

No. 875,530.

PATENTED DEC. 31, 1907.

D. E. JOHNSTON.
POTATO MASHER.
APPLICATION FILED OCT. 10, 1905.

Fig. 1.

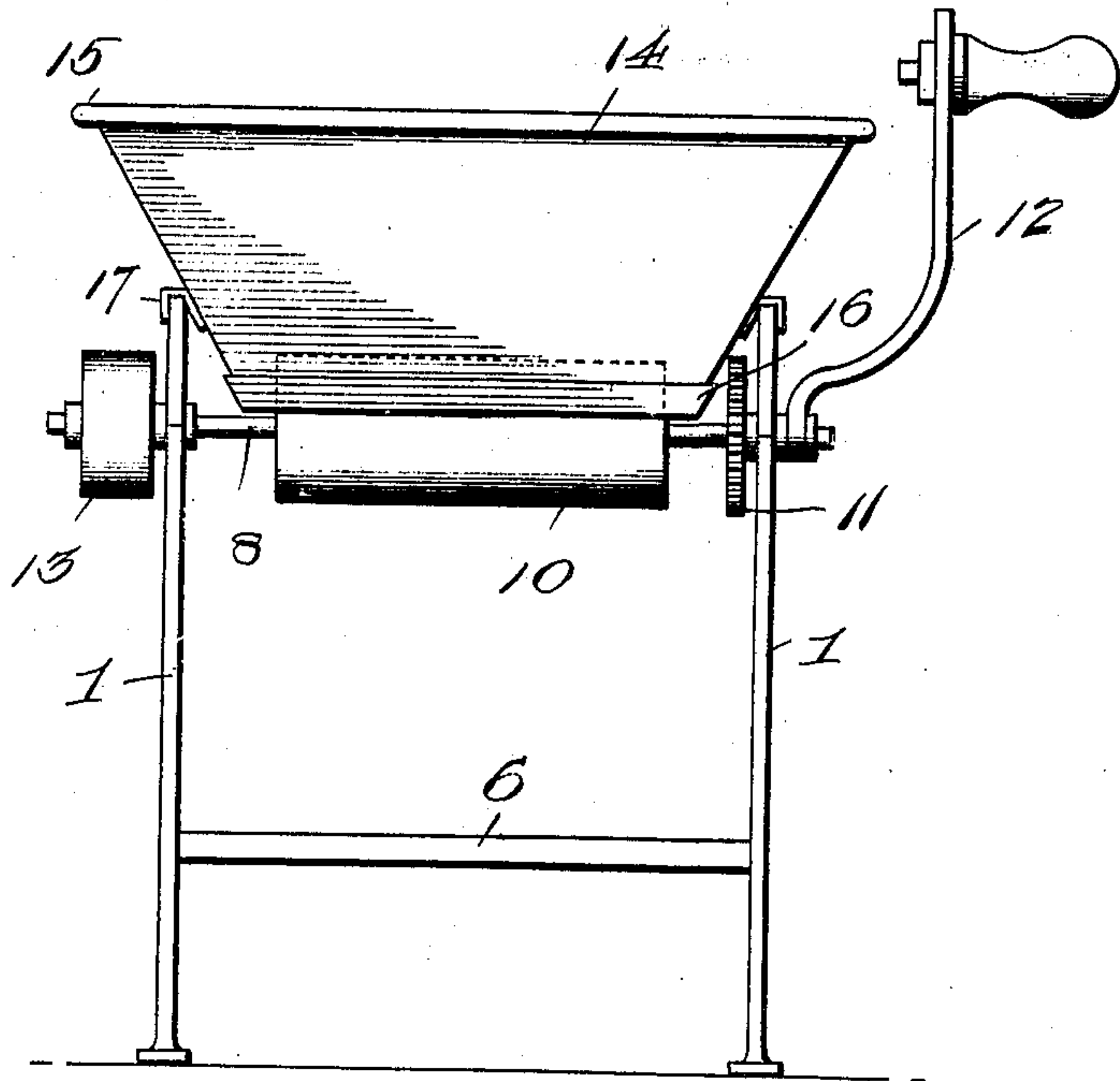


Fig. 2.

