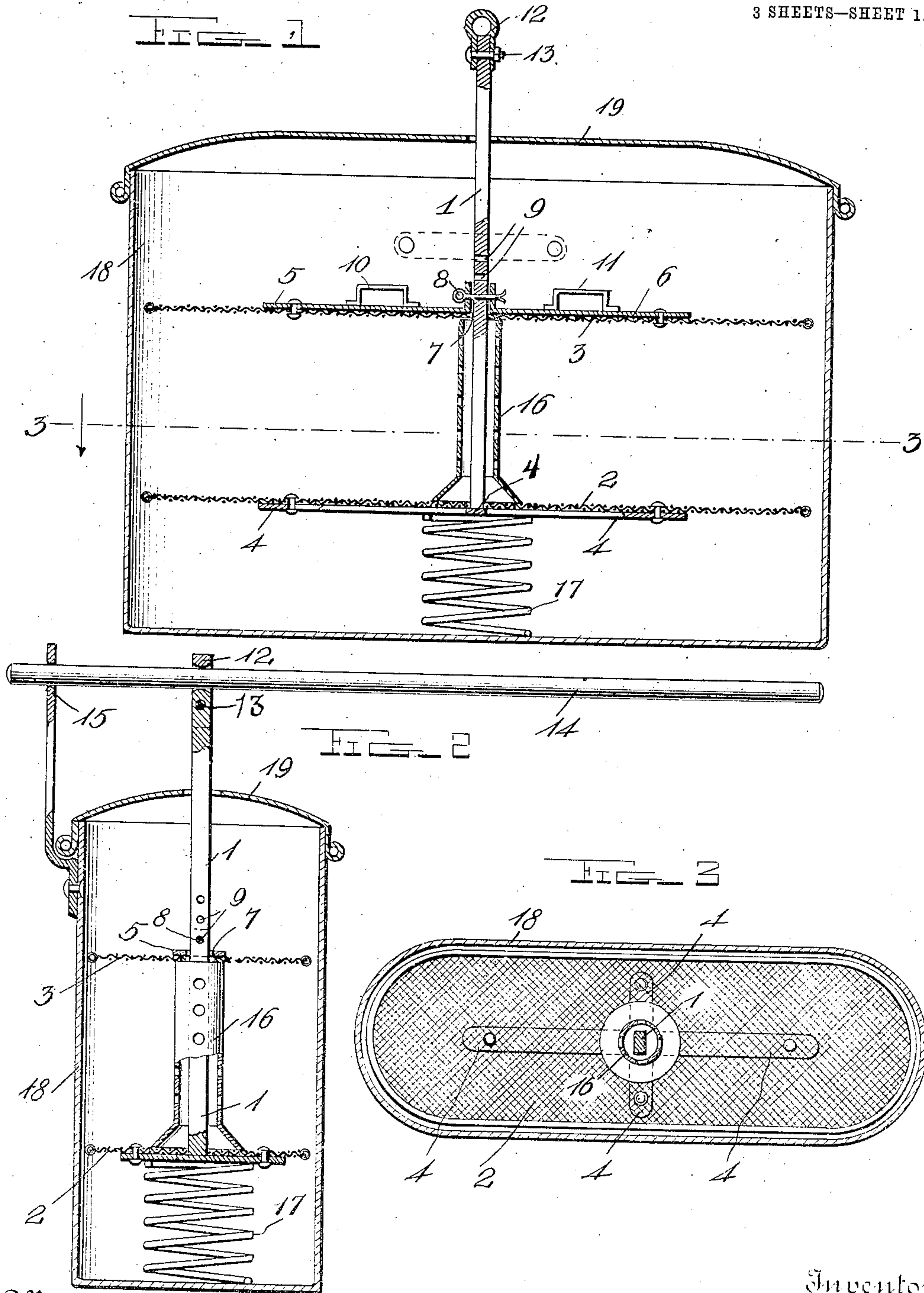


O. & M. FROESÉ.
 WASHING MACHINE.
 APPLICATION FILED DEC. 2, 1907.

912,107.

