(No Model.)

A. O. FITZ-GERALD.

SHIPPING CAN.

No. 345,223. Patented July 6, 1886.

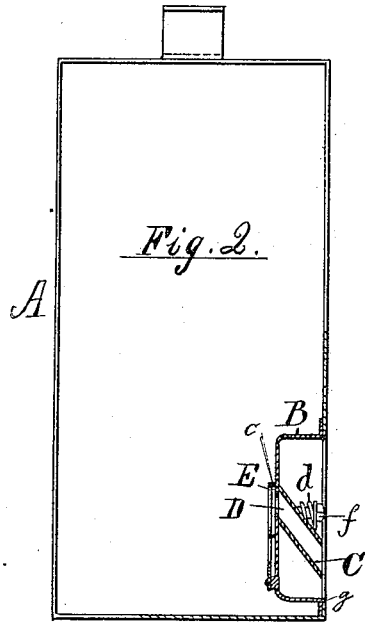

Fig. 2.

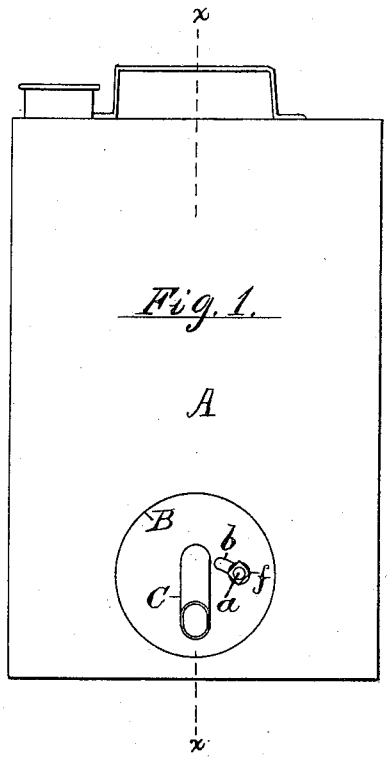

Fig. 1.

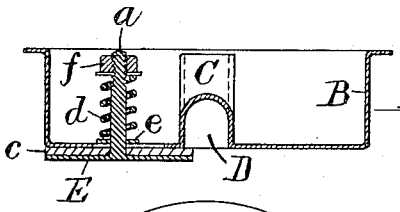

Fig. 4.

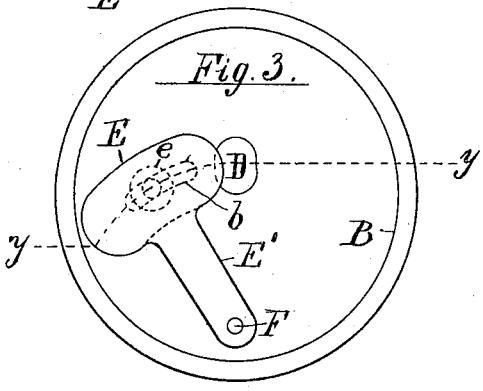

Fig. 3.

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UNITED STATES PATENT OFFICE.

A. OGDEN FITZ GERALD, OF NEWARK, NEW JERSEY.

SHIPPING-CAN.

SPECIFICATION forming part of Letters Patent No. 345,223, dated July 6, 1886.

Application filed May 1, 1885. Renewed June 15, 1886. Serial No. 205,293. (No model.)

To all whom it may concern:

Be it known that I, A. OGDEN FITZ GERALD, a citizen of the United States, residing in Newark, Essex county, New Jersey, 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 consists in the combination, with a flat-bottomed cup recessed into the side of the can, of a nozzle inserted in the bottom of the cup and projected toward the side of the can, and a sliding valve-plate fitted to the inner surface of the cup and provided with a stem projected through a slot in the bottom of the cup, so as to be moved over the outlet to the nozzle, to prevent the discharge of the can's contents, at pleasure.

It also consists in the combination, with the sliding valve-plate, of a leather seat or facing for the same, and of a spring and a screw-nut applied to the valve-stem to produce and regulate the required pressure of the valve-plate upon the outlet.

