Dec. 14, 1948. R. STOREVIK 2,456,092

PUMP FOR CLEARING WATER TRAPS

Filed Feb. 21, 1946

Fig. 1.

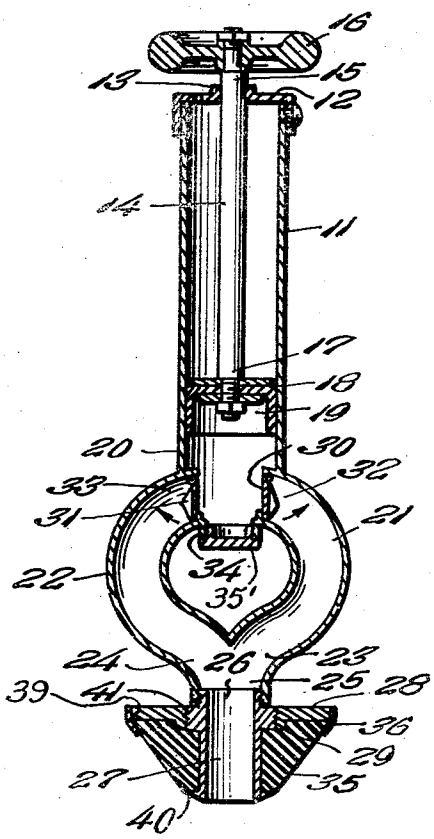
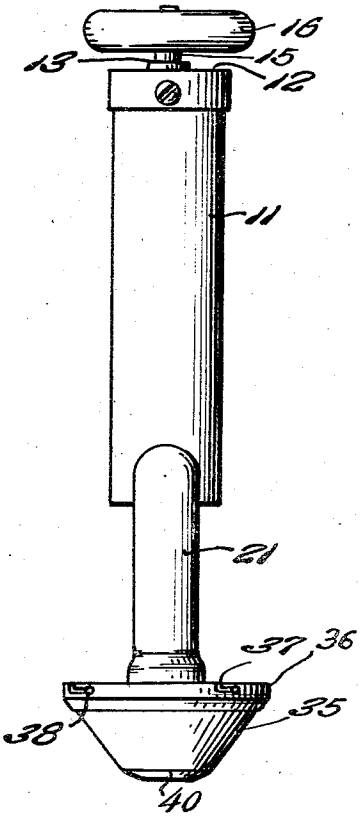


Fig. 2.



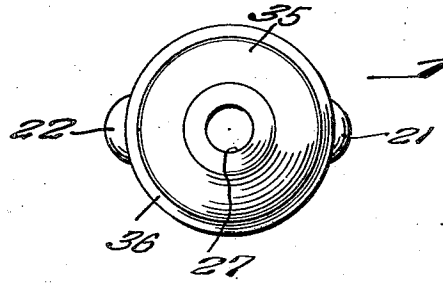


Fig. 3.

Inventor

Rasmus Storevik

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Dec. 14, 1948

2,456,092

UNITED STATES PATENT OFFICE

2,456,092

PUMP FOR CLEARING WATER TRAPS

Rasmus Storevik, Brooklyn, N. Y.

Application February 21, 1946, Serial No. 649,142

3 Claims. (Cl. 4—255)

1

This invention relates to pumps and has for its object to provide a pump for cleaning debris from water traps, such as those used in kitchen sinks, for instance.

Another object of my invention is to provide a force pump so formed that it will force a stream of water under pressure into a water trap to loosen up the debris therein.

A still further object of this invention is to provide a portable force pump for clearing water traps.

Othere features and advantages will become more readily apparent from the following description and the accompanying illustrative drawings in which:

Figure 1 is a vertical sectional view of my improved pump,

Figure 2 is an elevational view thereof, and

Figure 3 is a bottom plan view thereof.

In the above drawings as well as in the specification to follow, the same characters of reference indicate the same parts throughout.