Patented Feb. 9, 1909.

3 SHEETS—SHEET 1.



Witnesses

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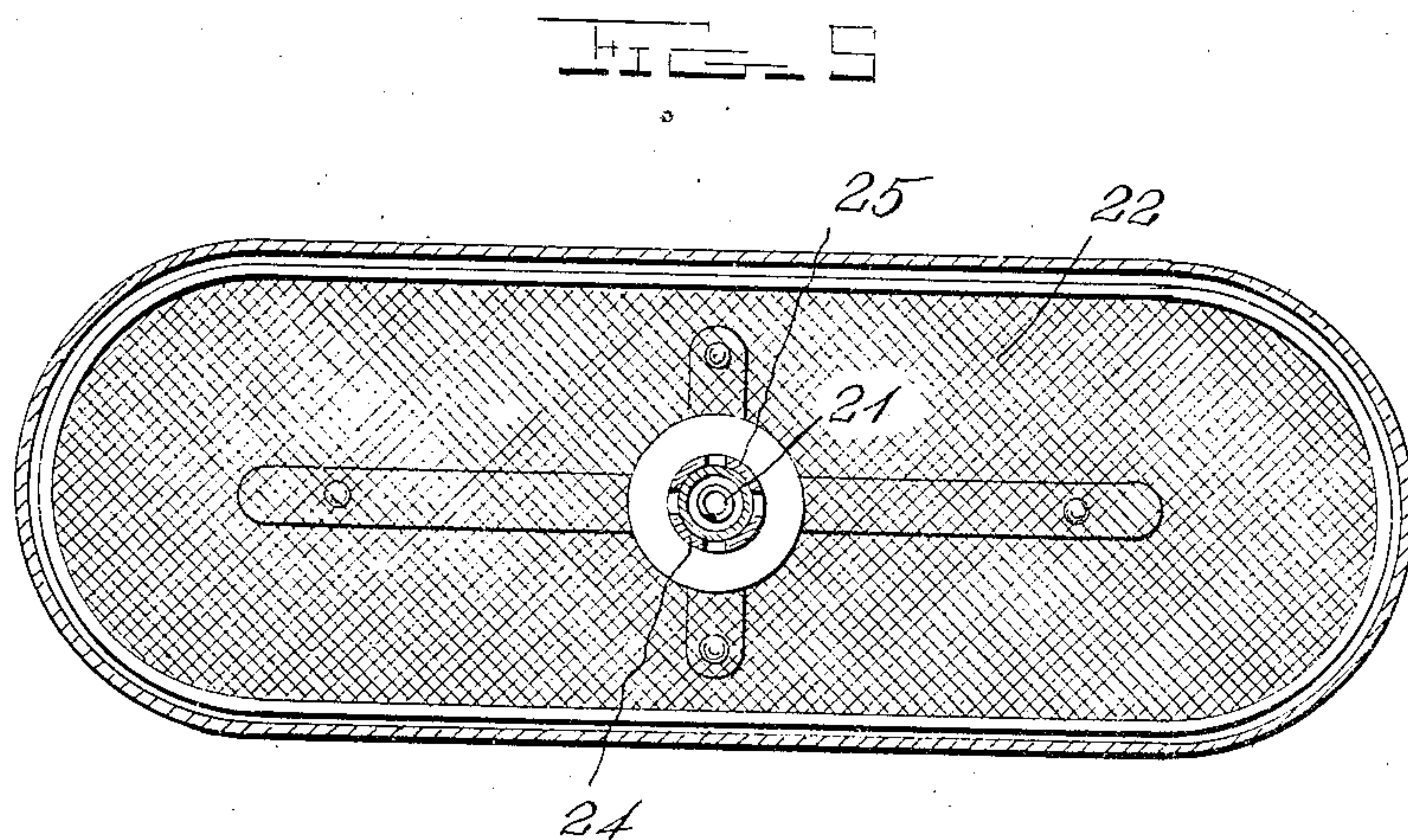
