No. 676,353. Patented June 11, 1901.

# J. J. CAYLOR.

## NON-CORRODIBLE PUMP.

(Application filed Apr. 16, 1901.)

(No Model.)

Fig. 4

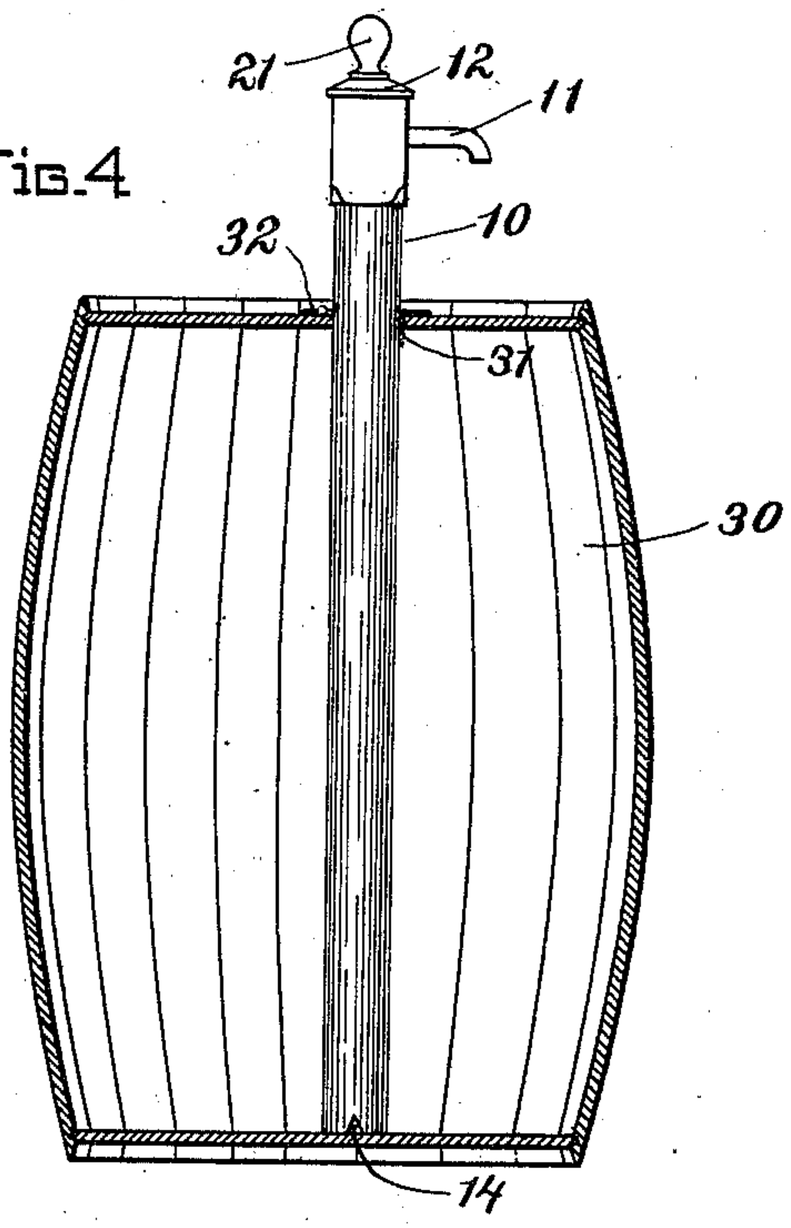



Fig. 1.

