Jan. 1, 1929. 1,697,583

A. J. WINTER

SAUSAGE STUFFER

Filed March 16, 1927

Fig. 1.

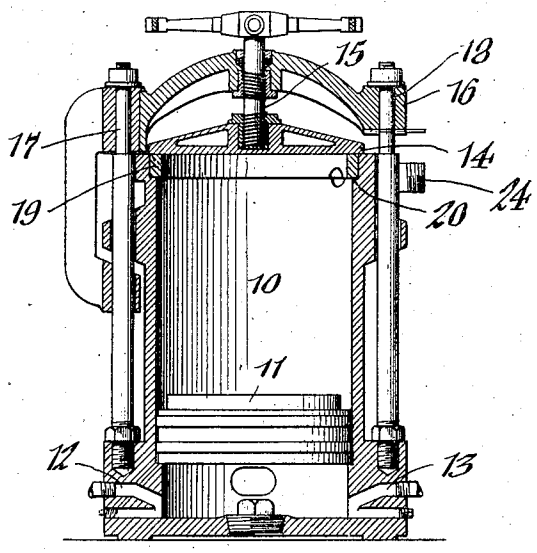



Fig. 2.

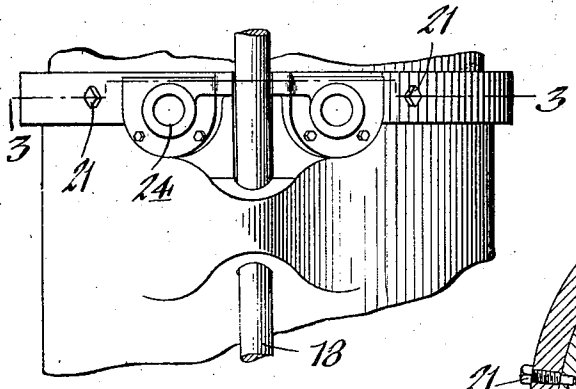



Fig. 3.

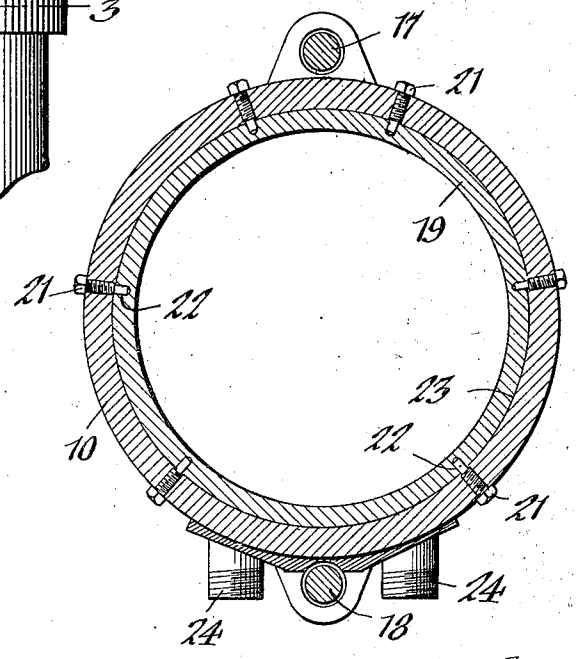
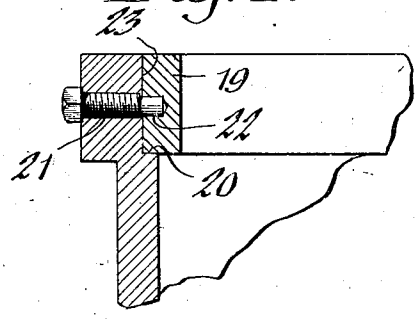



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## SAUSAGE STUFFER.

Application filed March 16, 1927. Serial No. 175,829.

