(No Model.)

C. W. HOTTMAN.

SAUSAGE STUFFING MACHINE.

No. 444,052. Patented Jan. 6, 1891.

Fig. 1.

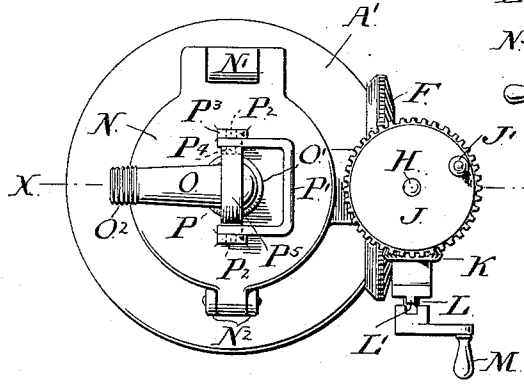


Fig. 2.

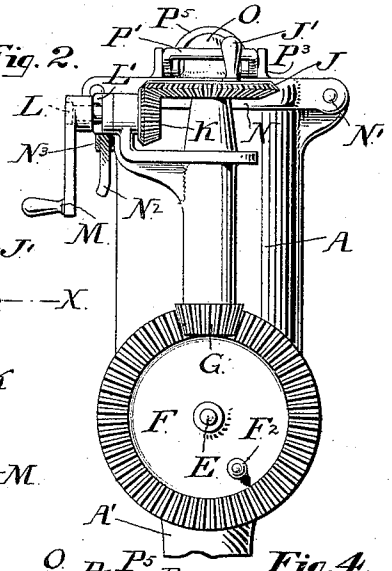


Fig. 3.

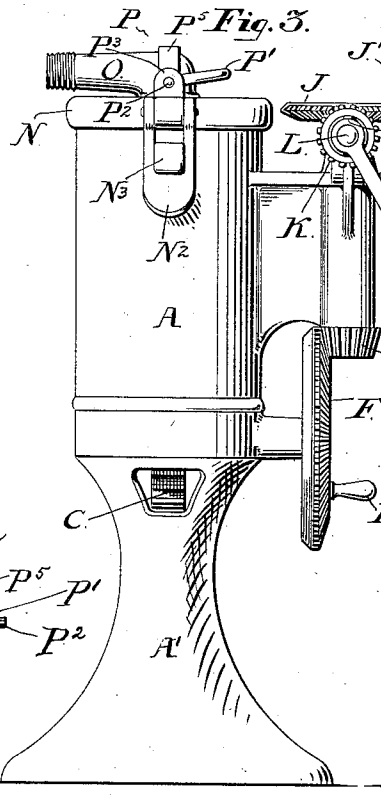


Fig. 4.

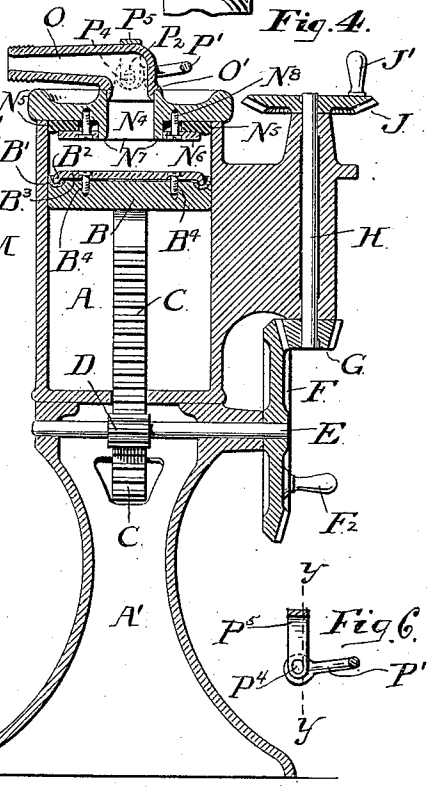


Fig. 5.

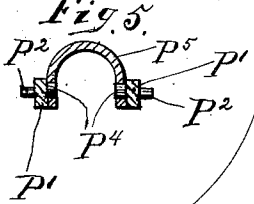


Fig. 6.

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SAUSAGE-STUFFING MACHINE.

SPECIFICATION forming part of Letters Patent No. 444,052, dated January 6, 1891.

Application filed November 18, 1889. Serial No. 330,799. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WILLIAM HOTTMAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sausage-Stuffing Machines; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof as to enable others skilled in the art to make and use the said invention.

