(No Model.)

C. WARREN.

MACHINE FOR MASHING POTATOES, &c.

No. 399,587. Patented Mar. 12, 1889.

Fig. 1.

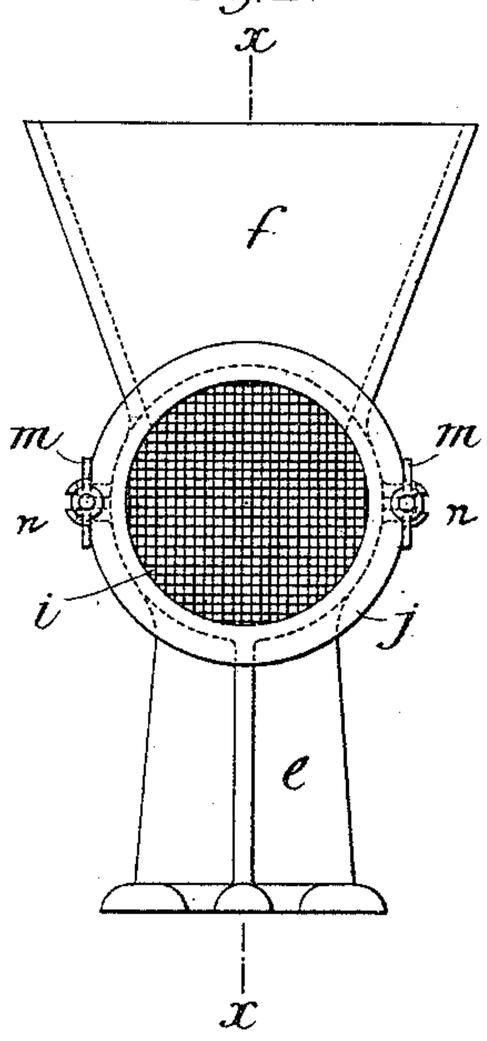


Fig. 2.

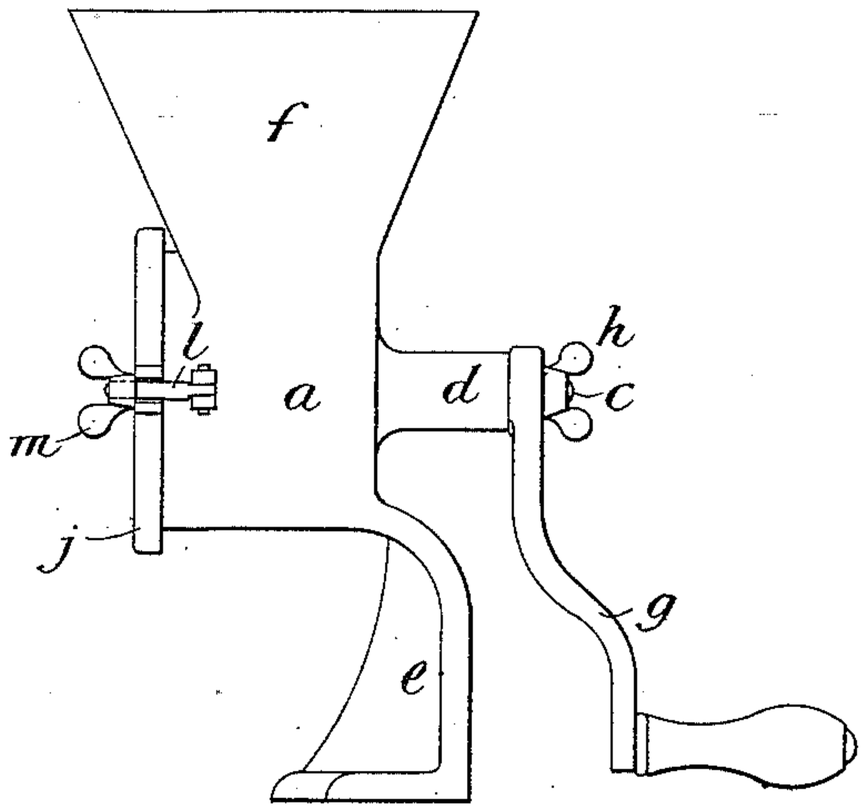
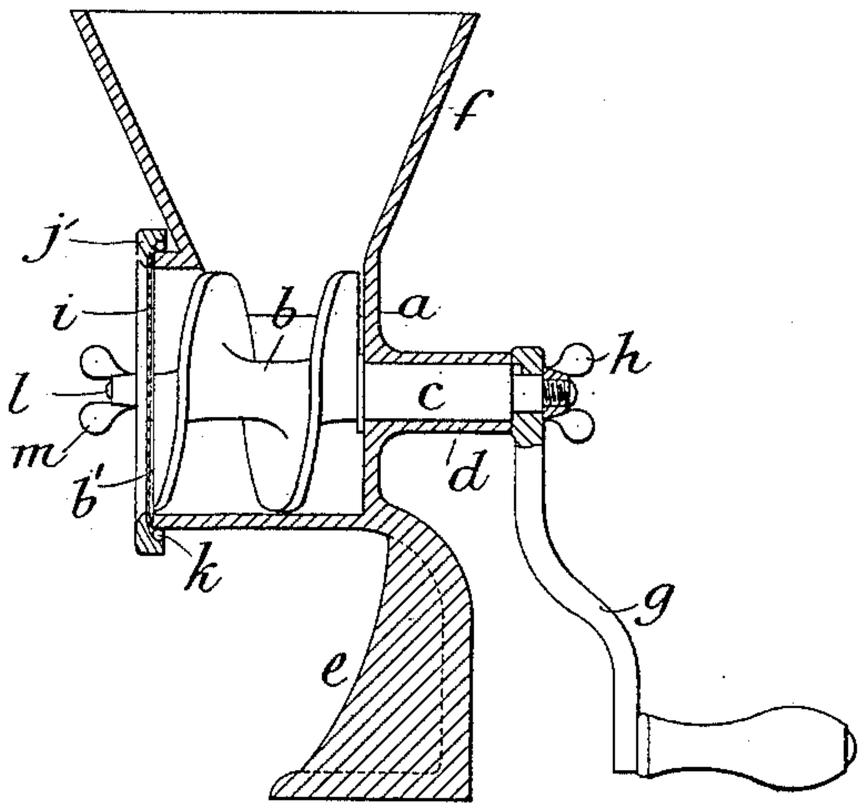