This invention has more particular reference to the class of sausage stuffers comprising a cylinder having a cover carried by a laterally-swinging yoke, a free piston or plunger operated by compressed air or other fluid under pressure, and a safety ring to prevent the plunger from being blown out of the cylinder in case the operator should open the cylinder-cover before shutting off the fluid-pressure.

In order to clean the cylinder, which must be done periodically, the plunger must be removed. In machines, as hitherto constructed, it is necessary to remove the cover, yoke and safety-ring before the plunger can be taken out of the cylinder, which is a laborious operation requiring considerable time.

The object of this invention is to improve the construction of such stuffers with a view of simplifying their construction and reducing their cost of production as well as facilitating and expediting the removal of the plunger, when necessary.

In the accompanying drawings:

Figure 1 is a sectional elevation of a stuffer embodying the invention. Figure 2 is a fragmentary side elevation of the machine, at right angles to Fig. 1. Figure 3 is a horizontal section on line 3—3, Fig. 2. Figure 4 is a fragmentary vertical section of the cylinder and safety ring on an enlarged scale.

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

Referring to the drawings, 10 indicates the upright cylinder of the stuffer containing the piston 11 and provided in its base with the usual inlet 12 and outlet 13 for the motive fluid.

The cover 14 of the cylinder has the customary clamping screw 15 preferably carried by a horizontally-swinging yoke 16. This yoke is pivoted at one end to an upright tie-rod 17, while its opposite end is detachably locked to a similar rod 18.

The parts so far described are well-known in the art and form no part of the present invention.

19 indicates the safety ring fitted in the upper or delivery end of the cylinder 10 and seated on an annular shoulder 20 preferably formed by counter-boring the upper portion of the cylinder, as shown. The ring is removably secured in place by horizontal bolts 21 passing radially through the flanged top of the cylinder at appropriate intervals and interlocking with sockets or openings 22 in the back of the ring. The counterbore or recess 23 is of such depth that the safety ring, when in place, projects inwardly a suitable distance beyond the inner wall of the cylinder to form a stop which prevents blowing out of the piston should the operator neglect to turn off the motive fluid before opening or removing the cylinder cover. The upper edge of the safety ring is preferably flush with the upper end of the cylinder, as shown.

In the preferred construction herein shown, the safety ring carries one or more nozzles 24 through which the sausage meat is discharged from the cylinder 10, but these features form no part of the present invention.

When it is desired to remove the safety ring to withdraw the piston for cleaning it and the cylinder, the locking bolts 21 are simply unscrewed far enough to release the ring; the yoke 16 and cover are swung aside and the ring is withdrawn from its seat.

By this construction and arrangement, the ring can be quickly and conveniently removed without necessitating the removal of the cover, its clamping screw and yoke from the machine, thus facilitating the cleaning operation of the machine and enabling it to be done in a comparatively short time. This duty is therefore less likely to be neglected.

This improvement also effects a material saving in the cost of manufacturing the machine.

I claim as my invention:

1. In a sausage stuffer, a cylinder provided in the wall of its delivery end with a recess, a safety-ring removably seated in said recess, and locking members extending transversely through the cylinder wall and engaging the safety-ring.

2. In a sausage stuffer, a cylinder provided in the wall of its delivery end with a recess, a safety ring removably seated in said recess, and radial bolts passing through the cylinder-wall and interlocking with the safety-ring.

3. In a sausage stuffer, a cylinder provided with a counter-bore extending in-

wardly from its delivery and forming a supporting shoulder, a safety-ring removably arranged in said counter-bore and seated on said shoulder, said ring having radial sockets, and radial bolts passing through the cylinder-wall and interlocking with said ring-sockets.

4. In a sausage stuffer, a cylinder provided with a counter-bore extending inwardly from its delivery end forming a supporting-shoulder, a safety-ring removably arranged in said counter-bore and seated on said shoulder, the upper edge of said ring being flush with the upper end of the cylinder, and means passing through the cylinder-wall for retaining the safety-ring in said recess.

ANDREW J. WINTER.