

W. COLLINS.

CAPS OR STOPPERS FOR CAN SPOUTS.

No. 177,620.

Patented May 23, 1876.

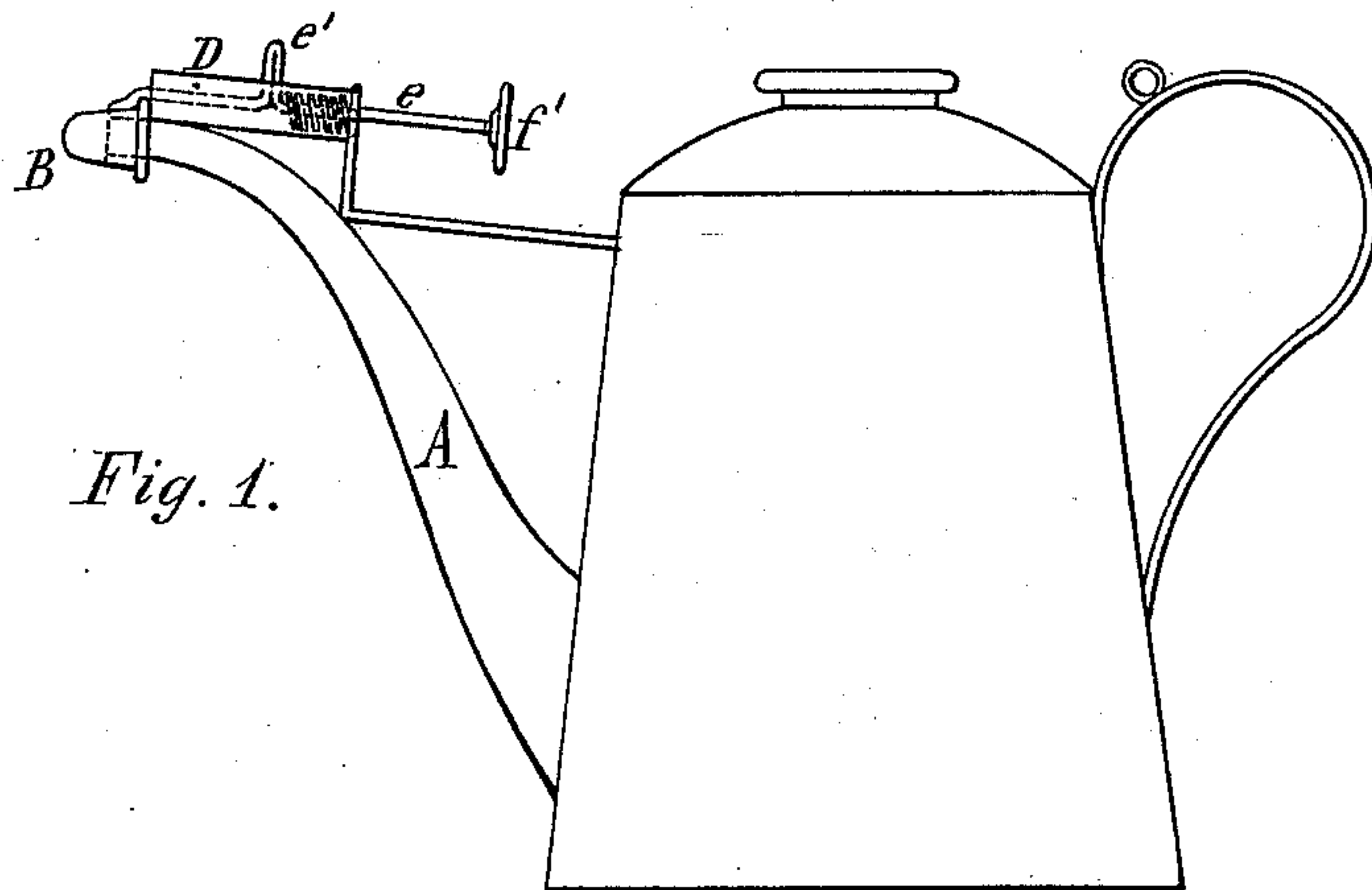


Fig. 1.