While one embodiment of my invention is illustrated in the above referred to drawings, it is to be understood that they are merely for the purpose of illustration and that various changes in construction may be restored to in the course of manufacture in order that the invention may be utilized to the best advantage according to circumstances which may arise, without in any way departing from the spirit and intention of my device, which is to be limited only in accordance with the appended claims. And while I have stated the primary field of utility of my invention it remains obvious that it may be employed in any other capacity wherein it may be found applicable.

In the drawings, 11 is a cylinder of a length to conveniently hold in the hand of a user; 12, is the cap therefor, through an opening 13 therein, operates a piston rod or plunger 14, provided on its outer end 15, with a hand grip 16. To the lower end 17, of the plunger is secured a piston 18, including the inverted cup 19.

The cylinder 11, terminates at its lower end 20, in two semi-cylindrical pipes 21 and 22, which converge at the lower ends 23 and 24, into a common port tube 25, into which is threaded the upper end 26, of an extension pipe 27. An annular flange 28, is provided on the pipe 27, which is adapted to seat over a sink outlet vent to close the apertures thereof and form a support for the pump. The pipe 27, is adapted to project down into the outlet pipe of the sink, and a collar 29, is fixed to the underside of

2

flange 28, to enter the said outlet pipe (not shown) to hold the device centered.

Valves 30 and 31, are provided in the ends 32 and 33, respectively of said pipes 21 and 22, adapted to close when the piston 18, is drawn up in the cylinder 11, and to open on the reverse or down stroke. Directly beneath the cylinder 11, is a reduced pipe 34, with a flap valve 35', therein, which opens as the piston is raised and is adapted to fill the cylinder with water from the sink into which the pipes 21, 22, and 34 are immersed and on the down stroke the valve is closed and the water forced down through the pipes 21 and 22, and thence to the water trap below (not shown).

In case the device is to be used on an outlet pipe of a diameter for which the particular pump does not exactly fit, I provide an inverted flexible cone 35, connected to a metal ring 36, having bayonet slots 37, to receive the headed pins 38, projecting from the annular edge 39, of flange 28, whereby the device may be held to outlets of various diameters. In case the pump is to be continually used in connection with vents of different sizes, the cone 35, may be held fixed in place by a flange 40, on the end of pipe 27. Working the pump for awhile will loosen up debris in a water trap and shortly open the same. The flange 28, is screw threaded to the pipe 27, as indicated at 41.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Changes in shape, size and rearrangement of detail and parts such as come within the purview of the invention claimed may be resorted to, in actual practice, if desired.

Having now described my invention that which I claim as new and desire to procure by Letters Patent is:

1. A pump comprising a cylinder terminating in an inlet pipe, a piston workable in said cylinder, a flap valve for the inlet, a pair of arcuate outlet pipes projecting outwardly from said inlet, said outlet pipes having a common terminal coaxial with said inlet, a nipple carried by the terminal, valves for said outlet pipes adjacent said inlet, a retaining flange carried by said nipple and a flexible cone detachably carried by said flange.

2. A pump comprising a cylinder terminating in an inlet pipe, a piston workable in said cylinder,

a flap valve for the inlet, a pair of arcuate outlet pipes projecting outwardly from said inlet, said outlet pipes having a common terminal co-axial with said inlet, a nipple carried by the terminal, valves for said outlet pipes adjacent said inlet, a retaining flange carried by said nipple, a flexible cone detachably carried by said flange, a retaining ring carried by said cone, and means for locking said ring to said flange.

3. The combination of claim 2 wherein said last means includes headed pins carried by said flange engaging bayonet slots in said ring.

RASMUS STOREVIK.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
646,455	Noppel	Apr. 3, 1900
950,549	Kurrus	Mar. 1, 1910

FOREIGN PATENTS

Number	Country	Date
5,695	Great Britain	Mar. 13, 1908
348,268	Italy	May 15, 1937