

No. 719,032.

PATENTED JAN. 27, 1903.

G. R. NAPIER.
SAUSAGE STUFFING MACHINE.
APPLICATION FILED AUG. 29, 1901.

NO MODEL.

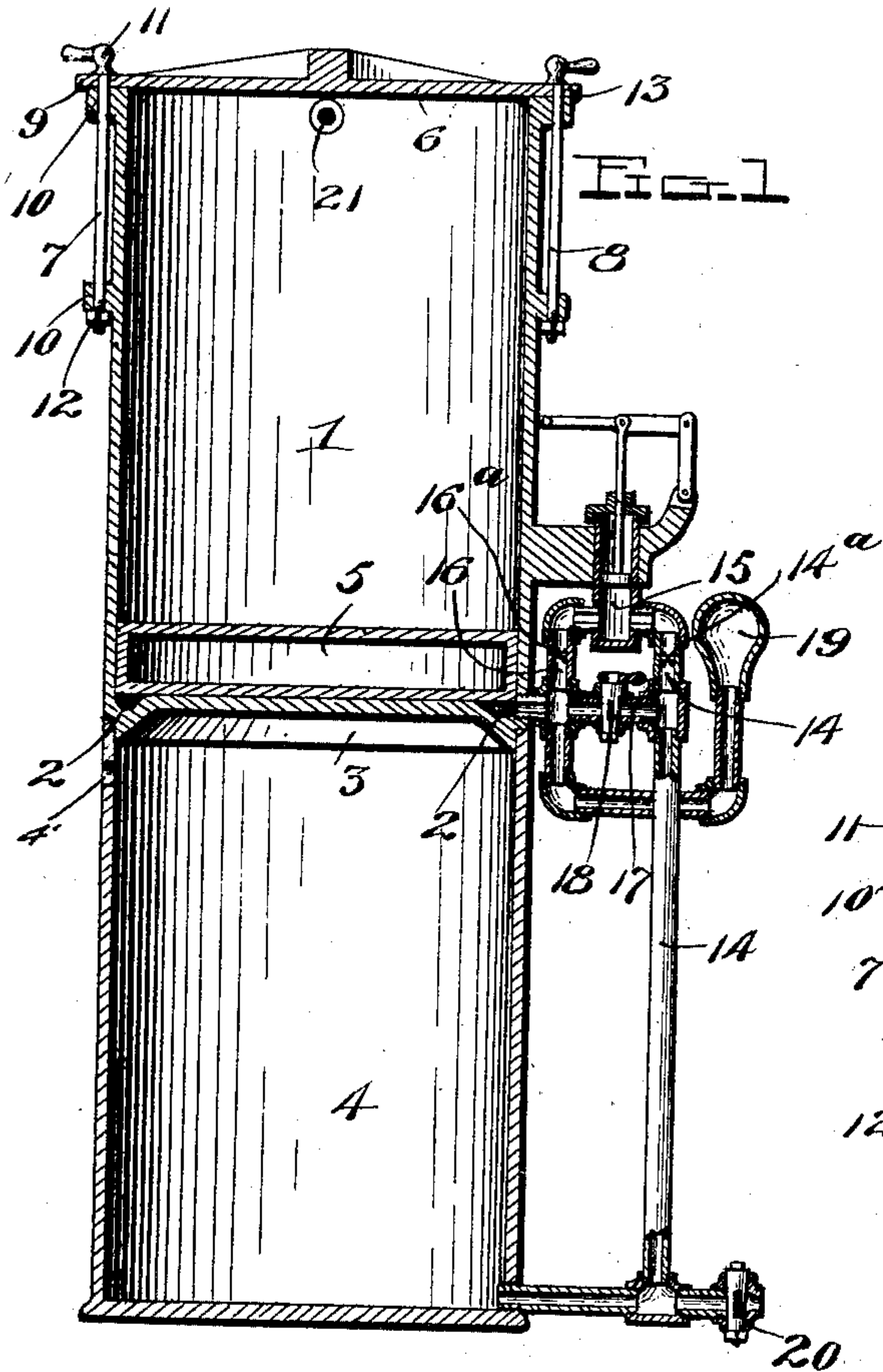


Fig. 2