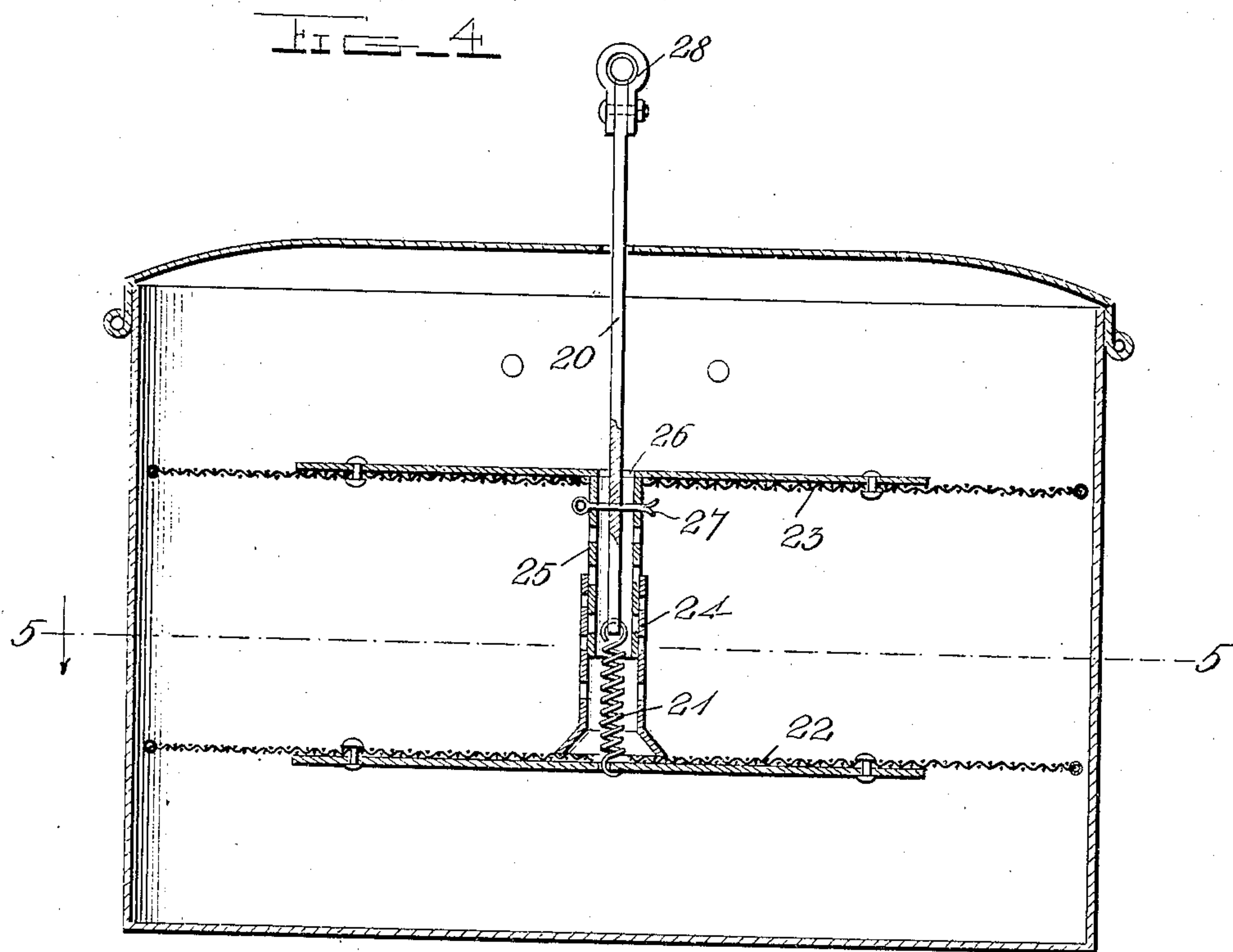
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3 SHEETS—SHEET 3.