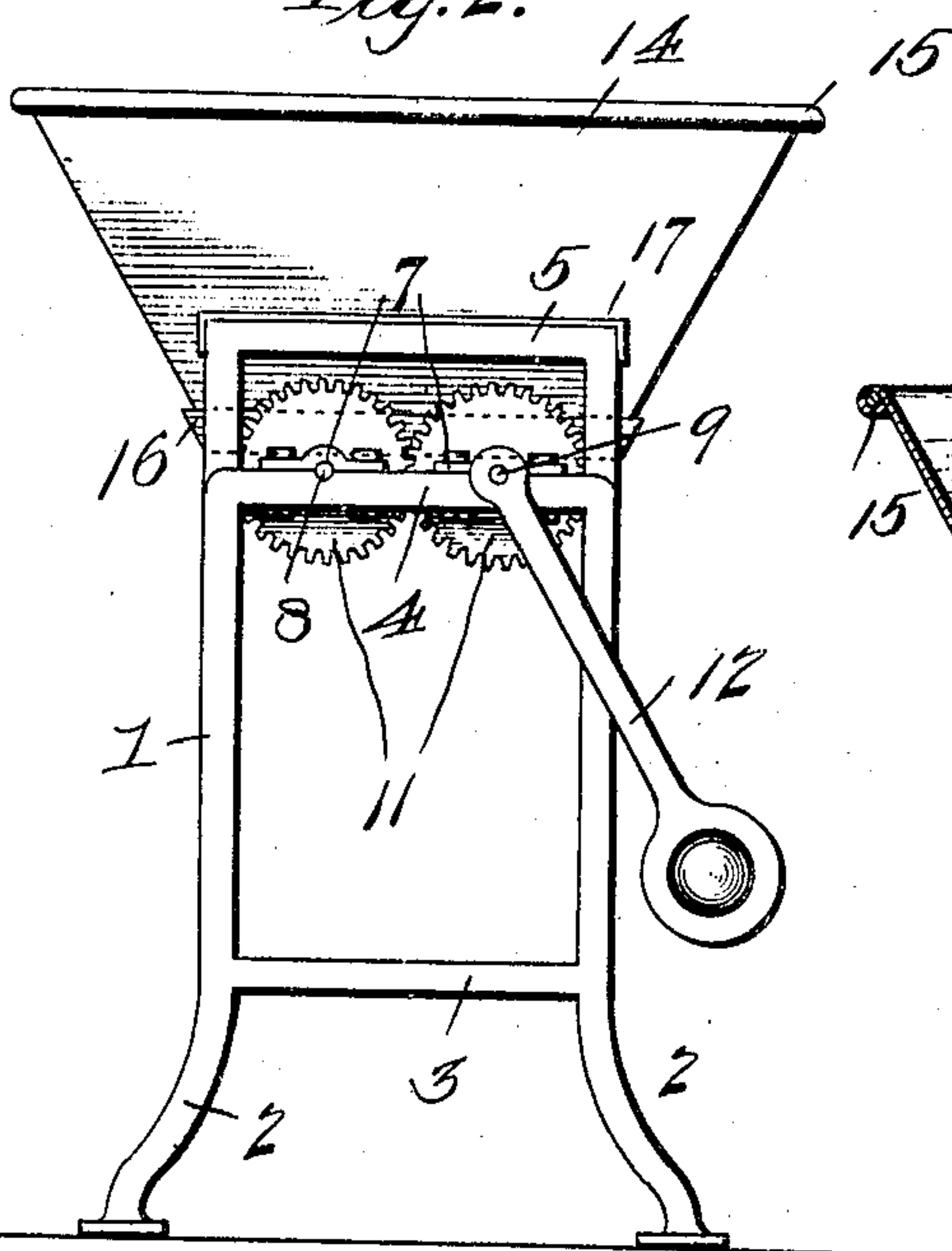