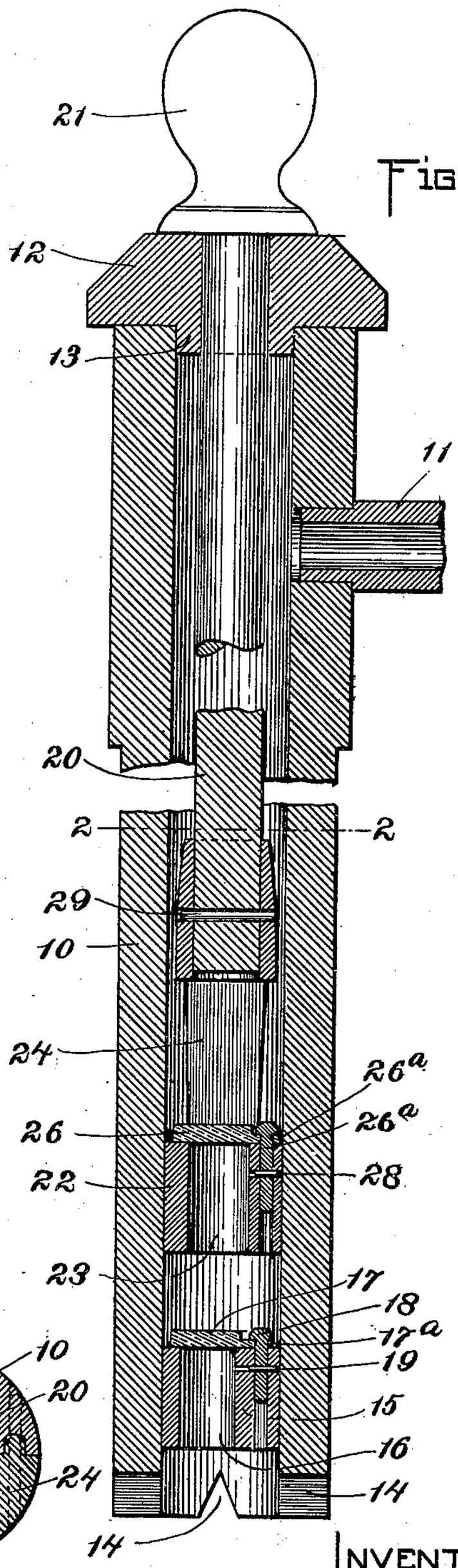



Fig. 3.

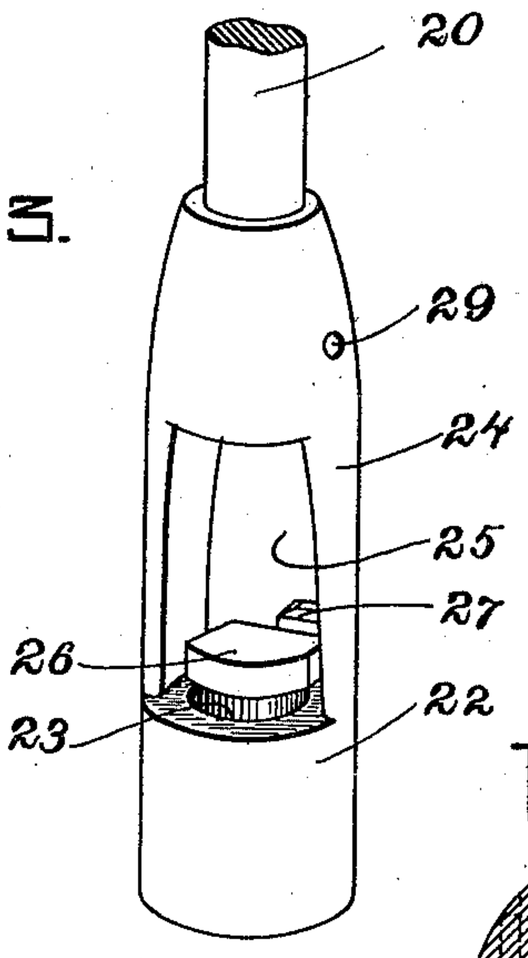
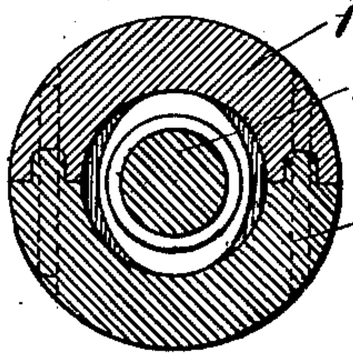



Fig. 2.




WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSEPH J. CAYLOR, OF WASHINGTON, DISTRICT OF COLUMBIA.

## NON-CORRODIBLE PUMP.

SPECIFICATION forming part of Letters Patent No. 676,353, dated June 11, 1901.

Application filed April 16, 1901. Serial No. 56,112. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH J. CAYLOR, of Washington, in the District of Columbia, have invented new and useful Improvements in Non-Corrodible Pumps; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to pumps, and particularly to that type of portable pump which is adapted to be inserted in a cask or other receptacle in order to withdraw therefrom the liquid contents.

