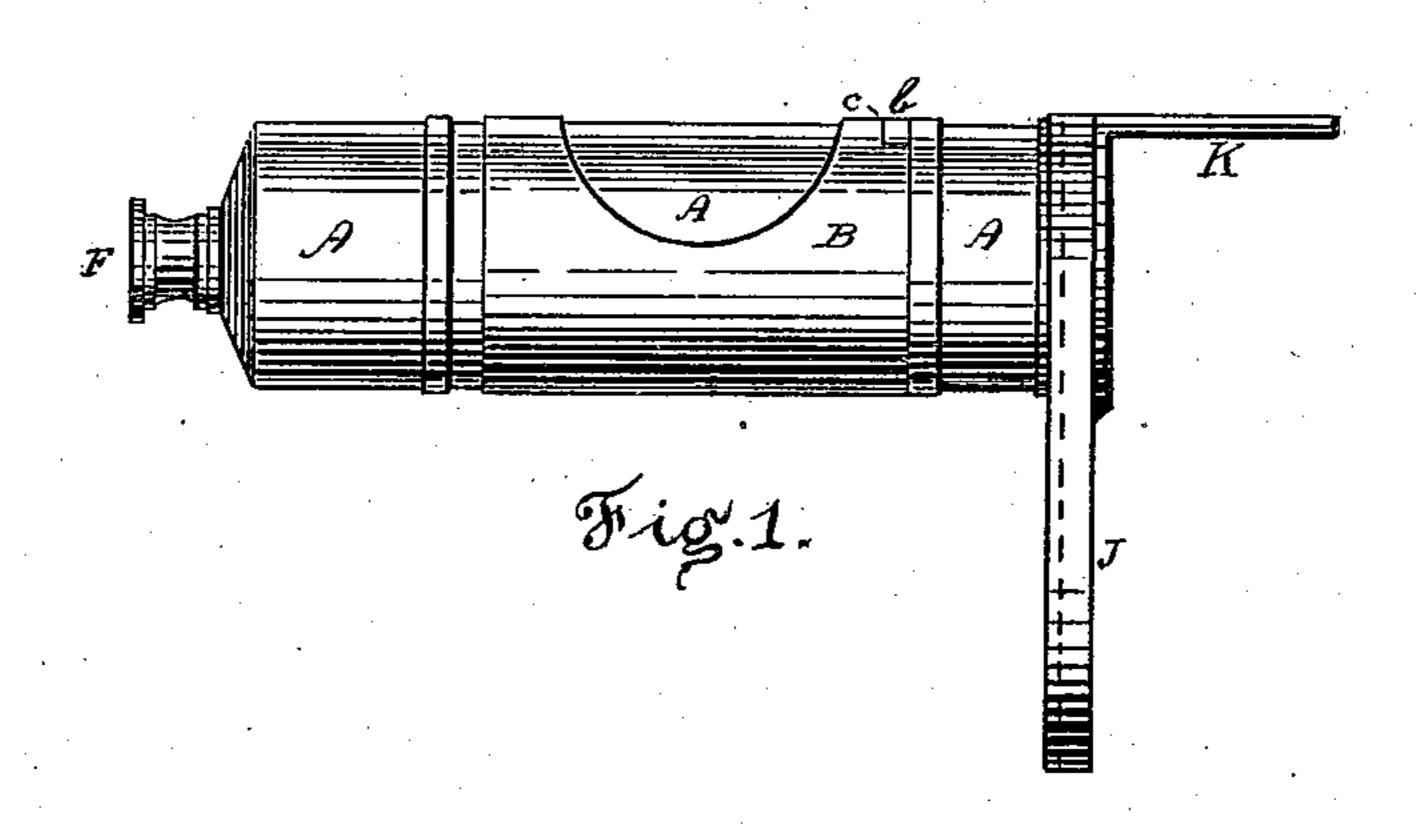
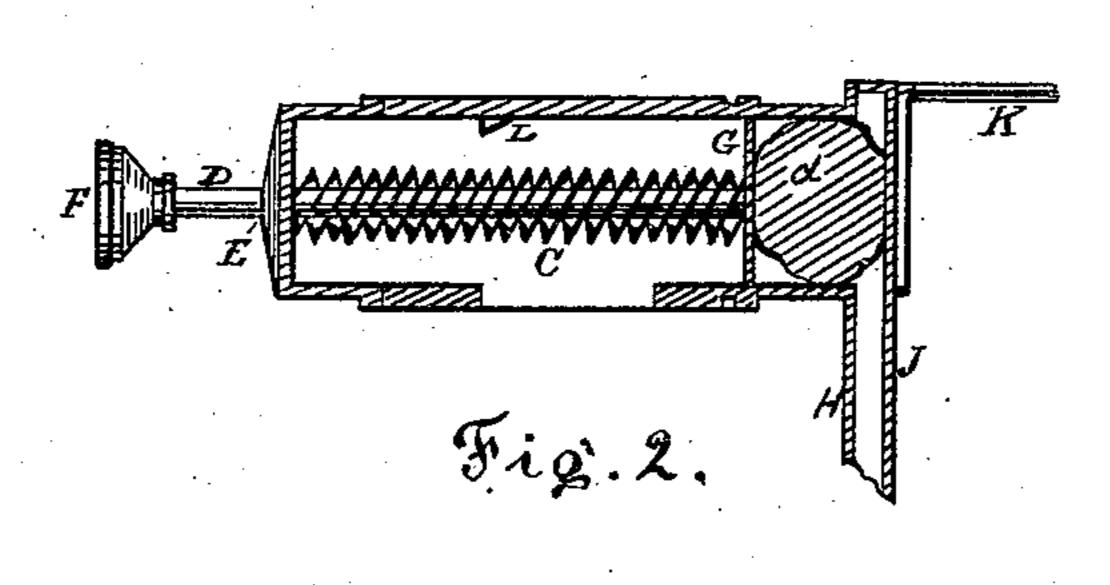
## R. SOPER.

