(No Model.)

J. F. BROWN.

SHIPPING CAN.

No. 326,940. Patented Sept. 29, 1885.

Fig. 1.

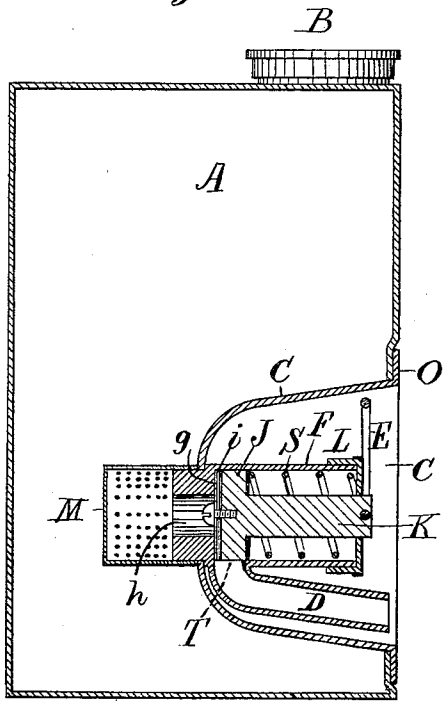


Fig. 3.

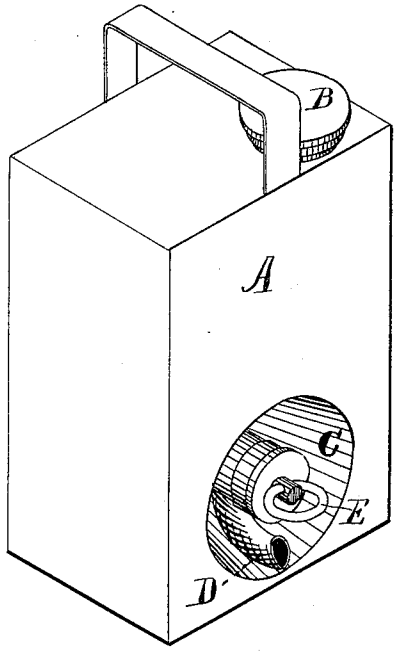
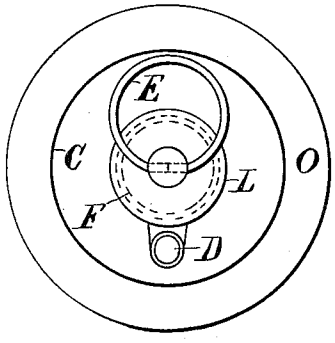


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN F. BROWN, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO FITZ-GERALD & CO., OF NEWARK, NEW JERSEY.

SHIPPING-CAN.

SPECIFICATION forming part of Letters Patent No. 326,940, dated September 29, 1885.

Application filed December 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. BROWN, a citizen of the United States, residing in Providence, Providence county, Rhode Island, have invented certain new and useful Improvements in Shipping-Cans, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to that class of cans in which a valve is placed upon the side, at the lower part of the same, in order that its contents may be drawn off without tipping the can, such construction being especially desirable in cans for fine varnish, upon the surface of which a skin forms when the same is opened or vented, and which skin is liable to be broken and particles of it discharged with the varnish if the same be poured from the top of the can.

My invention belongs to that class of cans in which the valve is applied to the side without projecting therefrom, and the invention consists in the combination specifically set forth herein.

The nature of my invention will be understood by reference to the drawings, Figure 1 showing a central vertical section of a can provided with my improved valve, Fig. 2 being a front view of such valve and its socket detached from the can, and Fig. 3 showing a can having my improved valve in perspective.

A is the body of the can, B the ordinary inlet for filling the same, C the socket, D the discharge-nozzle, and E the handle for opening the valve when required.

F is the valve-chamber, formed as a hollow cylinder; *g*, the valve-seat formed around the valve-inlet *h*, which is closed by a leather washer, *i*, applied to the end of a spring-plunger, J. The plunger is pressed toward the seat by a spring, S, and is provided with a shank, K, extended through a cap, L, upon the front end of the chamber F, where it is supplied with a ring, E, to serve as a handle.

The outlet T from the valve-chamber is formed upon its lower side near the seat *g*, and the discharge-nozzle D is fitted to the chamber at such point that when the plunger J is retracted by pulling the handle E the inlet *h* is opened and the outlet T simultaneously uncovered. The plunger J is closely fitted to the bore of the cylinder, to prevent the passage of the fluid into the same and its escape where the shank K passes through the cap L. The handle E, being in the form of a ring fitted loosely to a hole in the outer end of the shank, may be readily turned either upward or downward when the cans are packed so as to lie entirely within the recess formed by the socket C. The socket is preferably made of sheet-tin stamped into cup shape, with a flange, O, at its margin, and is formed of such size around the valve-chamber and its nozzle that the lip of a tin measure or similar vessel may be inserted between the nozzle and the edge of the socket, and thus receive the fluid and prevent the same from dripping down upon the front of the can.

When operating the valve, the ring E is turned outward, as shown in the same figure, so as to be readily grasped by the fingers, and the plunger pulled outward against the resistance of the spring, which serves to automatically close the valve as soon as the ring is released. A finely-perforated screen, M, is shown applied to the base of the chamber around the valve-inlet *h*, to prevent the egress of anything but clear varnish from the can in case the surface-skin or any thickened particles of the varnish may be floating in the same.

By the construction thus described it is obvious that only the perfectly fluid varnish is drawn from the can, and without any agitation of its contents, and that the valve automatically closes when released by the operator and is held securely upon its seat until again retracted.

The arrangement of the plunger, which is fitted snugly to the valve-chamber behind the leather washer, prevents the access of the varnish in any considerable degree to the plunger or to the shank where the latter passes through the cap L.

The arrangement of the plunger with reference to the outlet-opening T also prevents the access of air to the valve-seat from such outlet when the valve is not in use.

The previous state of the art is illustrated

in United States Patents Nos. 156,290 and 203,672, such can-valves differing widely from my invention both in their construction and mode of operation.

I therefore claim my invention in the following manner:

The combination, with the interior of the tin socket C, of the valve-chamber F, provided with the opening T and spout D, and having the seat *g* and inlet *h* at its inner end, the plunger J, fitted within the chamber outside of the seat, the cap L, secured upon the outer end of the chamber, the shank K, projected through the cap, the spring S under the cap, for pressing the valve toward the seat, and the ring E, fitted loosely to the shank for opening the valve, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN F. BROWN.

Witnesses:
EDWIN C. PIERCE,
RICHARD B. COMSTOCK.