J. L. RUCKER.

FUNNEL.

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1,256,733. Patented Feb. 19, 1918.

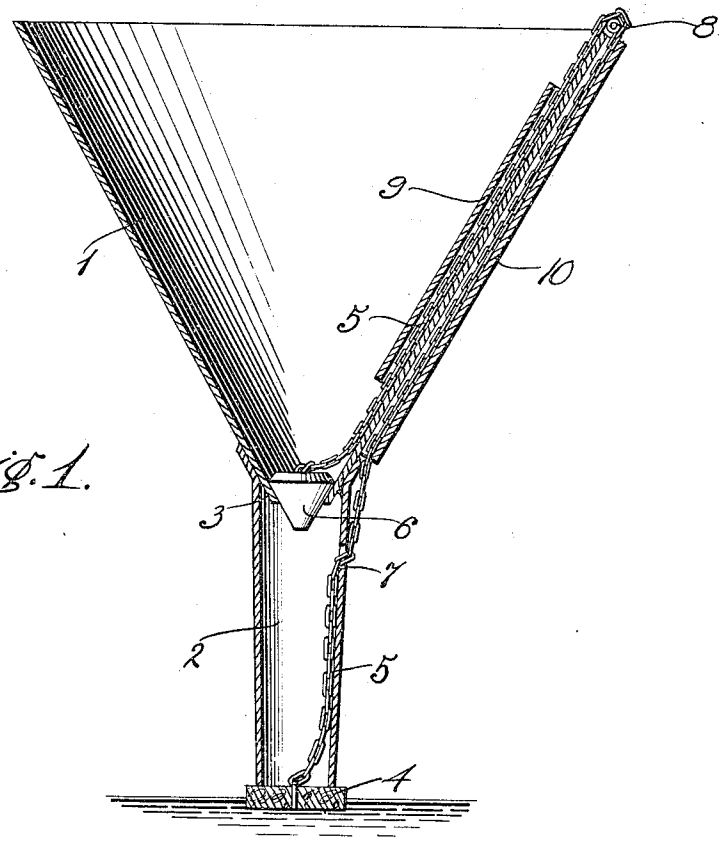


Fig. 1.

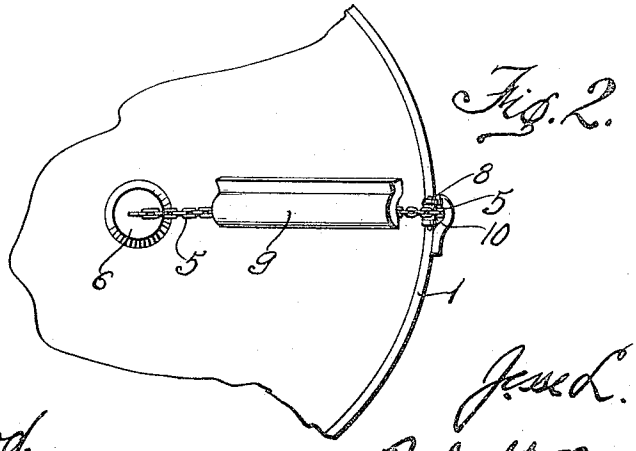


Fig. 2.

WITNESSES

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JESSE L. RUCKER, OF VIOLA, KANSAS.

FUNNEL.

1,256,733. Specification of Letters Patent. Patented Feb. 19, 1918.

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To all whom it may concern:

Be it known that I. JESSE L. RUCKER, a citizen of the United States, residing at Viola, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Funnels, of which the following is a specification.

My invention relates to funnels and has for its object to provide a new and improved means for automatically closing the discharge thereof when the liquid within the receptacle being filled rises to a predetermined height, and consists in the peculiar construction and arrangement of parts as more fully hereinafter described and pointed out in the claim.

In the drawings annexed;

Figure 1 is a longitudinal sectional view of my improved funnel, and

Fig. 2 is a fragmentary top plan view.

Like numerals of reference designate like or corresponding parts throughout the several views.

Referring now to the drawings by numerals 1 designates the usual inverted coin-shaped body and 2 the discharge spout leading from the apex end thereof. A valve seat 3 is formed at the apex end of the body 1 by extending said body into the discharge spout in the manner illustrated in Fig. 1.

A float 4 is mounted at one end of a small chain or the like flexible element 5 and a valve member 6 at the opposite end thereof, said valve being of a proper shape or design to snugly engage the valve seat 3 to afford a closure therefor when said float 4 shall have been elevated or raised to the position illustrated in Fig. 1. The said element 5 is located, throughout a portion of its length, interiorly of the discharge spout 2, an opening 7 being formed in the discharge spout at a point below and in proximity to the valve seat 3 whereby said element may extend without the spout exteriorly of the funnel body, to the top edge thereof, the chain at this point engaging a sheave or roller 8 over which it is arranged to extend interiorly of the funnel body toward the apex end thereof, being connected, as hereinbefore pointed, to the valve member 6. The float 4 is of a sufficient weight to automatically remove the valve member 6 from engagement with its seat when said float is unsupported by a liquid body.

Combined protector and guide strips 9 and 10 are located respectively interiorly and exteriorly of the funnel body 1, each strip being fastened along one of its longitudinal edges to said body. Upon reference to Fig. 2 it will be observed that the strips 9 and 10 are arranged in contiguous relation, and, the adjacent longitudinal edges of the strips are spaced from the funnel body while the longitudinal edges of the strips are fastened to said body, this arrangement affording a positive guide for the chain or element 5 and precluding casual displacement thereof in either direction from the guide strips. The element 5 however, should occasion demand, may be quickly removed from beneath the combined guide and protector strips 9 and 10, that portion of the chain beneath the protector strip 9 being first removed—that portion beneath the protector 10 following.

From the foregoing, taken in connection with the accompanying drawings it will be observed that the closing action of the valve member 6 is substantially automatic; that the float, by reason of the interior disposition of the element 5 in proximity thereto, will contact with the discharge end of the spout and through such contact afford a closure therefor; and that the combined guide and protector strips 9 and 10 not only direct movement of element 5 but, in practice, preclude contact of said element with structure or devices not intended therefor.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

In a funnel, a funnel body, a discharge spout leading therefrom, a valve seat, a valve member, a float member normally maintaining said valve out of engagement with its seat, a section of chain or the like element connected at one end to said float and at its opposite end to said valve member, a combined guide and protector strip mounted exteriorly of the funnel body to engage with and maintain said section throughout a portion of its length parallel to said body, said strip being affixed to said body along one of its longitudinal edges, the opposite longitudinal edge of said strip being spaced therefrom, a second combined guide and protector strip fastened to said body interiorly thereof, said strip maintaining said section contiguous to said body, said last mentioned strip being affixed to

said body along one of its longitudinal edges, the said longitudinal edge last referred to being opposed to the fixed longitudinal edge of the first mentioned strip, and a means mounted on said body to facilitate movement of said section for the purpose specified.

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

JESSE L. RUCKER.

Witnesses:
CHAS. ADAMS,
GEO. WASSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."