This invention relates to machines for stuffing sausages; and the object of the invention is to provide a machine of simple construction and arrangement of parts, so as to obtain a more convenient introduction of the charge of material into the machine.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of my improved machine. Fig. 2 is a side elevation. Fig. 3 is a front elevation, and Fig. 4 is a vertical section in the plan indicated by the dotted line *x x* in Fig. 1. Fig. 5 is a detached longitudinal sectional view of my clamping-bail, showing the eccentric and trunnions of the lever-bail in elevation; and Fig. 6 is a cross-section thereof.

Like letters of reference denote like parts throughout the several figures.

A represents a cylinder supported on a base A′ and provided with a piston B, operated to rise and fall therein by a rack C, worked by a pinion D, mounted on a shaft E, turned by a beveled wheel F, secured thereon and propelled by a pinion G on the lower end of the upright shaft H, bearing at its upper end and turned by a beveled wheel J, which beveled wheel J is provided with a handle J′. The wheel J is turned by a pinion K on the shaft L, which is turned by a crank M. This crank M is attached to the shaft by a clutch L′, whereby when the crank M is drawn forward toward the operator such crank is unclutched and the shaft L is free to turn without imparting motion to the crank M, so that when it is desired to lower the piston B rapidly the wheel J can be turned by the handle J′ and the operator relieved of the unnecessary work of operating said shaft L by means of the pinion K and crank M. A still greater acceleration of movement of the piston B can be had by turning the wheel F by the handle F^2. The piston B has a groove formed in its upper side near its edge, into which is placed a packing-ring B′, held in place by a rim B^2 of a follower B^3, which is held to the body of the piston B by screws B^4.

To the upper end of the cylinder A a lid or or cover N is attached by a hinge N′ to the rear edge of the cylinder A and held by a clasp N^2, jointed to the lid M and hooked over a projection N^3 on the front of the cylinder A.

In the center of the cover N is an aperture N^4, into which fits the lower end of an elbow O, provided with a shoulder O′, which rests against the top of the cover N, and is held firmly against it by a clamp P, consisting of a lever-bail P′, having trunnions P^2 engaging in ears or lugs P^3. The bail P′ has eccentrics P^4 fitting in the ends of the clamping-bail P^5, which they (the eccentrics P^4) draw down tightly on the top of the elbow O when the lever-bail P′ is drawn downwardly toward the lid A, as already shown in Figs. 5 and 6. The outer end O^2 of the elbow O is screw-threaded to facilitate the attachment of tubes for guiding the stuffing discharged through the elbow O.

The under side of the lid N is provided with an elastic compressible and expansible packing-ring N^5 of such diameter when it is not compressed that it will readily enter the upper end of the cylinder A. The packing-ring is held in place by a metallic ring N^6, fitted close around the wall or flange N^7 of the aperture N^4 and having set-screws N^8, which pass through perforations in the said metallic ring and into the lid N, but they (the set-screws) are not screwed up enough to compress the packing-ring N^5 to any extent.

By the above-described arrangement and combination of parts, when pressure is applied to the under surface of the ring N^6 it will rise against and compress the packing-ring N^5 vertically, which will cause the said packing-ring to expand horizontally and tightly close the upper end of the cylinder A.

This machine is operated as follows: The

clasp N^2 is disengaged from the projection N^3 and the cover N is raised and turned backward upon the hinge N′, whereby the crank-handle M is disengaged from the clutch L′ and the wheel J turned by the handle J′, which turns the pinions K and G and actuates the beveled gear-wheel F, the shaft E, and pinion D until the rack C and piston B have descended far enough in the cylinder A to admit the desired amount of stuffing. The lid N is then closed and clasped, as before, the crank M engaged by the clutch L′ within the shaft L and turned, so as to force the piston upwardly and force the stuffing against the flange N^6, which compresses the packing-ring N^5 and expands it tightly against the cylinder A. The stuffing, then having no other escape, is expelled through the elbow O into the casings applied to the end thereof.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a sausage-stuffing machine, the combination of the lid thereof and the metallic ring attached to the under side of the lid, of the elastic ring located between said lid and the said metallic ring, with the piston and means for operating the same, substantially as shown and described.

2. In a sausage-stuffing machine, the combination of the lid thereof having a central aperture and provided with the lugs P^3, the elbow O, arranged to fit into the said aperture, with the bail P^5 and the lever-bail provided with trunnions and eccentrics adapted to turn, respectively, in the said lugs and the said bail, for the purpose set forth.

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Witnesses:
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