C. J. WILSON.

FUNNEL.

APPLICATION FILED MAR. 28, 1910.

971,233.

Patented Sept. 27, 1910.

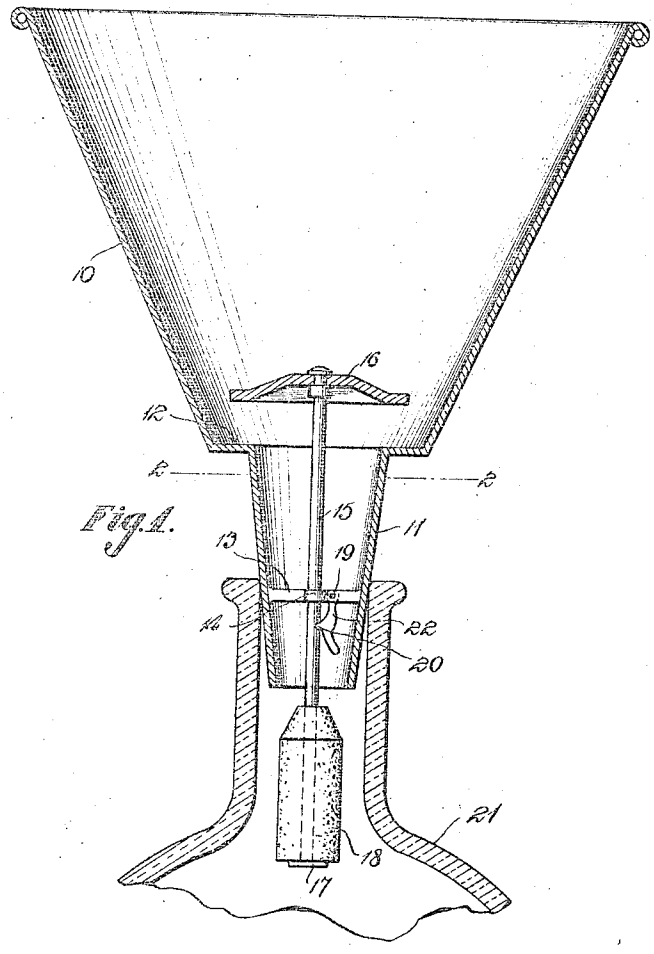

Fig. 1.

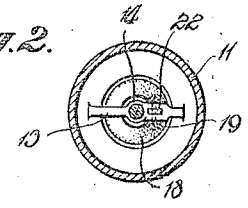

Fig. 2.

Witnesses

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FUNNEL.

971,223. Specification of Letters Patent. **Patented Sept. 27, 1910.**

Application filed March 28, 1910. Serial No. 551,928.

To all whom it may concern:

Be it known that I, CHARLEY J. WILSON, a citizen of the United States, residing at Roger, in the county of Barnes, State of North Dakota, have invented certain new and useful Improvements in Funnels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in funnels of the class wherein provision is made for automatically shutting off the flow of the liquid when the same rises to a certain predetermined point in the receptacle, and has for one of its objects to simplify and improve the construction and increase the efficiency and utility of devices of this character.

With this and other objects in view, the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claims; and, in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a vertical sectional view of the improved device. Fig. 2 is a transverse section on the line 2—2 of Fig. 1.

The improved device comprises a body portion 10 having a tapered discharge nozzle 11 of the usual form and with an annular valve seat 12 at the juncture of the body and the nozzle, as shown. Located within the nozzle 11 is a transverse guide bar 13 having a central bearing 14 through which a stem 15 is slidably disposed. The stem is provided at its upper end with a valve 16 for bearing upon the seat 12, the rod having an enlargement or stop 17 at its lower end and with a float 18 slidable upon the rod and supported by the stop 17. The transverse bar 13 is provided with a socket in which the upper end of a trip 22 is pivoted at 19, the trip having a lug 20 for engaging in a notch in the stem 15 to maintain the stem in its elevated position with the valve spaced from the seat 12, as shown in Fig. 1. When thus arranged the float 18 is located at about the point to which the liquid is designed to rise in the bottle, represented at 21. By this arrangement when the funnel is to be used the stem 15 is elevated until the trip 22 engages in the notch in the stem which will hold the valve in upward and open position. The nozzle 11 is then inserted into the neck of the bottle 21 and the liquid poured into the body 10, and will continue to flow until it rises in the bottle to a sufficient height to displace the float 18 and cause the latter to engage the trip and disengage the latter from the notch in the stem and thus release the stem and permit the valve to close by gravity. The float 18 being loose upon the stem will not interfere with the dropping of the stem when the trip is released, as will be obvious. By this means the flow of the liquid is automatically stopped when the bottle is full, and the liquid which remains in the body 10 held back by the valve. The funnel is then removed and the surplus liquid poured therefrom.

The improved device is simple in construction, and can be inexpensively manufactured in any required size or capacity.

What is claimed is:—

1. The combination with a funnel having a stem extending through its nozzle, said stem having an intermediate notch, a valve upon the upper end of the stem, a trip movably connected within said nozzle and engaging the notch of the stem and operating to maintain the same in elevated position and the valve open, and a float slidable upon the stem and adapted to release the trip when elevated.

2. The combination with a funnel having an intermediate valve seat and a discharge nozzle, a guide bar extending transversely of the nozzle, a stem slidable through said guide bar and provided with a notch, a valve carried by said stem for engaging upon said seat, a trip swinging from said bar and engaging said notch, and a float slidable upon the stem and adapted to release the trip when elevated.

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

CHARLEY J. WILSON.

Witnesses:

O. P. WALLER,

M. O. GRANGAARD.