

*Charles H. Miller &
William Ascough's
Improvements in Bungs.*

No. 118,811.

Fig. II.

Patented Sep. 12, 1871.

Fig. I.

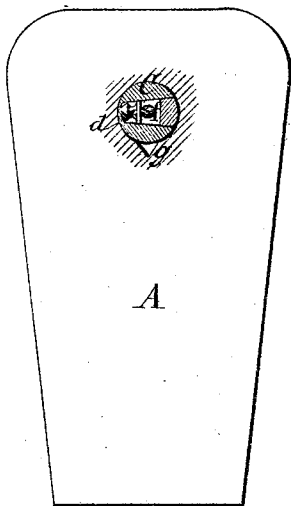


Fig. V.

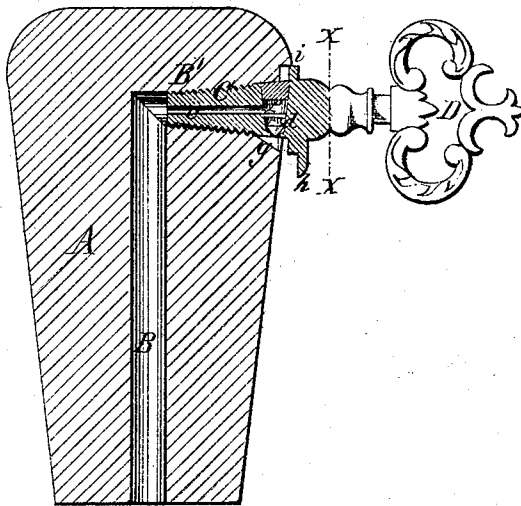
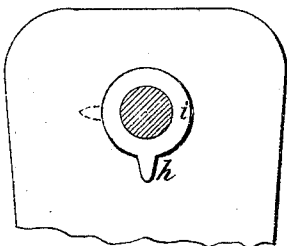


Fig. II.

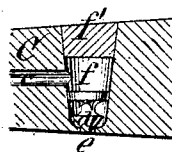
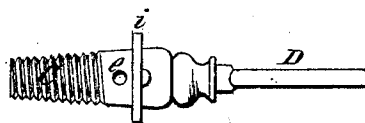


Fig. III.



*Ino. J. Bonner.
Jas. M. Carty.* } *Witnesses*

*Charles H. Miller
Wm. Ascough
by Jay Hyatt
Atty.*

UNITED STATES PATENT OFFICE.

CHARLES H. MILLER AND WILLIAM ASCOUGH, OF BUFFALO, NEW YORK.

IMPROVEMENT IN VENT-BUNGS.

Specification forming part of Letters Patent No. 118,811, dated September 12, 1871.

To all whom it may concern:

Be it known that we, CHARLES H. MILLER and WILLIAM ASCOUGH, of the city of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Vent-Bungs, of which the following is a specification:

Our improvements relate to that class of bungs which is known as vent-bungs, and which is provided with a central bore extending from the inner end, and intersecting a radial hole outside of the vessel, forming an air-passage, in which is arranged a vent-plug provided with an automatic valve which prevents the escape of gas within, while it permits the entrance of air while the liquid is being withdrawn. Our invention consists in the arrangement, with the air-admitting orifice of the valve-plug, of a recess or notch in the outer end of the radial hole of the bung, which permits the entrance of air when the orifice of the plug coincides therewith, while the vent can be rapidly closed, when required in handling or transporting the vessel, by giving the plug a partial turn to destroy this coincidence.

In the accompanying drawing, Figure I is a sectional elevation of a vent-bung provided with our improvements. Fig. II is an elevation at right angles to Fig. I, showing the valve-seat in section. Fig. III is a detached view of the valve-plug. Fig. IV is an enlarged view of the valve and seat. Fig. V is a cross-section of the plug in line *x x*.

Like letters designate like parts in each of the figures.

A represents the bung. B is the vertical part of bore, extending from the lower end of the bung to a point near the top. B' is the radial and horizontal part of the bore. C is the plug, formed with an external thread so as to screw tightly in the hole B'. The portion of the plug within the hole B' is provided with a bore or axial hole, *e*, the further or outer end of which communicates with the outside through a small radial hole, *e*, in which is fitted the valve *d*. This

valve, which may be of the kind known as ball-valve, is introduced into the plug through a radial hole, *f*, which is afterward closed by a plug, *f'*, screwed or soldered in place. The valve *d* plays in the cavity *f* thus formed, and, by its own gravity, drops to its seat and closes the orifice *e*. The valve-plug is constructed with thumb-ears D, for turning the same. *g* is a recess or notch arranged in the outer end and lowest part of the hole B', as shown in Figs. I and II.

When the plug is inserted in the bung the valve-orifice *e* will be within the radial hole B', and when in the position represented in Fig. I it will coincide with the notch *g*. Upon opening the faucet for the withdrawal of the contents of the vessel the valve *d* is raised by atmospheric pressure and a passage opened for the air into the barrel. Upon closing the faucet the valve will drop back to its place and close the air-passage. By giving the valve-plug a quarter turn the orifice *e* will assume the position represented in Fig. II. The vent is now absolutely closed, as the orifice is no longer in communication with the recess *g*, and the barrel may be handled or transported from one place to another without injury to its contents.

h is a pointer projecting from the shank of the plug, so as to indicate the position of the valve-orifice. The plug may also, if desired, be provided with a flange, *i*, which, when the plug is screwed into the bung, will be pressed against a countersunk seat in the latter and thus rigidly close the vent.

We claim as our invention—

In a vent-bung, the recess *g* of the radial hole B', arranged with the orifice *e* of the valve-plug C, as heretofore set forth.

CHARLES H. MILLER.
WM. ASCOUGH.

Witnesses:

JNO. J. BONNER,
JAMES MCCARTY.