

A. Warth,

Funnel.

No. 109,360.

Patented Nov. 15. 1870.

Fig. 1.

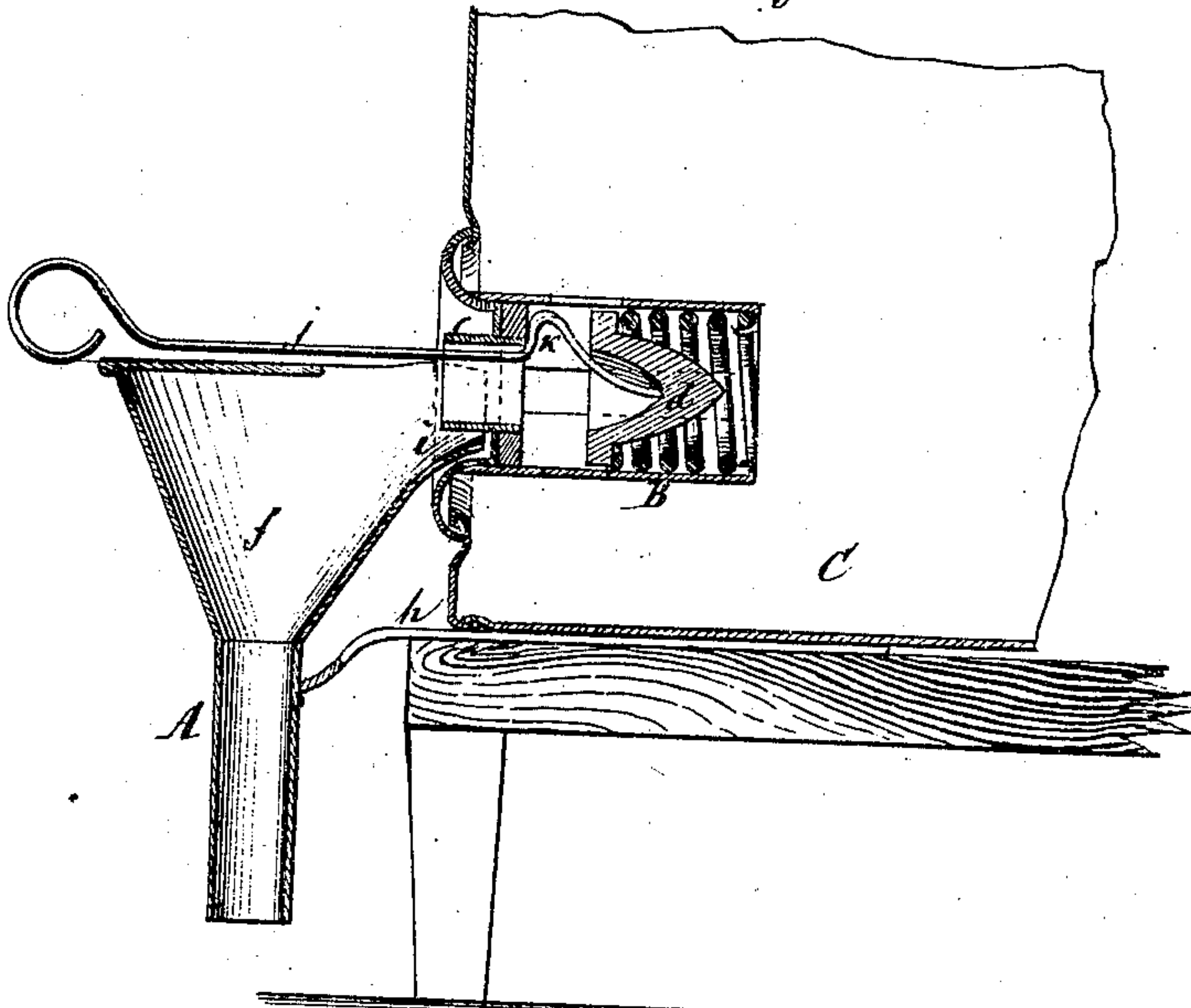
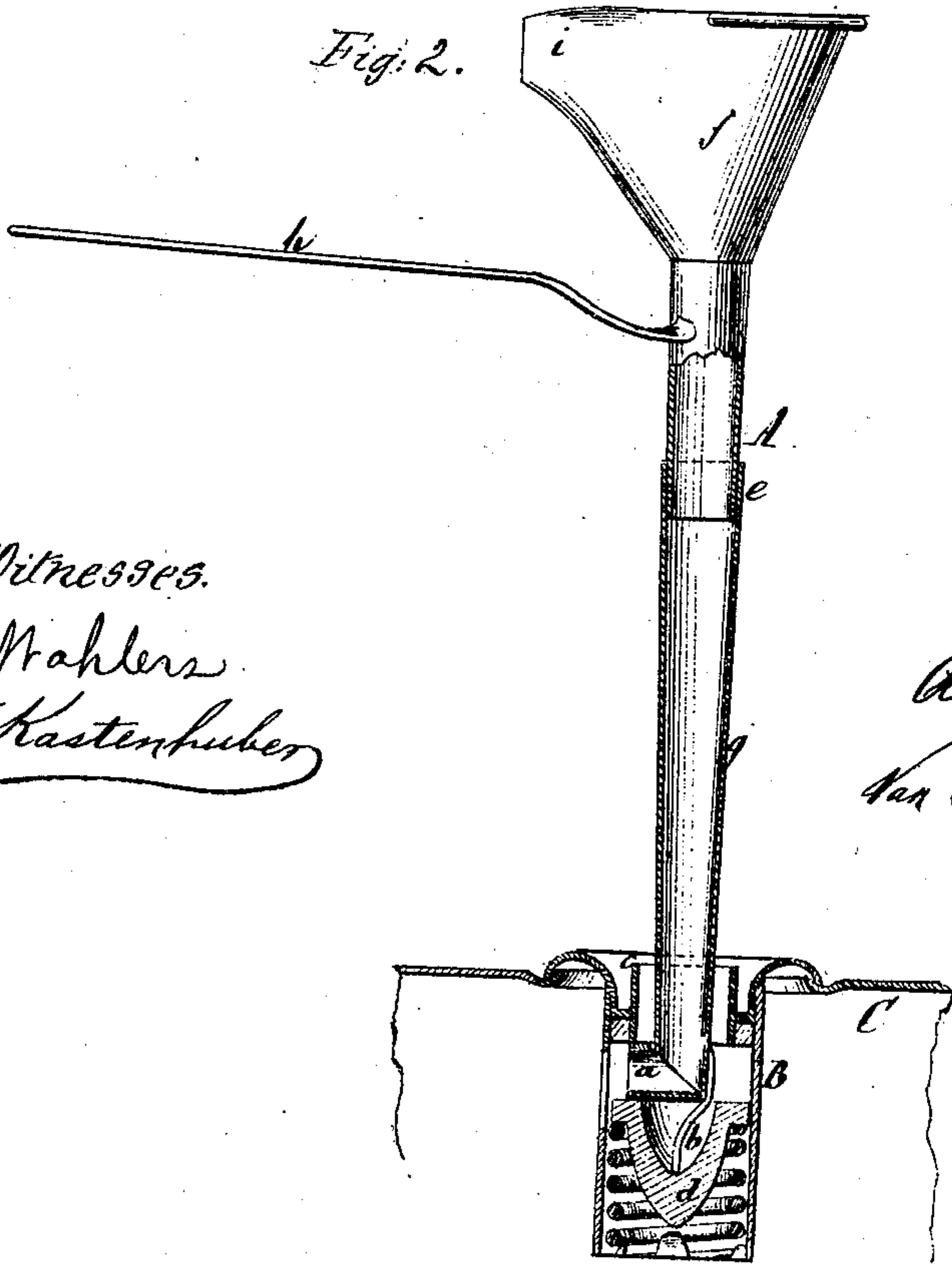


Fig. 2.



