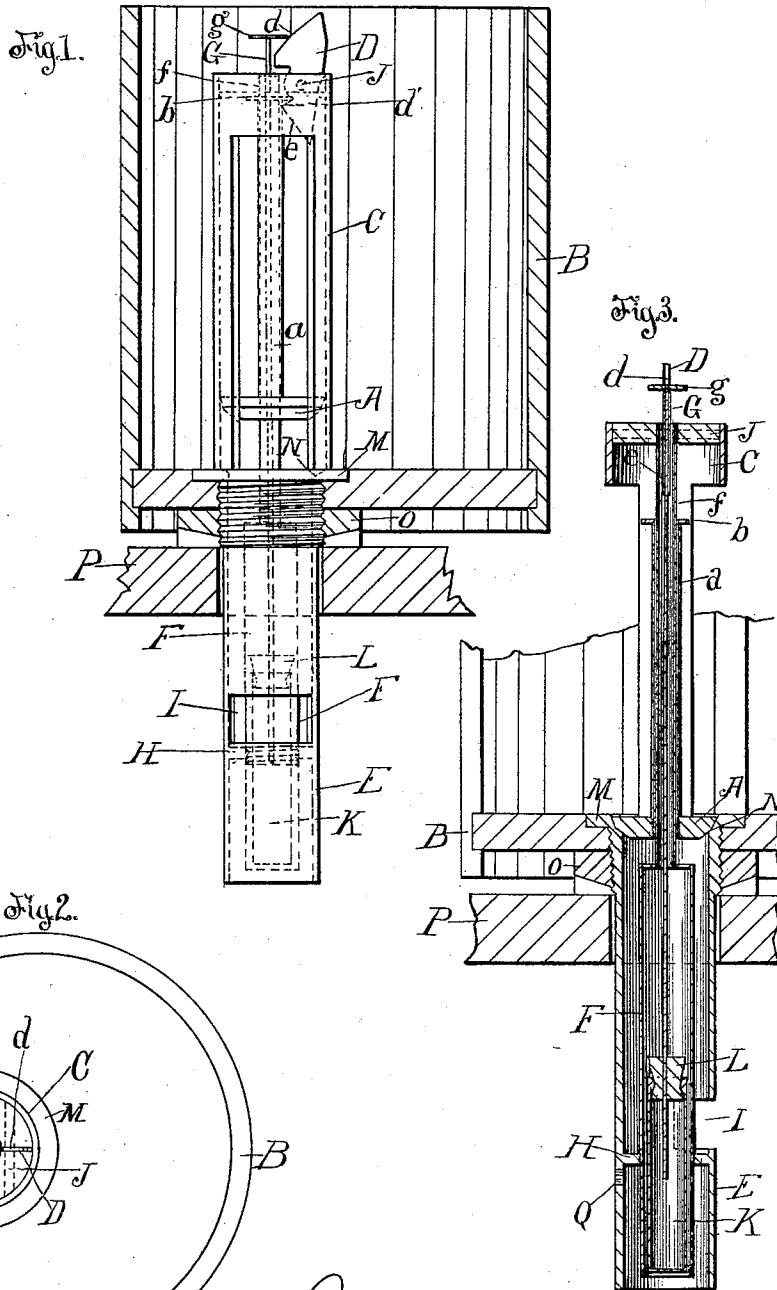


(No Model.)

J. H. DRILLER.
AUTOMATIC FUNNEL CUT-OFF.

No. 469,639.

Patented Feb. 23, 1892.



Witnesses.
M. M. Lee.
Alfred J. Townsend

John H. Driller
Inventor.
Alfred J. Townsend
his atty.

UNITED STATES PATENT OFFICE.

JOHN H. DRILLER, OF LOS ANGELES, CALIFORNIA.

AUTOMATIC FUNNEL CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 469,639, dated February 23, 1892.

