

1,387,776.

FIG. 1.

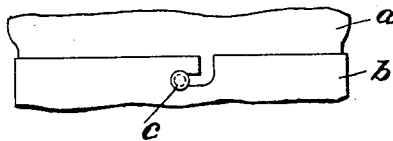
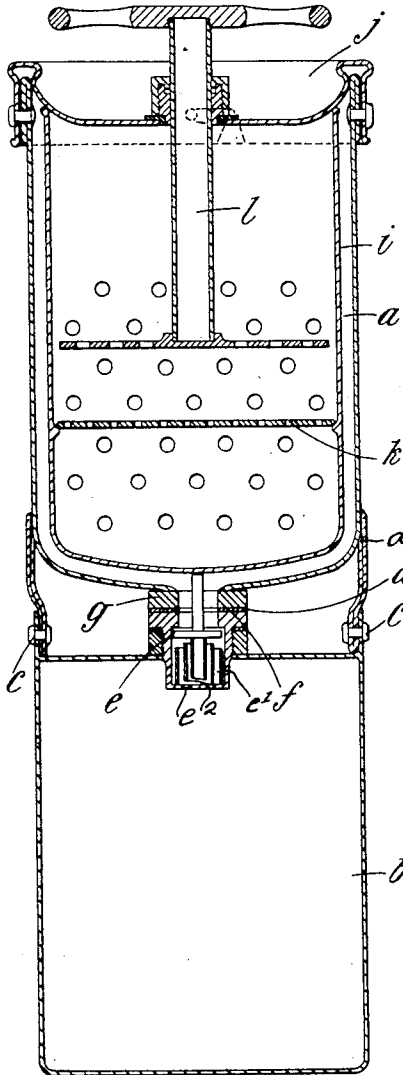


FIG. 3.

INVENTOR
Albert Henning,
by Thos. A. Adams
Att'y.

UNITED STATES PATENT OFFICE.

ALBERT HENNING, OF LEYTONSTONE, ENGLAND.

WASHING OR CLEANING MACHINE.

1,387,776.

Specification of Letters Patent. Patented Aug. 16, 1921.

Application filed September 9, 1919. Serial No. 322,747.

To all whom it may concern:

Be it known that I, ALBERT HENNING, a subject of the United Kingdom of Great Britain and Ireland, and resident of 120 Harrow Road, Leytonstone, in the county of Essex, England, have invented certain new and useful Improvements in or Relating to Washing or Cleaning Machines, of which the following is a specification, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a cleaning machine and is an improvement in the cleaning machine described in the specification of my prior United States Letters Patent 1,035,876, dated August 20, 1912, in which two superposed chambers or containers are employed into the upper of which the articles to be cleaned are placed, and into the lower of which the cleaning fluid is put.

The machine is then reversed and the fluid allowed to pass from the lower chamber into the upper chamber and saturate the said articles, means generally being employed to squeeze the fluid out of the articles when they have been sufficiently soaked, after which the machine is turned upright and the fluid reenters the lower chamber.

Hitherto it has been the custom to make the two chambers in one piece and to supply the fluid to the lower through the upper chamber, but I have found that in some cases it will be more convenient to make the chambers detachable and to use the lower chamber as a store or reservoir or transport container for the fluid. My invention consists in this detachable feature in addition to which the lower chamber is provided with means for closing it when detached from the upper chamber, and suitable means is provided for securing the two together when the machine is to be used.

Two examples of my invention are shown in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of one form of my invention;

Fig. 2 is a similar view of a modified form; and

Fig. 3 is a detail view of the locking means for the containers shown in Fig. 1.

Fig. 1 shows a machine comprising upper and lower chambers *a* and *b* held together by bayonet joints at *c c* and having a gas tight joint at *d*. The chamber *a* has a flange *a'* fixed or secured to it in any appro-

priate way as by welding or other means, the manner of securing this flange to the chamber being immaterial, and of course, the said flange has the bayonet joints *c c* to which the chambers are detachably connected to each other. The valve *e* is attached to the chamber *b* and automatically closes the same when the said chamber is detached from the chamber *a*. The lower end of the valve stem is shown as being in engagement with a spring *e'* and the spring is employed for holding the valve against its seat, whereas the valve is held unseated by reason of the fact that the basket strikes the upper end of the valve stem. The valve is held within bush piece *f* attached to the chamber *b* and coacts with a ring *g* fixed to the chamber *a* to form, by means of the packing at *d* the gas tight joint above referred to. When the two chambers are connected together the basket *i* in the upper chamber presses upon the valve in known manner and opens it as soon as the cover *j* is pushed on.

The bushing piece *f* is hollow and contains the valve *e* which valve is urged to its seat by a spring *e'* in the bushing piece, and the said bushing piece has ports *e²* by which communication is established from one chamber to the other.

A false bottom *k* is provided for use when a few articles only are to be cleaned and a sliding plunger *l* is shown in place of the usual screw plunger, but I may use either kind as may be required.

After the contents of the receptacle or basket *i* have become saturated, the plunger may be operated to squeeze the fluid so that it will again flow down into the chamber *b*.

In Fig. 2 the construction of the upper part is much the same as that in Fig. 1, but the lower chamber is made in double compartments *m* and *n* of which *m* is securely attached to the upper compartment as by welding at *o* and *n* is removably attached to *m* by screw collars *p*.

The valve is of slightly modified form but its operation and functions are much the same as those of the valve shown in Fig. 1.

A person using the machine shown in Fig. 1 can, when the supply of cleaning fluid is exhausted, simply detach the chamber *b* at the joints *c* and substitute another chamber ready filled with fluid for it and send the detached chamber away to be filled and held in reserve for future use.

Much the same applies to Fig. 2 in which the compartment *n* can be detached and another like compartment charged with fluid be connected in its place.

5 What I claim and desire to secure by Letters Patent is:—

1. In a washing machine, a lower chamber, a valve seat having communication with the interior of the chamber and a valve in
10 said chamber for said valve seat, the said valve having a stem extending above the top of the valve seat, means for urging the valve on its seat, a receptacle having an aperture in its bottom through which the valve stem projects, means for effecting a tight joint be-
15 tween the receptacle and the valve seat, an apertured basket within the receptacle having its bottom bearing against the valve stem for holding the valve open when the re-

ceptacle is in assembled relation to the lower 20 chamber.

2. In a washing or cleaning machine, a lower chamber adapted to contain cleaning fluid having a valved opening in its top, means for holding the valve closed, a recep- 25 tacle having an opening communicating with the said first named opening, a basket in the said receptacle, and means whereby the said basket operates the valve controlling the passage between the receptacle and chamber for 30 opening said valve.

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

ALBERT HENNING.

Witnesses:

HY. FAIRBROTHER,
BARBARA BROOM.