## REVOLVING-GRATERS

No. 184,921.

Patented Nov. 28, 1876.





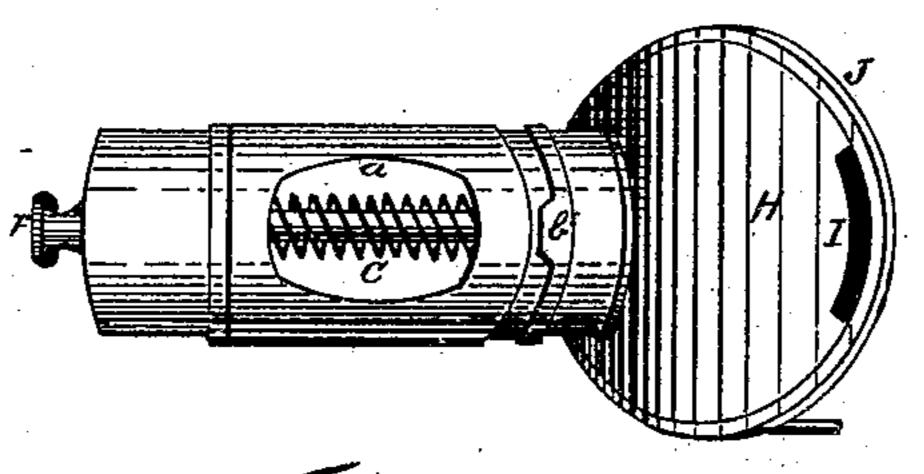


Fig.3.

WITNESSES:

Thomas Deech.

Philip J. Edmund.

INVENTOR:

Polienteloper by attorney Hewry Beech.

## UNITED STATES PATENT OFFICE.

ROBERT SOPER, OF LONDON, ONTARIO, CANADA.

## IMPROVEMENT IN REVOLVING GRATERS.

Specification forming part of Letters Patent No. 184,921, dated November 28, 1876; application filed August 23, 1876.

To all whom it may concern:

Be it known that I, ROBERT SOPER, of the city of London, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Revolving Graters; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, where—

Figure 1 is a side view of my invention. Fig. 2 is a longitudinal vertical section of

same. Fig. 3 is a perspective view.

This invention relates to improvements in revolving graters; and consists in the construction and arrangement of devices, as will be

hereinafter fully described.

A is a cylindrical box, having an opening, a, formed in it. B is an outer case, fitting accurately around this box, and having a similar opening, and through these openings the nutmeg d, or other substance to be grated, is inserted in the box. The case B is then turned partly round, so as to cover the opening in box, and on pressing it forward the stud b fits into a notch, c, on end of case, and secures it in place.

C is a coil-spring contained in the box. Through the center of this spring passes a rod, D, admitted through an orifice in closed end E. One end of this rod is furnished with a knob, F, and to the other end is attached a circular plate, G, in front of which the nut-

meg, &c., is placed.

H is a circular covering-plate, which is attached to the open end of box A, and having an opening, I, formed in it at side, near the

lower edge, to allow of the escape of the powder.

J is the rasping-disk, the outer rim of which is turned over upon the edge of circular plate, and so held in place while it is revolved by crank-arm K, which is soldered or otherwise attached thereto. Sufficient space between the plate and rasping-disk is left for the powder, as it is grated, to fall into and pass out at opening I.

In order to facilitate the holding back of the spring while the nutmeg is being placed in the box or removed from it, a stud, L, is attached to inside of box, so that on drawing back said rod the edge of the circular plate G is caught by the stud and retained until released again and returned to its usual posi-

tion.

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

1. The combination, with plate G, rod D, and spring C, of the stud L, located on the inside of the box A, substantially as and for

the purpose specified.

2. The combination, with circular coveringplate H, having the opening I, of the raspingdisk J, secured to the circular plate by turning its outer rim over the edge of the circular plate, whereby said disk is capable of revolving thereon, substantially as and for the purpose specified.

ROBERT SOPER.

Witnesses:

HENRY BEECH, THOMAS BEECH.