Fig. 6.

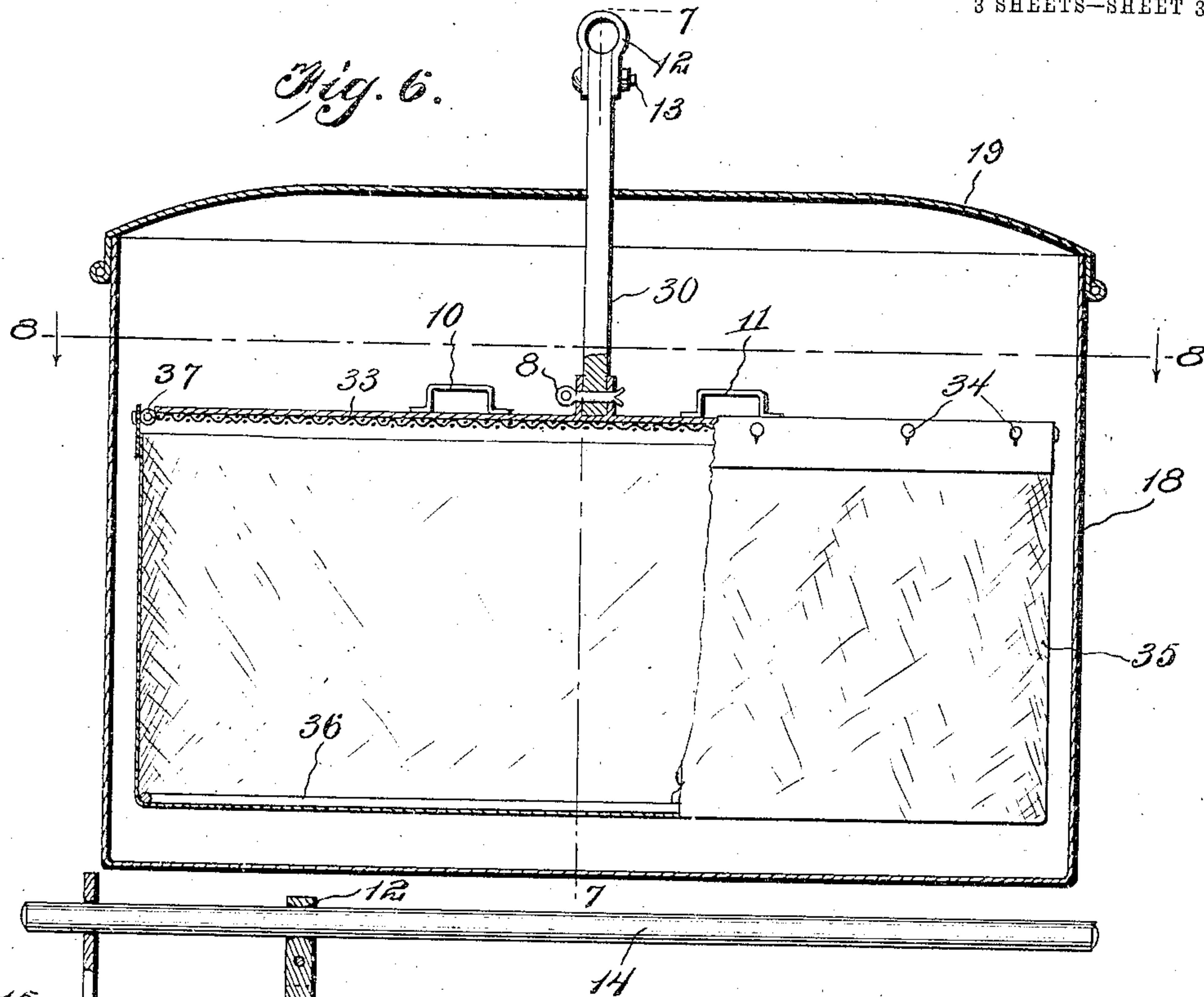


Fig. 7.