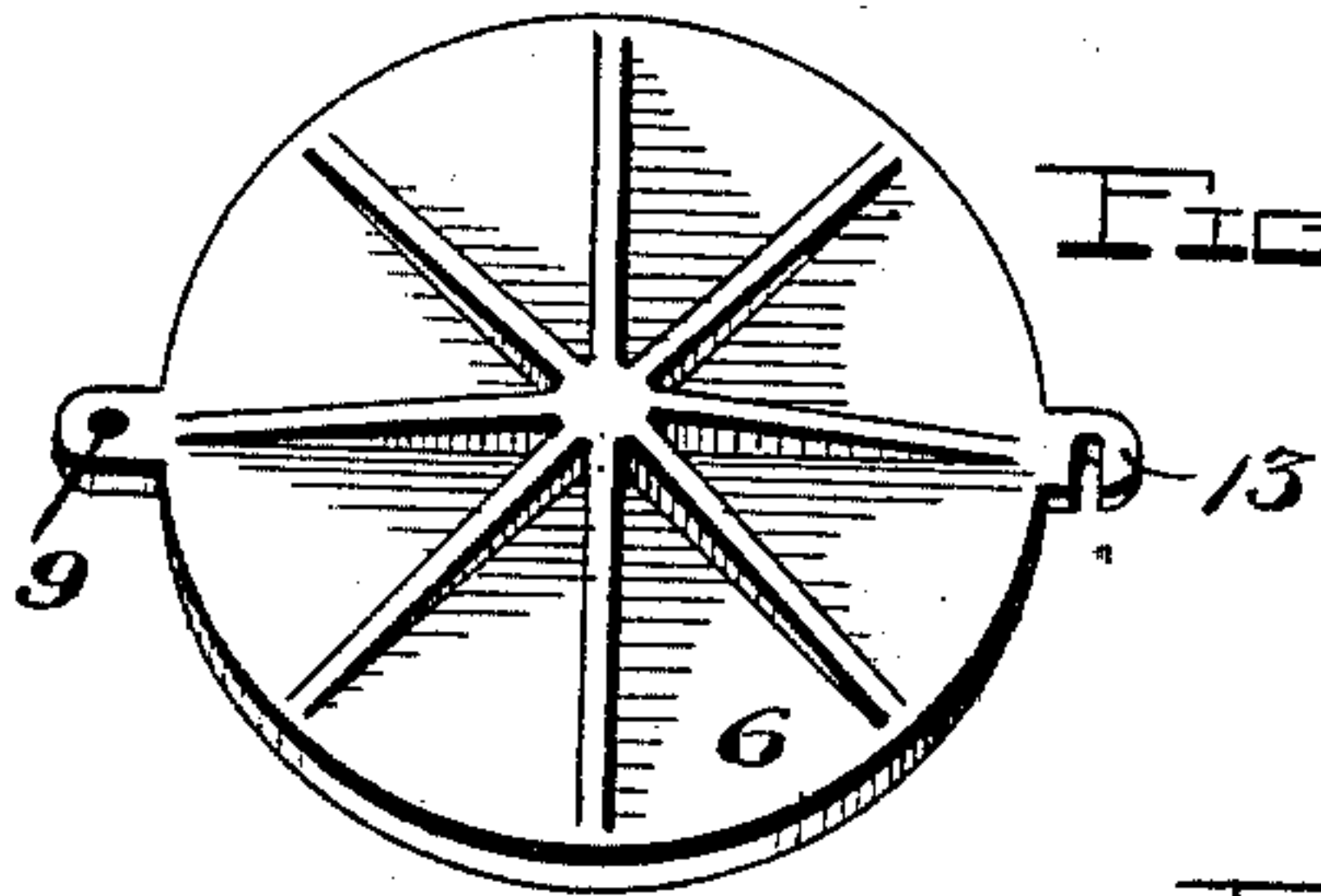
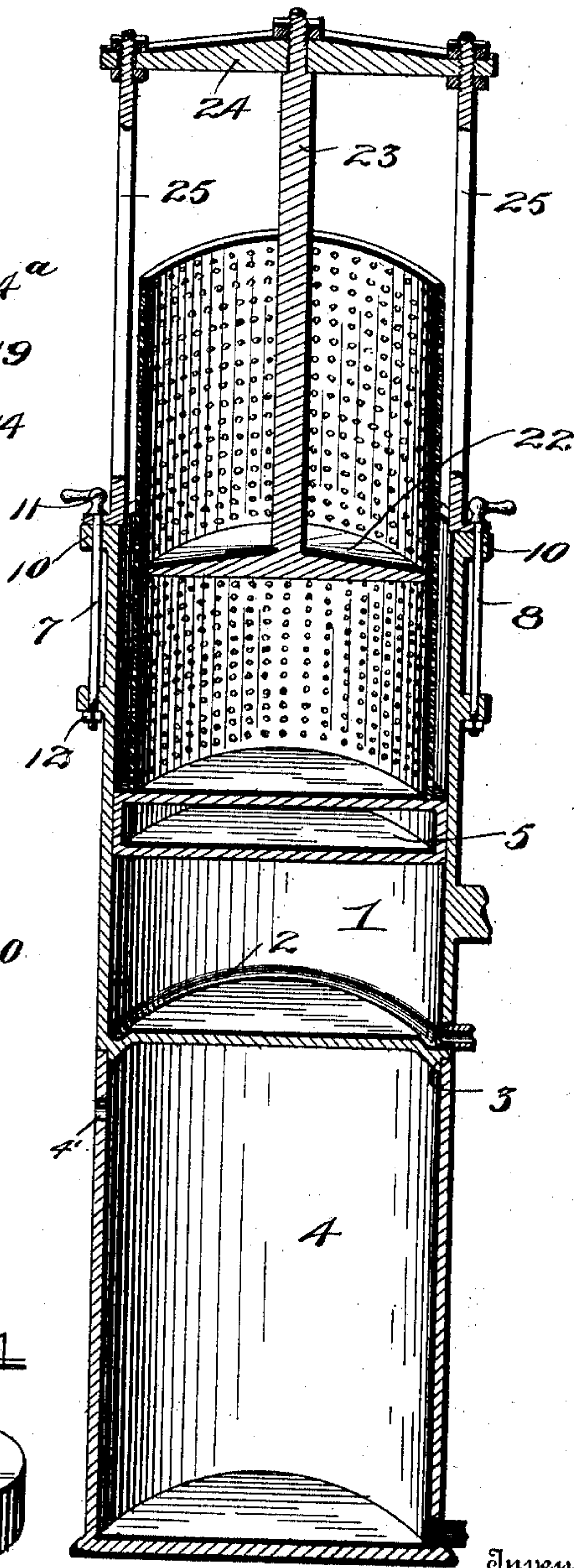