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES WARREN, OF IPSWICH, COUNTY OF SUFFOLK, ENGLAND.

MACHINE FOR MASHING POTATOES, &c.

SPECIFICATION forming part of Letters Patent No. 399,587, dated March 12, 1889.

Application filed December 22, 1887. Serial No. 258,702. (No model.) Patented in England October 29, 1887, No. 14,722; in France February 7, 1888, No. 188,596, and in Belgium February 7, 1888, No. 80,559.

To all whom it may concern:

Be it known that I, CHARLES WARREN, a subject of the Queen of Great Britain, residing at Ipswich, in the county of Suffolk, England, have invented a new and useful Improved Machine for Mashing Potatoes and Crumbling Bread and for Similar Purposes, (Letters Patent for which were granted me in Great Britain October 29, 1887, numbered 14,722; in France February 7, 1888, numbered 188,596, and in Belgium February 7, 1888, numbered 80,559,) of which the following is a specification.

My invention relates to machines for mashing potatoes and other vegetables and for crumbling bread; and it consists in a certain improved construction of the same, fully set forth in the following specification and claim.

In the accompanying drawings, illustrating my invention, Figure 1 is a front elevation of my improved machine. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical section on line *x x*, Fig. 1.

Similar reference-letters indicate identical parts throughout.

a is the barrel or cylinder of the machine, in which is located a spiral compressor, *b*, mounted upon a shaft, *c*, which is journaled in a bearing, *d*, at one end of the barrel. The outer extremity of the shaft *c* is provided with a handle, *g*, by which the compressor is rotated.

The barrel *a* is supported by a standard, *e*, and is provided with a hopper, *f*, through which the material to be operated upon is introduced into the machine. The bearing, standard, and hopper are preferably formed integral with the barrel.

i is a disk of wire-gauze or other suitable material secured to a ring, *k*, which surrounds the cylinder. To hold this disk in position, I provide a ring, *j*, which also encircles the cylinder, and has a flange, *j'*, extending over the end of the cylinder for the purpose of clamping the disk *i*. The disk *j* is provided with slotted ears *n*, which receive swivel-bolts *l*, attached to the cylinder, as shown in Figs. 1 and 2. To fasten the disk over the mouth of the cylinder, the ring *k*, to which the wire disk is attached, is placed in position and the ring *j* placed over it. The bolts *l* are then slipped into the slotted ears *n* and the nuts *m* screwed down until they rest upon the flange *j'*. A further turning of the nuts forces the rings *j* and *k* inward upon the cylinder and stretches the wire tightly across the mouth of the cylinder, in which condition it is firmly secured by the flange *j'*, clamping it against the cylinder. By this means I secure what might be termed a "drum-head tension," which is very desirable in a machine of this character, as it is necessary that the wire-gauze should be drawn very tightly across the mouth of the cylinder to insure the best results.

It will be seen that the forcing of the ring *k* inward upon the cylinder stretches the wire before it is clamped in position.

What I claim, and desire to secure by Letters Patent, is—

In a machine for mashing vegetables and other substances, the combination, with the barrel or cylinder *a*, of the wire-gauze provided with a ring, *k*, extending around the cylinder, of the ring *j*, also extending around the cylinder, having a flange, J', extending over the end of the cylinder and being provided with slotted ears, and the swivel-bolts secured to the cylinder and adapted to engage the slotted ears, whereby the wire-gauze is stretched tightly across the end of the cylinder and clamped, substantially as described.

CHARLES WARREN.

Witnesses:
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