Witnesses.
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ALBIN WARTH, OF STAPLETON, NEW YORK.

Letters Patent No. 109,360, dated November 15, 1870.

IMPROVEMENT IN FUNNELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALBIN WARTH, of Stapleton, in the county of Richmond and State of New York, have invented a new and useful Improvement in Funnels; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a vertical section of my invention, showing the funnel in position for discharging.

Figure 2 is a similar section of the same, showing the funnel in position for charging.

Similar letters indicate corresponding parts.

This invention relates to a funnel which is intended to be used for charging and discharging liquid packages provided with a spring-valve or tap, such as described in Letters Patent granted to me April 19, 1870, and numbered 102,188, said tap consisting of a valve, which is closed up against its seat from the inside by means of a spring, and the seat being provided with a tubular nipple, through which the liquid discharges when the spring-valve is forced back against the action of its spring.

The funnel, which forms the subject-matter of my present invention, is provided at its end with an elbow and with a projecting finger, in such a manner that, when said end is introduced through the tubular nipple of my tap, the finger forces the valve back away from its seat, and the elbow catches under the seat, thus forming a stop, whereby the tap is held open, and at the same time the liquid, on passing into the package, is caused to flow from the funnel in a lateral direction, while the air is free to escape from the interior of the package through the tubular nipple, and by these means the liquid is made to enter the package without difficulty, or without being interfered with by the current of air discharging from said package.

The head of my funnel is made detachable from its shank, and it is provided with a receiving-spout and with a projecting arm, in such a manner that, in discharging liquid from a package, said arm can be clamped between the package and the table supporting the same, and the receiving-spout can be adjusted under the tubular nipple of the tap, and that, by forcing the valve in the liquid discharges, the wire which serves to force the valve back being bent, so as to form a shoulder which can be made to abut against the valve-seat, thereby holding the valve open, allowing the liquid to discharge without requiring any further attention.

In the drawing—

The letter A designates a funnel, the end of which is provided with an elbow, *a*, and with a projecting finger, *b*, so that, by introducing said end into the tubular nipple *c* of the tap B, (see fig. 2,) the valve *d* is forced back by the action of the finger *b*, and the elbow *a* can be made to catch between the valve and its seat, so as to hold the valve open.

The liquid, on being poured into the funnel, flows from the same into the package O in a lateral direction, while the air, being displaced from the package, discharges through the nipple *c*, and by these means the current of air discharging from the package does not interfere with the liquid flowing in, and the operation of charging a package can be carried on without spilling any portion of the liquid.

If desired, the finger *b* may be dispensed with, since the valve can be forced back by the end of the funnel.

The funnel A is made in two parts, which are connected by a slip-joint, *e*, so that the top *f* can be separated from the shank *g*.

Said top is provided with an arm, *h*, projecting from its side, and with a spout, *i*, capable of fitting under the nipple *c* of the tap B, (see fig. 1.)

In order to retain the funnel in the position shown in said figure, the arm *h* is clamped between the package C and the table or bench supporting the same, and, if the valve is forced open after the funnel has thus been adjusted, the liquid from the package discharges through said funnel.

For the purpose of keeping the valve open I use a wire, *j*, which is provided with a crook, *k*, that can be made to abut against the inner surface of the valve seat, as shown in fig. 1.

By these means the valve is kept open, and the liquid from the package is free to discharge without requiring any further attention.

What I claim as new, and desire to secure by Letters Patent, is—

1. The projecting finger *b*, arranged at the ends of a funnel, A, as and for the purpose set forth.
2. The elbow *a*, arranged at the end of a funnel, when said end is provided with a projecting finger, *b*, substantially as and for the purpose set forth.
3. A funnel provided with a spout, *i*, arm *h*, and elbow *a*.
4. The funnel A, with the spout *i*, slip-joint *e*, shank *g*, and elbow *a*, substantially as and for the purpose described.

ALBIN WARTH.

Witnesses:

W. HAUFF,
JAMES MORSE.