case A, chamber A', and cylinder B, arranged and combined together substantially in the manner described and set forth.

GEO. L. WITSIL.

Witnesses:

BENJ. MORRISON, B. F. SHATTUCK.