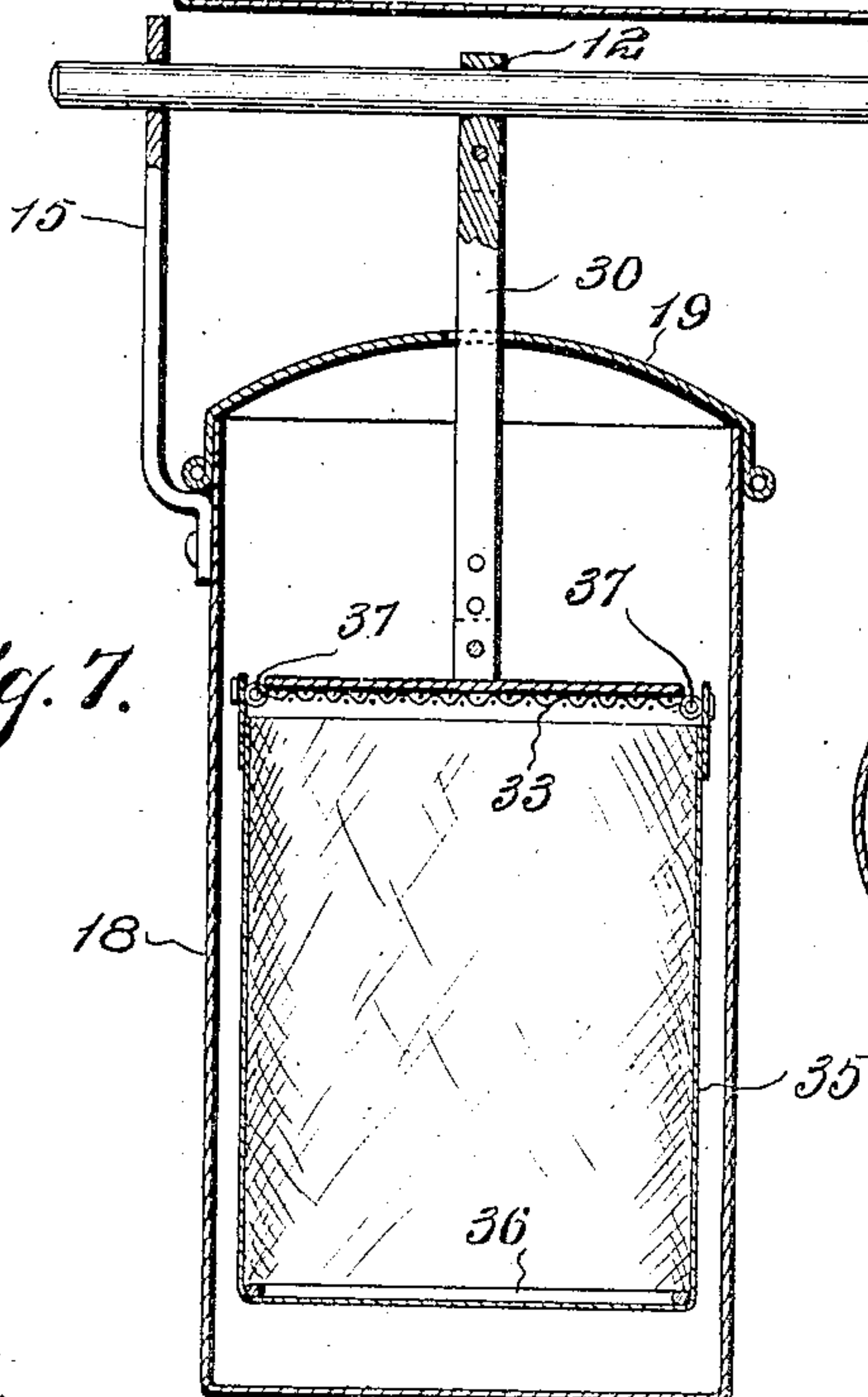
