(No Model.)

M. SCHAIBLE.

GRATER

No. 343,141. Patented June 1, 1886.

FIG. 1.

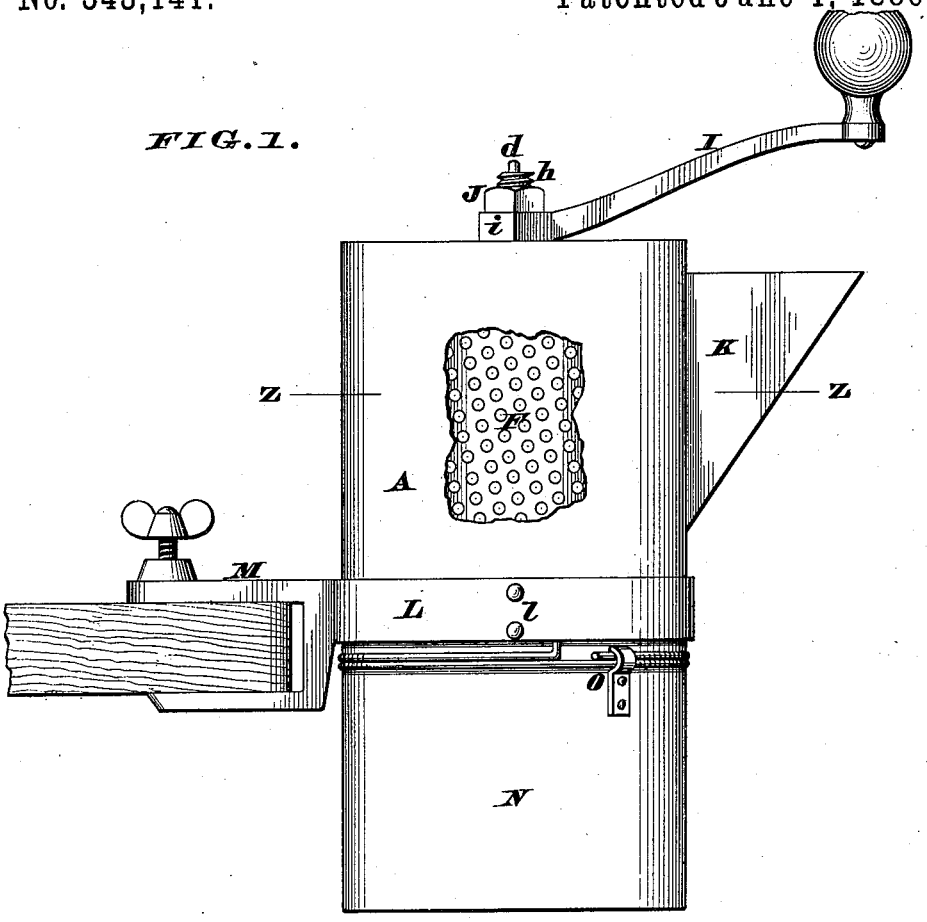


FIG. 2.

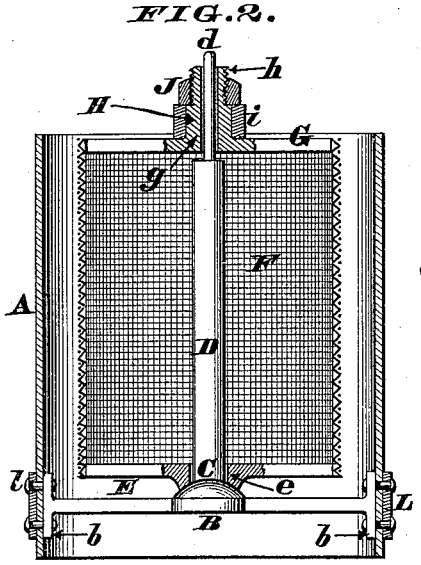
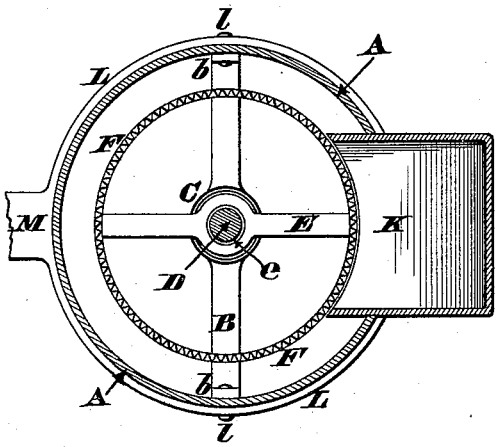


FIG. 3.