In the drawings, Figure 1 is an external front view of a can provided with my improvement. Fig. 2 is a vertical section of the same on line *x x* in Fig. 1. Fig. 3 is a view of the inner side of the cup, enlarged, with the valve-plate adjusted to open the nozzle. Fig. 4 is a top view of the same cup in section on line *y y* in Fig. 3.

A is the can; B, the cup forming a recess in the side of the can of sufficient depth to contain the nozzle C, and formed with a flat bottom, in which the nozzle is inserted.

D is the outlet from the can into the nozzle, by which the contents of the can are discharged.

E is the valve-plate applied to the flat inner side of the cup B, and is shown in Fig. 3 as formed with an arm, E', by which it is connected with a pivot, F, upon the cup.

a is a valve-stem secured to the front side of the valve-plate, and projected through a slot, *b*, in the bottom of the cup adjacent to the outlet D.

The valve-plate E is oblong in form, so that it may cover the outlet D and the whole of the adjacent slot *b*, when required, and the slot is so proportioned and related to the outlet that the valve-plate may be moved sufficiently to cover or uncover the outlet D by pushing the stem *a* to one end or the other of the slot *b*.

As shown in Figs. 1 to 4, inclusive, the valve-plate moves in an arc of a circle by reason of its pivotal attachment to the inner flat side of the cup B at F, and the slot is therefore curved concentrically with the pivot; but it is obvious that a straight slot and movement for the valve-plate may be employed, if desired. In these four figures the inner side of the valve-plate is provided with a leather facing, *c*, through which the valve-stem passes, and which is moved over the outlet with the valve-plate when the plate is moved to close the outlet. The leather facing at such time covers the entire slot as well as the outlet, and thus prevents any leakage therefrom, the valve-plate being pressed elastically toward the bottom of the cup B by means of a spring, *d*, applied to the valve-stem inside the cup. The spring abuts at its inner end against a washer, *e*, which bears upon the opposite sides of the slot, and at its outer end against a screw-nut, *f*, applied to the outer end of the valve-stem to adjust the tension of the spring. The operator grasps the nut in moving the stem to and fro in the slot *b*, and the nut affords a means of increasing the pressure of the packed valve-plate at any time in case of leakage. By this construction the nut and spring are entirely accessible at all times, and furnish a means of regulating the action of the valve in case of wear or derangement without opening or unsoldering any part of the can.

The cup B is located in one side of the can, close to the bottom, and the nozzle C is shown inclined, so as to discharge the fluid in an inclined direction into a suitable vessel or measure, and the tip of the nozzle is projected clear from the lower corner of the cup at *g*, so that the lip of a measure may be inserted between the two when desired.

It will be seen that the essential feature of my invention is the actuation of the sliding valve-plate within the can by means of a stem without the can, and connected with the valve-plate through a slot which is continuously closed by the valve-plate itself.

What I claim is—

1. In a shipping-can, the combination, with a flat-bottomed cup recessed into the side of

the can, of a nozzle contained within the cup, an outlet from the can to the nozzle, and a sliding valve-plate fitted to the inner side of the cup's bottom and adapted to slide over the outlet, as described, a slot in the cup's bottom, a stem on the valve-plate for moving the plate from the outer side of the can, so as to close or open the outlet, and a spring operating to hold the valve-plate elastically against the bottom of the cup, as and for the purpose set forth.

2. In a shipping-can, the combination, with the flat-bottomed cup recessed in the side of the can and provided with the slot *b*, as described, of the outlet D, the sliding plate E, the packing *c*, the stem *a*, and a spring operating to hold the valve-plate elastically, as and for the purpose set forth.

3. In a shipping-can, the combination, with the cup having an outlet, the nozzle, and valve-plate, constructed and operated as described, of the packing between the valve-plate and flat bottom of the cup, the valve-stem projecting through the slot in the cup, so as to operate the valve from the outside of the can, and the spring and adjusting-nut *f*, applied to the stem within the cup and accessible from the outside of the can, as and for the purpose set forth.

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

A. OGDEN FITZ GERALD.

Witnesses:

THOS. S. CRANE,

L. LEE.