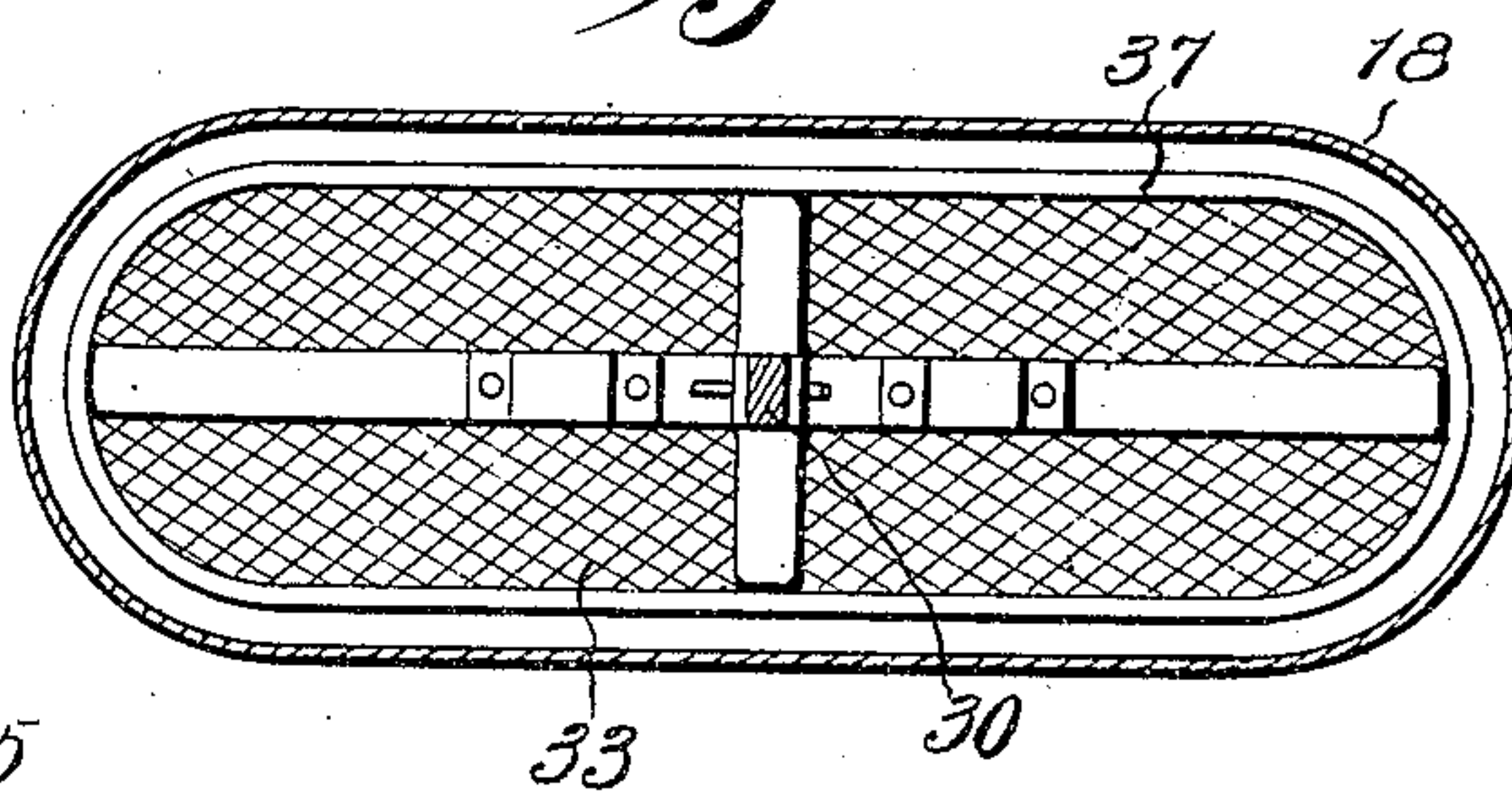