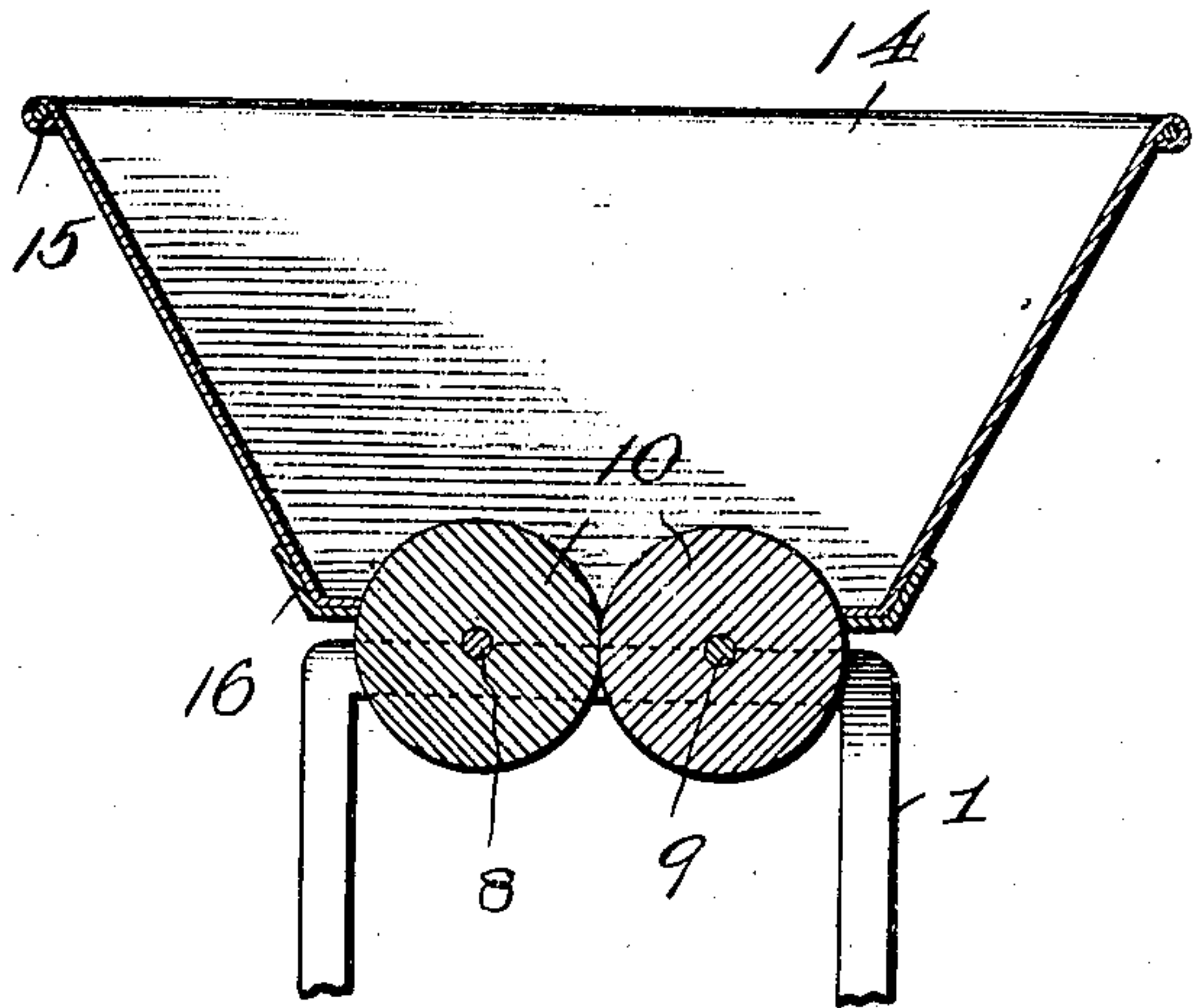