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UNITED STATES PATENT OFFICE.

MICHAEL SCHAIBLE, OF CHEVIOT, OHIO.

GRATER.

SPECIFICATION forming part of Letters Patent No. 343,141, dated June 1, 1886.

Application filed February 25, 1886. Serial No. 193,125. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL SCHAIBLE, a citizen of the United States, residing at Cheviot, in the county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Graters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to those devices which are employed for grating fruits, vegetables, &c.; and the first part of my improvements comprises a novel combination of appliances for centralizing the grating-cylinder within the inclosing shell or casing, and permitting the former to be turned by hand, as hereinafter more fully described.

The second part of my improvements consists in securing the bearing of the grating-cylinder to the shell or casing by the same rivets that fasten a band or hoop around said casing, the band being integral with a clamp that is employed for attaching the device to the edge of a table, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation showing my improved grater attached to a table, a portion of the outer shell being broken away to expose the inner grating-cylinder. Fig. 2 is a vertical section of the upper portion of the device. Fig. 3 is a horizontal section of the same, taken at the line Z Z of Fig. 1.

A represents a cylindrical shell or casing open at both ends, and having near its bottom a cross-bar, B, provide with flanges *b b*, and a convex bearing, C, from which projects vertically an axial shaft, D, the upper portion thereof being reduced in diameter to form a spindle, *d*.

Resting upon the convex bearing C is the lower arm, E, of the grating-cylinder F, said arm having a central perforation, *e*, to admit the shaft D.

G is the upper arm of the grating-cylinder, which arm is pierced at *g* to admit the spindle *d* of said shaft. Furthermore, this upper arm has a square or other non-circular boss, H, over which is engaged the socket *i* of driving-crank I, said crank being retained in place by a nut, J. This nut is engaged with a screw-threaded termination, *h*, of the boss H.

K is the hopper of the device.

L is a band or hoop surrounding the casing A, said band or hoop being secured with rivets *l*, that pass through the flanges *b b* of cross-bar B, as seen in Fig. 2. This hoop has an integral clamp, M, for the ready attachment of the grater to a table or other convenient support.

N is a detachable box for holding the grated substances, said box being secured to the casing by an ordinary coupling, O.

From the above description it is apparent the power applied to crank I is transmitted directly to the integral boss H of cylinder-arm G, thereby insuring a positive turning of the grater F, which latter revolves very freely, because it rests upon the crowning bearing C. It is also apparent that said cylinder F can be removed in an instant without detaching any part of the device, although the handle can be readily uncoupled from this cylinder after the nut J has been disengaged from the screw *h*.

In Fig. 1 the cylinder F is shown as being made of perforated sheet metal, while Figs. 2 and 3 represent it as constructed of wire-cloth, thereby indicating that the device can be used either as a grater or sieve.

I claim as my invention—

1. In a grater, the combination of casing A, cross-bar B, secured therein, provided with convex bearing C, shaft D, having reduced portion *d*, grating-cylinder F, having apertured arms E *e* G *g*, the arm G being provided with a non-circular boss, H, and screw-threaded termination *h*, with crank I, having a socket, *i*, applied to said non-circular boss H and secured thereto by the nut J, substantially as described.

2. In a grater, the combination of casing A, cross-bar B, provided with flanges *b b*, shaft D, grating-cylinder F, and crank I, with clamps M, provided with hoop L, and rivets *l*, which latter secure the hoop, casing, and cross-bar together, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL SCHAIBLE.

Witnesses:
JAMES H. LAYMAN,
SAML. S. CARPENTER.