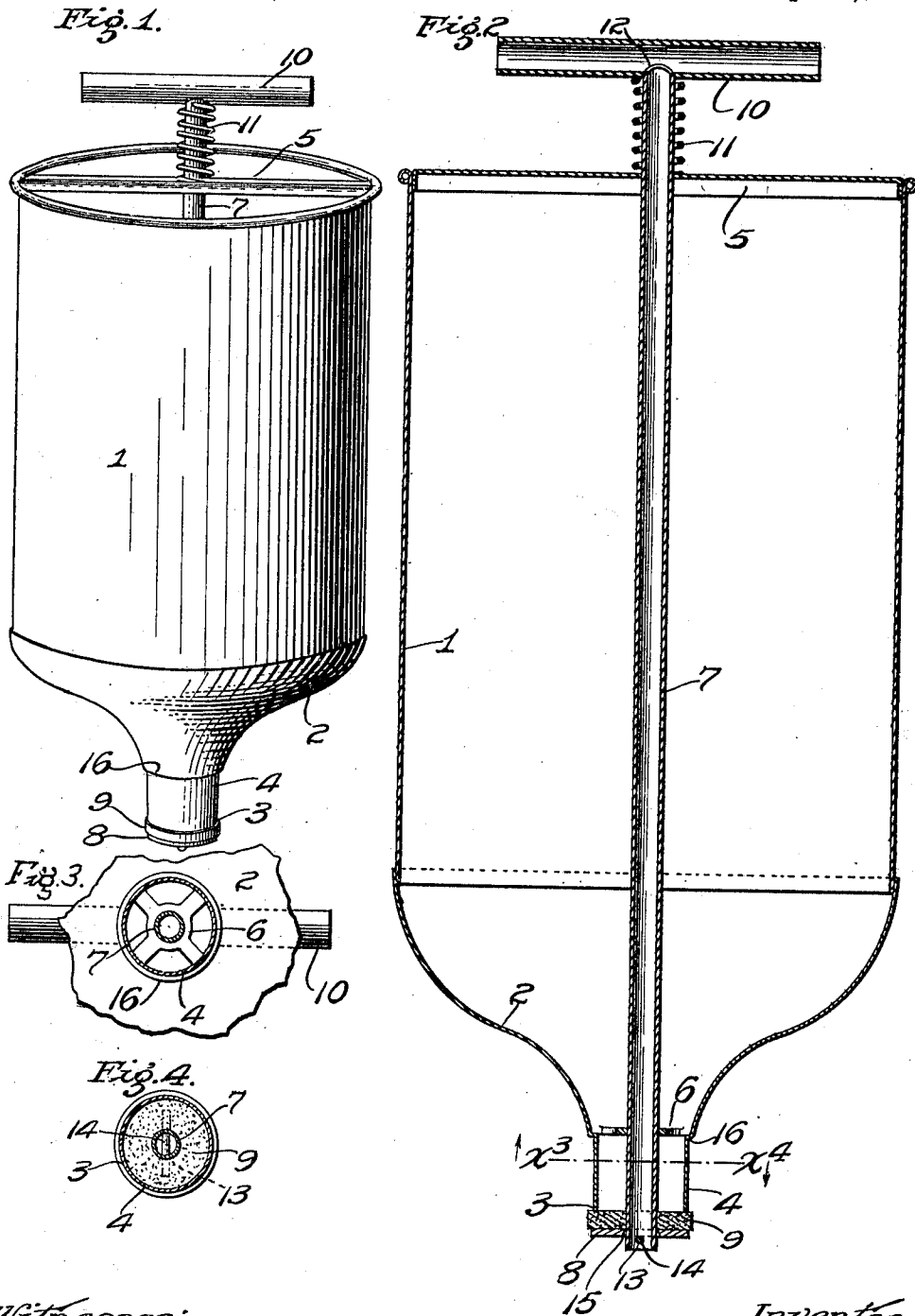


F. E. BROWNE.
 VENTED VALVED FUNNEL BUCKET.
 APPLICATION FILED AUG. 30, 1909.

989,113.

Patented Apr. 11, 1911.



Witnesses:
 H. N. Fishby.
 L. Belle Rice.

Inventor
 F. E. Browne
 By James R. Townsend
 his atty.

UNITED STATES PATENT OFFICE.

FRANK E. BROWNE, OF LOS ANGELES, CALIFORNIA.

VENTED VALVED FUNNEL-BUCKET.

989,113.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed August 30, 1909. Serial No. 515,358.

To all whom it may concern:

Be it known that I, FRANK E. BROWNE, 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 Vented Valved Funnel-Bucket, of which the following is a specification.