The object of my invention is to provide a pump of this character which shall be absolutely free from any parts which may corrode, since my particular object is to provide a pump which may be inserted in a vinegar-cask and left therein until the contents have been entirely pumped out.

To these ends my invention consists in the construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 represents a vertical section through a pump constructed according to my invention, a portion of the spout being broken away. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a perspective view of the piston or plunger. Fig. 4 represents a vertical section of a cask with the pump located therein.

The barrel of the pump is represented at 10, said barrel being formed of wood, which, if made of a single piece, is longitudinally bored and externally turned to circular form. It may, however, be made from two pieces of board formed with longitudinal grooves semicircular in cross-section, the two pieces being formed with tongues and grooves, respectively, and secured together by wooden pins, as indicated by dotted lines in Fig. 2, and then preferably turned down to a cylindrical form, as represented in said Fig. 2. Near the upper end the barrel is bored laterally to receive the wooden spout, which is driven tightly into the boring, as represented at 11. The barrel is provided with a wooden cap or head 12, having an annular rib or projection 13 fitting and driven within the bore of the barrel. At the bottom the barrel is notched, as at 14, in order that the liquid may find access to the pump when the latter is resting on the bottom of a cask, as indicated in Fig. 4.

Into the bottom of the pump-barrel is driven a wooden plug 15 to a point level with or slightly above the tops of the notches 14. This plug 15 is provided with a vertical hole 16 a little to one side of the center, so as to leave a thicker portion of the plug at one side of the hole than the other. The upper end of the hole 16 is closed by a valve 17, preferably of leather and reduced in thickness to form a thin lip $17^a$. Through the lip $17^a$ a wooden headed pin 18 is driven into the plug in the thicker side thereof, said pin 18 being retained in place by a small wooden pin 19, as clearly indicated in Fig. 1.

The piston-rod 20, of wood, extends through an opening in the cap or head 12 and is formed with a handle 21 above said cap. Secured to the lower end of the piston-rod is a piston or plunger 22, having a vertical hole 23 formed therethrough at one side of the center, said piston or plunger being preferably formed integral with the yoke 24, which is secured to the piston-rod 20 by a wooden pin 29. The yoke 24 is formed with openings 25 above the piston or plunger, and on the upper end of the latter a valve 26 is secured across the opening in said piston or plunger. This valve 26 is also preferably formed of leather and is formed with a lip $26^a$, through which a wooden headed pin 27 is driven into the thicker portion of the plunger, said pin 27 being held in place by a small wooden pin 28, as shown.

The operation of the pump, including the valves, will be obvious and does not need description. As will be seen, there is no part whatever that is formed of material that will be corroded by vinegar or other acids.

One of the preferred uses of this pump is indicated in Fig. 4, in which the cask 30 has its upper head formed with a hole which will closely receive the barrel of the pump. If desired, a wedge 31 may be employed to hold the pump from being withdrawn until the cask has been emptied, when said pump may be withdrawn from this cask and immediately placed in a new one without giving the pump an opportunity to dry and crack or to rot.

In order to prevent access of dust or other foreign substances to the cask around the pump, I may employ a washer 32, which tightly fits the barrel of the pump and is slipped thereon before the pump is placed in the cask, after which the washer may be tacked to the upper surface of the head of the cask. This washer may also serve instead of the wedge mentioned to hold the pump with sufficient firmness in the cask.

Having now described my invention, what I claim is—

1. A pump comprising a wooden barrel having a wooden plug driven in the lower end thereof and provided with a non-corrodible valve, and a wooden piston and rod therefor, the piston having a vertical opening and a non-corrodible valve at the upper end thereof, each of said valves being secured in place by a wooden headed pin passing through a portion of the valve into the part with which it coacts, and each of said headed pins being retained in place by a smaller wooden pin driven laterally therethrough.

2. A pump comprising a wooden barrel having a wooden plug driven in the lower end thereof, a wooden piston-rod having a wooden yoke secured to its lower end, said yoke being formed with an integral piston or plunger at its lower end, the said plug and the plunger being each formed with a vertical hole at one side of the center thereof, a leather valve for closing the upper end of the hole and formed with a thin lip, a wooden headed pin passed through said lip into the thicker side of the part to which each valve is applied, and a small wooden pin driven laterally through the headed pin.

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

JOSEPH J. CAYLOR.

Witnesses:
A. H. BROWN,
H. JOSEPH DOYLE.