Application filed May 22, 1891. Serial No. 393,682. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. DRILLER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Automatic Funnel Cut-Off, of which the following is a specification.

The object of my invention is to provide sensitive means to be operated by the rising liquid in a cask or other receptacle which is being filled to cut off the discharge from the funnel whenever the liquid has risen to the desired height within such receptacle.

The accompanying drawings illustrate my invention, and also illustrate a feature of my invention which is not claimed herein, for the reason that it is described and claimed in an application for Letters Patent for an automatic cut-off cask-filling faucet filed in the United States Patent Office on the same day herewith—viz., the 22d day of May, 1891—Serial No. 393,681, and which feature consists, essentially, of the combination of the vertical stem, the float and rod-tube arranged within such stem, and the float and rod arranged within such tube and arranged to engage the cut-off-controlling mechanism.

Figure 1 is a plain elevation with the funnel open. Fig. 2 is a plan view. Fig. 3 is a vertical mid-section on line *x x*, Fig. 2, with the funnel closed.

A is the cut-off plug mounted upon a tubular guide-stem *a*, mounted upon the rod-tube *f* and provided at the top with the sustaining-flange *b*. This tube is of sufficient length to extend above the depth of liquid likely to be put in the funnel.

B is the funnel.

C is the plug-supporting stand, to the top of which is pivoted the plug-supporting catch-plate D, provided with the inclined plug-supporting shoulder *d'* and inclined flange-engaging face *d*.

E is the discharge-stem.

F is the float-containing tube. *f* is the upper reduced portion thereof or rod-tube inserted through the plug guide-stem *a*.

G is the float-rod provided at its top with the catch-plate-engaging flange *g*.

H is the transverse partition across the discharge-stem.

I is the side discharge-opening.

J is the catch-plate pivot.

K is the float, and L the cork stopper therein, through which said rod G is passed, as set forth in my said other application.

M is a flange, between which and the nut O is clamped the bottom of the funnel.

In practice the funnel is placed upon the cask P or other receptacle with the stem E inserted through the bung-hole. The rod G is raised to free the top shoulder of plate D from the flange *g*. Then the tubular stem *a* is drawn up into the position shown in Fig. 1, the flange *b* engaging the sloping under face *c* of the catch-plate, and thus pressing the catch-plate out of the way until the flange *b* is above the shoulder *d'*. The rod G is then lowered to rest upon the sloping shoulder *d*, thus pressing the top member of the catch-plate out and the lower member *e* in, so that *d'* will support the flange *b* and tube and plug *a* A. The liquid is then poured into the funnel until the liquid causes the float to rise, thus raising the rod G and flange *g*. As flange *g* rises, thus releasing the upper member of D, the weight of the plug causes the flange *b* to press the lower member of D out until the shoulder *d'* is withdrawn from beneath flange *b*, thus allowing the plug to drop into its seat N and cut off the discharge.

The float-containing tube F is screw-threaded and screws through the transverse partition H, and the rod-containing and plug-guiding tube *f*, which forms the upper part thereof, extends up to and is inserted in the top of the plug-supporting stand, and is thereby held firm. It can be raised or lowered by screwing it in or out.

Q is a vent-hole.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the plug-supporting stand, the float and rod-tube, the cut-off plug provided with the tubular guide-stem mounted upon the rod-tube and provided at its top with the sustaining-flange, the pivoted catch-

plate provided with the sloping shoulders, the float, and the float-rod provided with the projecting head arranged to engage the sloping upper shoulder to hold the catch-plate in engagement with the flange of the plug-stem.

5 2. In a funnel cut-off, the combination of the cut-off plug and its stem provided with the sustaining-flange, the pivoted catch-plate provided with the sloping shoulders, and the

rod provided with the projecting head arranged to engage the sloping upper shoulder to hold the catch-plate in engagement with the flange of the plug-stem. 10

JOHN H. DRILLER.

Witnesses:

JAMES R. TOWNSEND,
ALFRED I. TOWNSEND.