Fig. 3.



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DAVID E. JOHNSTON, OF LOS ANGELES, CALIFORNIA.

POTATO-MASHER.

No. 875,530.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed October 10, 1905. Serial No 282,133.

To all whom it may concern:

Be it known that I, DAVID E. JOHNSTON, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Potato-Mashers, of which the following is a specification.

This invention relates to machines for mashing potatoes and other cooked vegetables and is especially adapted for use in hotels and other analogous establishments where large quantities of potatoes and vegetables are used to expedite the preparation of the latter for table use.

The machine embodies essentially two crushing or mashing rollers provided with means for operating the same either manually or by power, and having a hopper supported thereover, the hopper being preferably removable to render the rollers accessible for cleaning or other operations.

The invention also contemplates the use of a particular frame structure of a light and durable character for holding the mashing or crushing rollers and the hopper.

The invention still further consists in the construction and arrangement of the several parts in detail which will be more fully hereinafter set forth.

In the drawings, Figure 1 is a side elevation of a machine embodying features of the invention. Fig. 2 is an end elevation of the same. Fig. 3 is a transverse vertical section through the upper part of the machine.

Similar numerals of reference indicate corresponding parts throughout the several views.

The frame consists of end uprights 1 of open structure having depending legs 2 adapted to rest upon a floor or other base support and transversely connected by lower, intermediate and top bars 3, 4 and 5. The uprights 1 are also attached at the side by longitudinal bars 6 disposed in the same plane as the bars 3. Suitable light metal will be used in the construction of this frame, and the general dimensions and proportions may be modified as desired. Secured on each intermediate cross bar 4 are pairs of journal boxes 7 of any preferred form to provide bearings for shafts 8 and 9 of crushing or mashing rollers 10, the latter being of less length than the shafts and securely fastened by any suitable means to rotate with said shafts. On each of the shafts 8 and 9 a

spur gear 11 is secured, both gears being held in continual mesh to simultaneously rotate the rollers 10 through the medium of a crank-handle or a power wheel or pulley respectively designated by the numerals 12 and 13, and shown applied to the shaft 9. The shaft 9 is operated in such direction as to cause the rollers to rotate inwardly toward each other to effectively draw the potatoes or other vegetables fed thereto between the rollers for obvious reasons.

A hopper 14 is disposed over the upper portion of the frame and rollers and is preferably constructed from light sheet metal having an upper beaded head 15 and a lower surrounding angle strip 16 secured to the lower end of said hopper to establish a snug fitting with respect to the rollers 10. The angle strips 16 reinforce the lower end of the hopper which is projected inwardly as shown by Fig. 3 to closely approach the rollers 10 and to sustain the weight of the material disposed in the hopper. Any of the material that may settle on this inwardly projecting flange will, in view of the inner motion of the rollers, be picked up by the latter and thrown over toward the central point of contact of the two rollers and be drawn between the latter. The hopper 14 is removable from the rollers and is reliably supported when applied by angle hangers 17 secured to the opposite ends thereof to fit over the top bars 5 of the uprights 1 of the frame, as clearly shown by Fig. 1. As will be noted by reference to Fig. 3, the point of contact between the hopper and the mashing rollers is above the shafts of the rollers, whereby to insure a close fit between the parts and thus prevent the escape of material being operated upon. The angle hangers 17 have such elevation on the ends of the hopper as to cause the bottom of the latter to inclose the upper portions of the rollers 10 without contacting with the shafts 8 and 9, and thereby obviate use of any particular receptive construction in the lower portion of the hopper for the shafts. By having the hopper 14 removable in the manner specified the rollers 10 are rendered accessible for cleaning purposes or other manipulations. The bars 3 and 6 of the frame may also be conveniently utilized as supporting means for a receptacle to receive the mashed potatoes or other vegetables falling from the rollers, the bars 6 being particularly useful for this purpose.

In the operation of the machine the cooked potatoes or other vegetables are fed to or deposited in the hopper 14 and drawn downwardly between the rollers 10 and mashed 5 when the shaft 9 is properly operated and in turn controls the actuation of the shaft 8 through the medium of the meshing gears 11. From the rollers, the mashed potatoes or other vegetables fall into the receptacle that 10 may be placed between the uprights 1 and supported as hereinbefore set forth. The sides and ends of the frame being fully open or unobstructed will permit the ready insertion and removal of the receptacle under and 15 from beneath the rollers.

The improved machine will be found exceptionally advantageous for the purpose for which it has been specially devised, and in view of the simplicity of structure of the

several parts may be produced and sold at 20 a minimum expense.

Having thus described the invention what is claimed as new, is:

In a machine of the class described, a pair of mashing rollers, an angular seat, a hopper 25 removably supported by the seat and having the walls of its lower end intumed to contact with the rollers, the point of contact being above the shafts of the rollers, whereby to insure a close fit between the parts, thus to prevent the escape of material being operated 30 upon.

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

DAVID E. JOHNSTON.

Witnesses:

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