Fig. 3

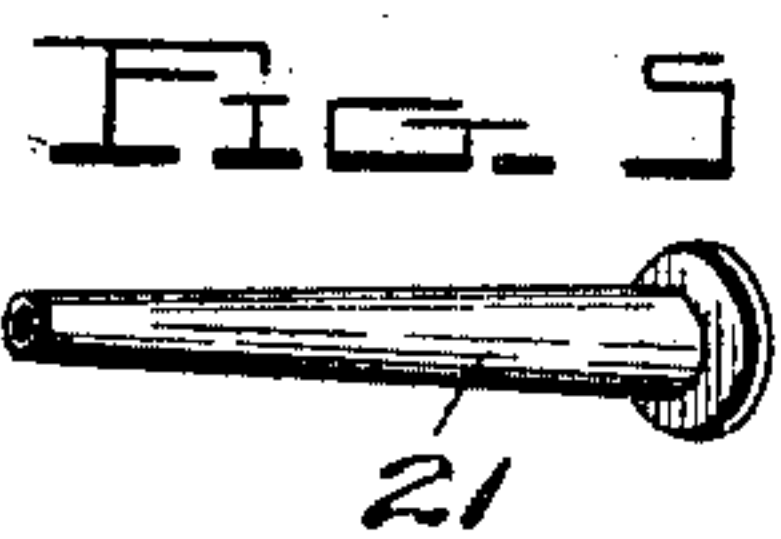


Fig. 5

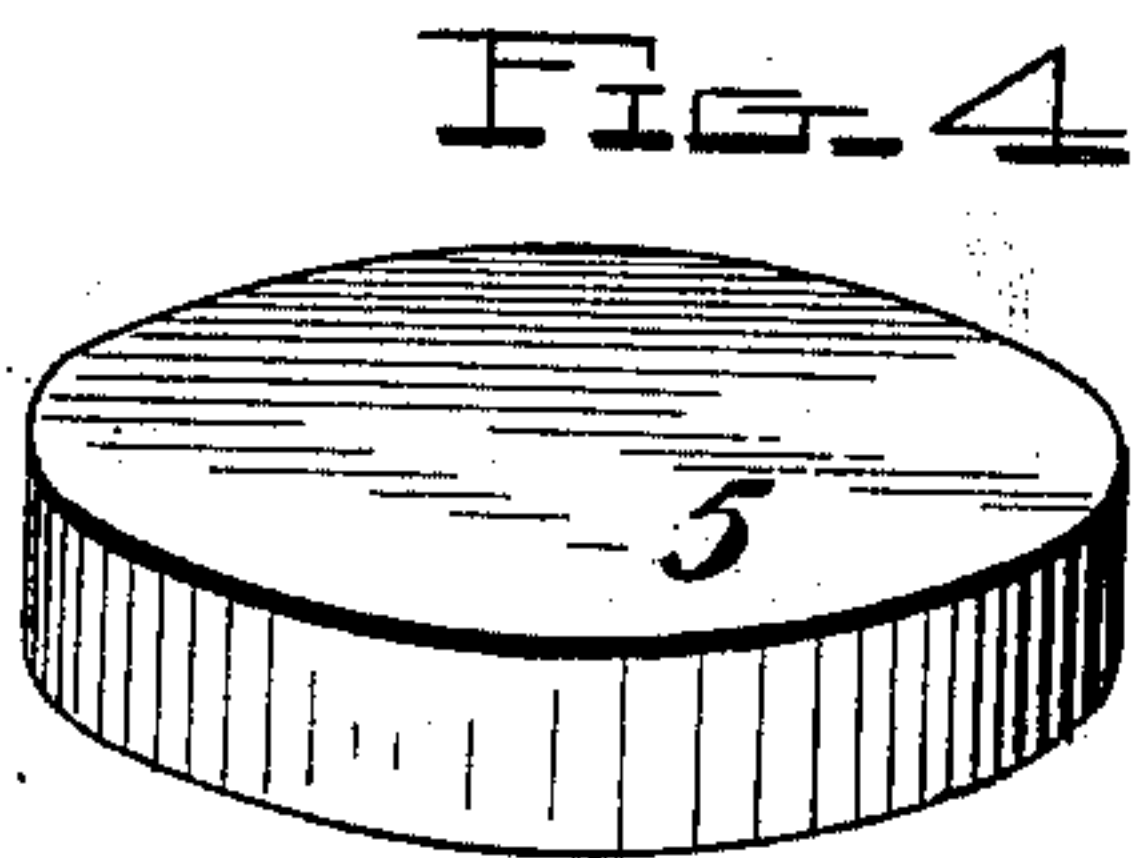


Fig. 4

Inventor

G. R. Napier

Witnesses

J. A. Griesbauer, Jr.
Wilbur S. Hauke

By

H. B. Wilson & Co.

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE REED NAPIER, OF MACON, GEORGIA.

SAUSAGE-STUFFING MACHINE.

SPECIFICATION forming part of Letters Patent No. 719,032, dated January 27, 1903.

Application filed August 29, 1901. Serial No. 73,736. (No model.)

To all whom it may concern:

Be it known that I, GEORGE REED NAPIER, a citizen of the United States, residing at Macon, in the county of Bibb and State of Georgia, have invented certain new and useful Improvements in Sausage-Stuffing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a sausage-stuffing machine.

The object of the invention is to provide a machine of this character which shall be simple of construction, durable in use, comparatively inexpensive of production, efficient in action, and which by the addition thereto of simple parts may be readily converted into a lard-press.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of the machine when used as a sausage-stuffer. Fig. 2 is a sectional perspective view of the machine when used as a lard-press. Fig. 3 is a detail perspective view of the top or cap of the cylinder. Fig. 4 is a similar view of the piston, and Fig. 5 is a similar view of the discharge-nozzle.

Referring to Fig. 1, 1 denotes the cylinder, which is preferably provided in its bottom with an annular groove 2 and on the lower face of its bottom with an annular flange 3. The cylinder is seated upon a water-tank 4, with the flange 3 projecting into and engaging the interior wall thereof. The tank 4 has an inlet 4'.

5 denotes a rodless piston or float which snugly fits the interior wall of the cylinder and is movable vertically in said cylinder, as hereinafter explained.