An object of this invention is to provide a simple and convenient appliance by which oil or other liquids may be carried from the storage receptacle therefor to the oil-cup or other receptacle to which it is to be delivered; and then to deliver the liquid to the oil-cup or other receptacle in any desired quantity.

The invention may be embodied in different forms.

The accompanying drawings illustrate the invention in a form at present deemed most advisable.

Figure 1 is a perspective view of the device ready for use. Fig. 2 is an axial section of the same. Fig. 3 is a transverse section on line x^3-x^4 , Fig. 2, looking up. Fig. 4 is a transverse section on line x^3-x^4 , looking down.

The receptacle 1 is tubular in shape being open at the top and having a bottom 2, having a central port terminating in a valve seat 3. The bottom of the receptacle is preferably downwardly tapered and the port is stamped or spun down to form a tubular funnel tip 4. Centrally perforated guides 5, 6, are fixed to the receptacle at top and bottom thereof to center and guide a tubular valve stem 7 which is provided at its lower end with a valve plate 8 carrying the valve face 9 which may be of leather or other suitable material to close the port from below and support the receptacle which thus forms a bucket and is adapted to serve as a funnel upon opening the valve.

The tip of the tubular valve stem is provided with a handle 10 between which and the upper guide 5 is a spring 11 which constitutes resilient means to limit the opening movement of the valve, to uphold the valve stem, and to normally close the valve.

The tubular valve stem is vented above the level of the receptacle. For this purpose the handle 10 may be a tube arranged across the valve stem and communicating therewith through a vent port 12, one or both ends of the tubular handle being open.

In practice, the user may pick up the

bucket by the handle, so that the weight of the receptacle resting on the valve will assist, in addition to the force of the spring, to keep the port closed, and may then place the receptacle underneath the faucet, not shown, from which the oil or other liquid is to be drawn, and may fill the receptacle with liquid to the extent desired, and then may carry the bucket to the place where the liquid is to be delivered and may thereupon insert the funnel tip into the oil-cup or other opening into which the liquid is to be discharged, and resting the bottom of the receptacle on the rim of such opening will then press down upon the valve stem handle, thus opening the port and allowing the liquid to discharge therethrough; the air displaced from the oil-cup being vented through the valve stem.

The discharge is under the control of the attendant who may stop the flow by releasing the pressure on the handle; whereupon the spring returns the valve to closed position. It is understood that the container may be filled sufficiently to supply a number or oil-cups, and said cups may be filled in succession, and if a charge of oil is still left in the container, it may be conveniently returned to the original receptacle.

The valve may be arranged to tilt on the valve stem so as to adjust itself to the valve seat. For this purpose the valve stem may have a transverse hole 13 below the valve plate and a pin 14 may be inserted there-through for the plate to rest upon. The valve plate 8 may have a taper valve stem hole 15 of greater diameter at the lower end than the valve stem so that the valve plate may tilt on the pin and thus become adjusted to the valve seat.

The bottom 2 and tip 4 may be spun or stamped of brass or other suitable material in one piece and a guide seat ledge 16 is provided at their junction to support the lower guide which may be soldered or otherwise secured in the guide-seat.

The upper guide 5 is in the form of a bar, and the handle 10 is arranged close enough thereto to allow the user to put his fingers beneath the bar to carry the receptacle so that while thus holding the receptacle, he may use the thumb of the same hand to operate the valve. By this means he may deliver an exact quantity of the liquid where desired, as for instance, in filling bottles, the

valve port may be inserted into the neck of the bottle and the bottle filled exactly to the depth required.

I claim:—

- 5 A receptacle comprising a tubular body provided with an open top, a bar secured across the diameter of the open top, a vertical opening through the center of said bar, a downwardly tapering bottom secured to the
10 tubular body, a tubular outlet to said bottom, a guide bar across the top of said outlet, with a central opening therein registering with the opening in the bar at the top of the body, a valve seat at the lower end of the
15 outlet a tubular valve stem slidingly engaging the openings in the two guide bars, the top of said stem being provided with an

open tubular cross-bar with an opening into said stem, a compression spring around the stem between said cross bar and the upper
20 guide bar, a valve loosely hung upon the lower end of said valve stem leaving the end of the stem open, said valve stem and springs so arranged as to normally hold the valve against the valve seat, its opening being
25 dependent upon pressure of the stem handle toward the guide bar.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 23d day of August, 1909.

FRANK E. BROWNE.

In presence of—

JAMES R. TOWNSEND,

M. BEULAH TOWNSEND.

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