Fig. 8.



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UNITED STATES PATENT OFFICE.

OTTO FROESÉ AND MINNA FROESÉ, OF NEW YORK, N. Y.

WASHING-MACHINE.

No. 912,107.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed December 2, 1907. Serial No. 404,736.

To all whom it may concern.

Be it known that we, OTTO FROESÉ and MINNA FROESÉ, citizens of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Washing-Machines; and we 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.

This invention relates to an improved clothes washing machine, especially adapted for use in connection with a clothes boiler; and it consists of the novel construction, combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

The object of the invention is to provide a machine of this character which is simple in construction, efficient in action, and cheap to manufacture.

Another object is to provide a simple and inexpensive machine capable of rapidly and thoroughly cleansing the clothes without rubbing, wearing or otherwise injuring the fabrics and which is easy to operate.

A further object is to provide a machine which may be removed from the boiler or tub in which it is used, carrying with it all of the clothes cleansed thereby or from which pieces of clothing may be removed individually if desired.

In the accompanying drawings,—Figure 1 represents a longitudinal section of a boiler with the top on and showing one form of this invention applied thereto; Fig. 2 represents a transverse section thereof; Fig. 3 represents a horizontal section through the boiler taken on line 3—3 of Fig. 1; Fig. 4 represents a longitudinal section through a boiler showing a modified form of this improved washer arranged therein; Fig. 5 represents a horizontal section thereof; Fig. 6 is a longitudinal vertical section of a boiler showing another modification of the invention; Fig. 7 is a transverse section on line 7—7 of Fig. 6; Fig. 8 is a horizontal section thereof on line 8—8 of Fig. 6.

This improved washer may be used in connection with any suitable vessel, and in the accompanying drawings it is shown applied to a boiler 18, having a removable top 19.

In the form illustrated in Figs. 1 to 3, a supporting standard 1 is shown of any de-

sired shape and construction, having any desired number of spaced clothes supporting and pressing members secured thereto. As shown two of these members, 2 and 3, are employed composed of any suitable foraminous material and preferably made of a shape to correspond in contour with the shape of the vessel in which they are to be used, and adapted to fit loosely therein. The bottom member or plate 2 is preferably made of wide mesh heavy wire, having a central opening through which the standard 1 is passed, and to the lower end of which it is secured by means of brace rods, as 4, extending in opposite directions from the lower end of said standard 1 underneath said plate 2 and fastened thereto by rivets or other suitable means. The upper plate 3 is constructed similarly to the plate 2, having secured to its upper face brace rods 5 and 6, extending longitudinally thereof on opposite sides of the central opening 7 therein and having their inner ends bent upwardly and perforated to receive a cotter pin 8 or other suitable device for adjustably connecting said plate to the standard 1, by passing said pin through one of the longitudinally spaced apertures, as 9, formed in said standard to adapt the plate 3 to be adjustable toward or from the plate 2 to accommodate clothes varying in bulk. Hand grips or loops 10 and 11 are secured to the brace rods 5 and 6 to provide means for lifting the washer from the boiler or other receptacle. The upper free end of the standard 1 is adapted to project through an opening in the cover 19 of the boiler 18, and is provided with a detachable loop 12, preferably secured thereto by means of a bolt 13, and adapted to receive an operating lever or rod 14, which is passed therethrough, and has one end engaged with a similar loop 15, formed on a bracket preferably secured to one side of the boiler 18, and which acts as a fulcrum for said lever for raising and lowering the washer. A perforated tube 16 surrounds the standard 1 between the plates 2 and 3, and is secured thereto in any suitable manner. This tube is designed to operate as a pump or fountain, the water and steam being sucked up therethrough and forced out through the perforations by the pressure of the steam into and through the clothes disposed between the plates 2 and 3. A spring 17 is preferably arranged between the bottom of the boiler 18 and the lower face of the plate 2 and is compressed on the downstroke

of the standard or plunger 1 and assists in raising it on its upstroke.