6 denotes the hinged cover for the upper end of the cylinder. This cover is secured in place by rods 7 and 8, the former of which passes through an apertured lug 9 on the cover, through apertured lugs 10 in the cylinder, and is provided at its upper end with

an operating-handle 11 and at its lower end with screw-threads to receive a nut 12. The rod 8 is constructed like the rod 7 and is secured to the cylinder in the same manner. This rod, however, instead of engaging an apertured lug engages a slotted lug 13. By loosening this rod the cover may be swung to one side for the purpose of gaining admission to the cylinder.

14 denotes a pipe communicating at the lower end with the tank 4 and extending upwardly and communicating with a suitably-mounted pump 15, which in turn communicates with the cylinder through a pipe 16, which has a branch 17, that communicates with the groove 2 of the cylinder, so that when the piston is at its lowermost point within and is resting upon the bottom of the cylinder water may be forced under said piston or plunger and elevate the same. The pipe 16 and the upper end of the pipe 14 are provided with the usual oppositely-working check-valves 14^a 16^a.

17 denotes a pipe communicating with the pipe 16 and the upper end of the pipe 14 below the check-valves therein and is provided with a cock 18, whereby the water may be drained from the cylinder and allowed to return to the tank 4.

19 denotes an air-chamber or compressor which communicates with the pipe 16 and is designed to maintain a uniform pressure within the cylinder.

20 denotes a filling or draw-off cock for filling or emptying the tank 4.

21 denotes a discharge-nozzle located at the upper end of the cylinder.

In operation, assuming the tank 4 to be filled with water and the plunger or piston resting upon the bottom of the cylinder, the handle of the rod 8 is worked to loosen it from engagement with the lug of the cover and the cover is then swung to one side, thus permitting the cylinder to be charged with sausage-meat or desired material. After the cylinder has been charged the cover is swung back to close the cylinder and is again fastened. The pump is now operated to force water from the tank 4 up through the pipe 14, through the pump, through the pipe 16 into the cylinder under the piston, and thus elevates said piston. In its upward move-

ment the piston forces the material supported thereby out through the nozzle 21 in the usual manner.

In large cities and towns where there is sufficient water-pressure the pump may be dispensed with and the water-service pipe connected directly to the lower end of the cylinder and the piston elevated, as above described. In that event a draw-off cock is also located in the cylinder at its lower end to permit the water to be drained from the cylinder and allow the piston to lower therein.

As shown in Fig. 1 of the drawings, after the piston has been elevated and it be desired to recharge the cylinder the valve 18 is opened, thus allowing the water from the cylinder 1 to reënter the tank 4.

As shown in Fig. 2, in which the invention is adapted for use as a lard-press, I have removed the cover and placed in the open end of the cylinder a perforated shell which is of slightly less diameter than the inner diameter of the cylinder and rests with its open end on the piston or plunger. A clearer-head 22 projects into the cylinder and is provided with a stem 23, which is secured to a cross-head 24, supported by rods 25, secured to the lugs 10 of the cylinder.

In operation, assuming the piston to be at its lowermost point within the cylinder and the perforated shell seated thereupon, the cracklings are placed inside the perforated cylinder and the head 22 adjusted and firmly held within the perforated shell or cylinder. Water under pressure is applied to the cylinder under the piston and forces the piston, with shell and the cracklings therein contained, upwardly, and thus causes the lard to flow out through the perforations in the shell into the space between the shell and cylinder and thence out through the nozzle 21 in the manner previously described in connection with the sausage-stuffing machine.

It will thus be seen that the invention has a double use in that it may be used as a sausage-stuffing machine and also by the addi-

tion of a few simple parts may be converted into a lard-press.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

1. In a device of the character described, the combination with a cylinder having an outlet at its upper end and an inlet at its lower end, of a piston located within said cylinder, a perforated shell supported by said piston and of less diameter than the interior diameter of the cylinder, and a clearer-head supported within said shell, and, as the piston moves upwardly with the shell, adapted to force the material supported by said piston through the perforations in the shell, substantially as set forth.

2. In a device of the character described, the combination of a cylinder provided at its lower end with a water-inlet and at its upper end with fastening devices, a piston located within said cylinder, a perforated shell supported by said piston and adapted to slide therewith within the cylinder, a clearer-head arranged within the shell, and a frame secured to the top of the cylinder by said fastening devices and supporting the clearer-head, substantially in the manner set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEO. REED NAPIER.

Witnesses:

W. W. WRIGLEY,
L. T. STALLINGS.