C. L. LOCHMAN.

FUNNEL.

No. 46,255. Patented Feb. 7, 1865.

Fig. 2.

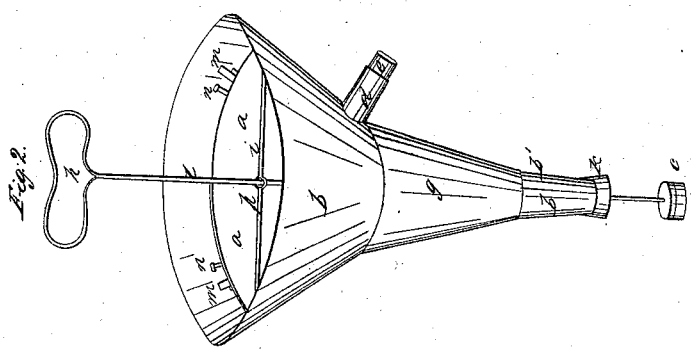
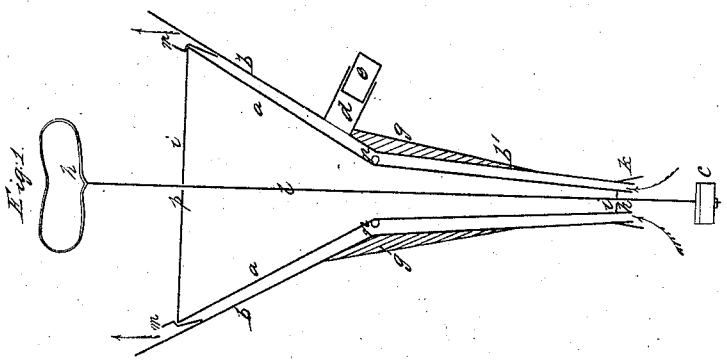


Fig. 1.



Witnesses:

A. L. Spmeller

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Inventor:

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# UNITED STATES PATENT OFFICE.

C. L. LOCHMAN, OF CARLISLE, PENNSYLVANIA.

## IMPROVEMENT IN FUNNELS.

Specification forming part of Letters Patent No. **46,255**, dated February 7, 1865.

*To all whom it may concern:*

Be it known that I, C. L. LOCHMAN, of Carlisle, in the county of Cumberland and State of Pennsylvania, have invented a new and useful Improvement on a Funnel for Filling Barrels or other Vessels with Fluids; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal section, and Fig. 2 a perspective view.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

I construct my funnel in two parts. Both have the same general shape, forming, as it were, an outer and an inner funnel, and when put together they will leave sufficient space between the two parts for the escape of air as fast as it is displaced by the fluid entering the vessel.

The letters *a a* designate the inner part, and *b b* the outside one. The projections *n n n n* keep the two parts separate.

*c* is a valve or stopper, worked by the sliding rod and handle *l* and *h*. The supports *i i*, with the eye *p*, keep the valve rod in its place.

*d* is a cock or exit-tube, closed with a stopper in ordinary use.

*g g* is a perforated elastic cone, placed over the wider part of the discharge-pipe of the funnel. Said cone or washer is constructed of elastic material—such as rubber, cork, or similar substance. *m m* are springs or catches to hold the inner part of the funnel in its place.

*k* is a shoulder on the nipple to guide the valve.

This funnel may be constructed of any material used for ordinary funnels.

I use my funnel in the following manner: I insert it in a vessel intended to be filled. The elastic washer *g* keeps it tightly in its place and prevents the fluid from escaping on its side. The fluid enters the inner part. The air escapes in the directions of the arrows as fast as the fluid enters. When the fluid in the vessel touches the tip or nipple of the funnel, the same begins to fill up, when it is removed by grasping the handle *h*, which, by the connecting-rod *l*, with the attached valve *c*, closes the funnel, and the fluid is prevented from escaping and being lost. By graduating the pipe *b'* or sliding the washer *g* the ullage of a vessel may be graduated at pleasure.

The cock *d* is opened when there is not a constant attention given to the funnel, and by means of a gutter or tube the fluid which would run over in an ordinary funnel when the vessel becomes full is secured in a proper vessel.

I am aware that double and single glass funnels have been used with the part *g* ground so as to fit tightly the mouth of a bottle, which, being part of the funnel and inelastic, such construction and arrangement I do not claim; but

What I claim as my invention, and wish to secure by Letters Patent, is—

The valve or stopper *c*, with its handle and connecting-rod *h* and *l*, or their equivalents, the elastic cone or washer *g*, or its equivalent, the cock *d* and springs or catches *m m*, constructed and connected substantially as and for the purposes specified.

Witnesses: C. L. LOCHMAN.

A. L. SPONSLER,

A. A. LINE.