In the use of the form above described, the loop 12 and the plate 3 are removed, and the clothes placed on the plate 2. The plate 3 is then adjusted in position to hold the clothes securely between it and the plate 2, and is fastened in adjusted position by means of the cotter pin 8, which is passed through the perforated ends of the brace rods 5 and 6, and through an aperture in the standard 1, as above described. The top of the boiler is then placed over the standard 1 and secured in place by any suitable clamping means (not shown) for holding it against the pressure of the steam generated in boiling. The loop 12 is then replaced on the free end of the standard 1, and the lever 14 is passed through said loop 12 and the loop 15 in the supporting bracket, and the operator moves said lever up and down with a pumping motion, which causes the plates 2 and 3 carried by the standard 1 to be moved correspondingly in the boiler and force the water and steam through the clothes, thereby thoroughly cleansing them.

If desired, when the tube 16 is employed, the pumping operation by means of the lever 14 may be dispensed with, as the water is forced up through said tube out through the perforations therein into the clothes.

In the form illustrated in Figs. 4 and 5, a standard 20 is shown similar in construction to the standard 1 of the other figures, except that it has a spring 21, arranged immediately at its ends in position to come between the plates hereinafter described. Two plates 22 and 23, constructed and braced similarly to the plates 2 and 3, are secured to this standard 20. The lower plate 22 has secured to its upper face around the central opening therein an upwardly projecting perforated tube 24, which fits around and is spaced from the standard 20, and the plate 23 has a depending perforated tube 25 secured to its lower face in any suitable manner around the central aperture 26 therein, through which the standard 20 passes. This tube 25 is of slightly smaller size than the tube 24, with which it is adapted to telescope and move up and down therein to provide for a yielding action between said plates 22 and 23, the spring 21 tending to draw the plate 23 downward and clamp or press the clothes tightly between it and the plate 22. This tube 25 is detachably connected with the standard 20 in any suitable manner, preferably by means of a pin 27 passing transversely through the walls of said tube and through an aperture in the standard. The free end of the standard 20 is provided with a removable lever engag-

ing the loop 28 similar to loop 12 of the other figures and for a similar purpose. This pulling action exerted by the spring 21 on the plate 23 forces it down onto the clothes and squeezes out the water which has been forced therein through the perforations in the tubes 24 and 25 when said plate 23 is elevated by the operation of the lever 14.

In the form shown in Figs. 6, 7 and 8, one plate 33 only is employed similar in construction to plates 3 and 23 of the other figures, and connected in the same manner to the standard 30. Detachably connected with said plate by buttons 34 or any other suitable fastening means, is a clothes holder in the form of a bag 35, composed of any suitable foraminous material, through which water will pass freely, such as burlap netting or the like. This bag is preferably provided in its bottom with an extension member 36 for holding it in operative position, the bag bottom within said member 36 forming a lower foraminous member preferably corresponding in shape to the member 33 and held in operative position relatively to said member 33 by the body of the bag 35 and it may also have a similar member 37 disposed near its top. Any suitable means may be employed for locking the top to the boiler and for holding the boiler anchored against movement when in operation.

Having described our invention, we claim:

1. A clothes washer comprising a standard carrying a plurality of vertically spaced foraminous members, and foraminous means arranged between said members.
2. A clothes washer comprising a supporting standard having a foraminous member fixed thereto, a complementary foraminous member carried by said standard, and compressible means arranged between said members.
3. A clothes washer comprising a supporting standard having a foraminous member fixed thereto, a complementary foraminous member carried by said standard, and flexible means connecting said members.
4. A clothes washer comprising a supporting standard having a perforated plate fixed thereto, a foraminous member spaced vertically therefrom, and flexible foraminous means connecting the edges of said plate and said member.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

OTTO FROESE.
MINNA FROESE.

Witnesses:

G. M. PREISSINGER,
IDA A. RUTHERFORD.