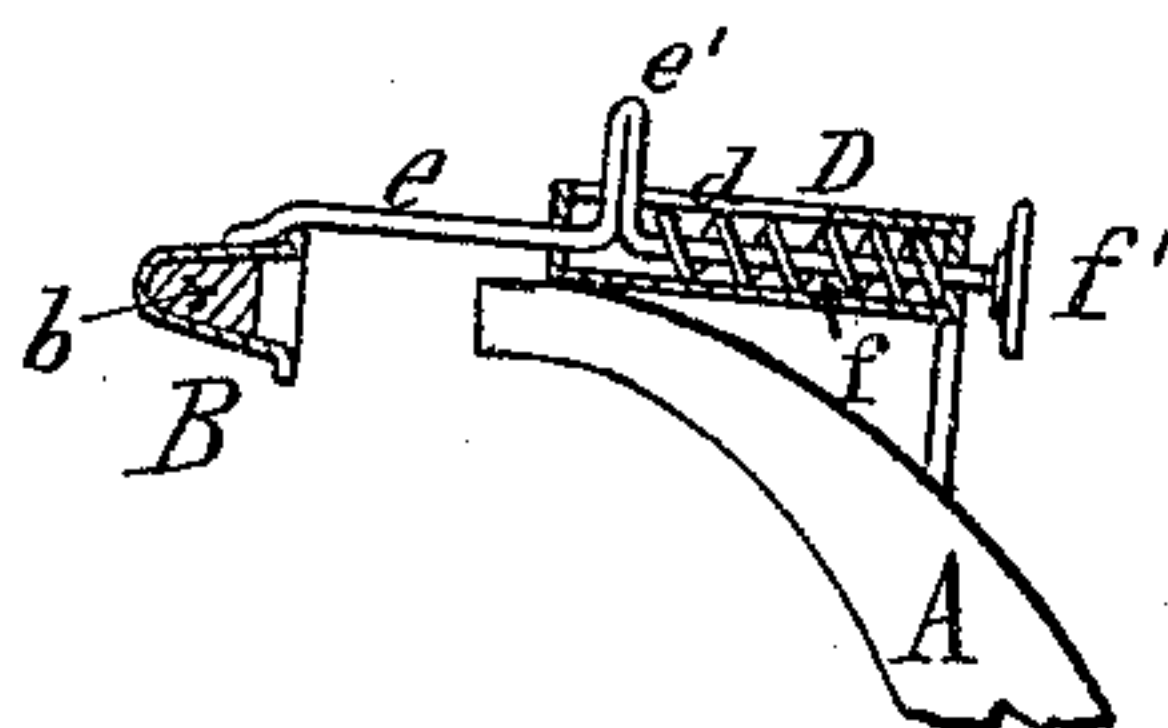
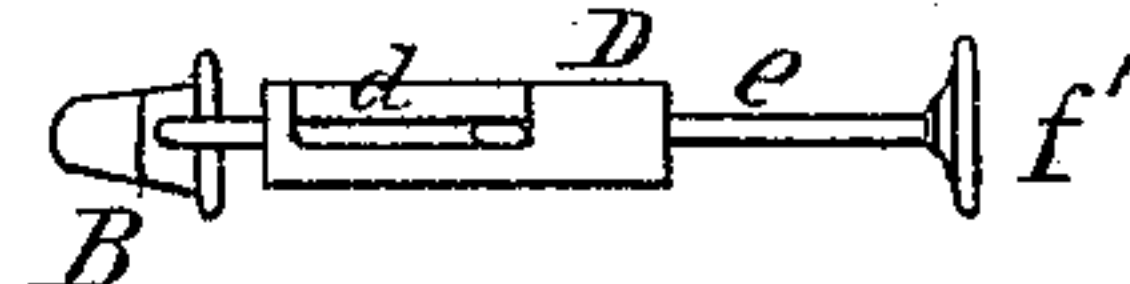


Fig. 2.

Fig. 3.



Fig. 4.



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Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM COLLINS, OF NIAGARA FALLS, NEW YORK, ASSIGNOR TO CHARLES H. PHILPOTT, OF SAME PLACE.

IMPROVEMENT IN CAPS OR STOPPERS FOR CAN-SPOUTS.

Specification forming part of Letters Patent No. **177,620**, dated May 23, 1876; application filed March 13, 1876.

To all whom it may concern:

Be it known that I, WILLIAM COLLINS, of the village of Niagara Falls, in the county of Niagara and State of New York, have invented certain Improvements in Caps or Stoppers for the Spouts of Cans, which improvements are fully set forth in the following specification, reference being had to the accompanying drawing.

My invention relates to the particular construction of the cap or stopper and its connecting parts, so that the same is tightly held against the mouth of the can, thereby preventing any loss of the fluid contained therein by the upsetting of the can or evaporation, while it can be readily opened when the contents of the can are to be discharged, as will be hereinafter more fully described.

In the accompanying drawing, Figure 1 is an elevation of a can provided with my improvements, the cap being closed. Fig. 2 is a section of a portion of the spout, with the cap open. Fig. 3 is a front view of Fig. 2; and Fig. 4 a plan view thereof.

Like letters of reference refer to like parts in each of the figures.

A represents the spout of the can. B is the cap or stopper, fitting over the mouth thereof, and constructed somewhat in the form of a thimble, as shown. *b* is a packing of rubber, leather, or other suitable material, arranged in the bottom or outer end of the cap B, so as to close tightly against the mouth of the spout. *e* is a rod or stem, secured to the upper part of the cap B, and extending horizontally through a tube or cylindrical sleeve, D, in which it is guided. *f* is a spiral spring, arranged in the tube D around the stem *e*, and secured with one end to the latter, and its other end to the tube D, so as to hold the cap B, with its packing, in close contact with the mouth of the spout. The stem or rod *e* is provided with an upwardly-extending arm or loop, *e'*, passing through a longitudinal slot, *d*, in the tube D,

made wide enough to permit the stem *e* to be turned therein sufficiently to swing the cap B away from the mouth of the spout, if desired. *f'* is a push-knob, secured to the rear end of the rod *e* for operating the same. By pressing the knob *f'* forward, the cap B is caused to move forward, away from the mouth of the spout, leaving the latter unobstructed, as shown in Fig. 2. Upon releasing the knob *f'*, the spring *f* returns the cap B instantaneously to its former position, so as to close the spout A. When the end of the spout is arranged in so close proximity to the can that there is not sufficient space between the rear end of the tube D and the can to accommodate the knob *f'*, the arm or loop *e'* is provided with a knob for operating the rod *e*, and the knob *f'* dispensed with.

My improved device forms a very simple and reliable means for closing the mouth of the spout, working equally well in all positions of the can, and preventing any escape of the contents thereof through the spout by upsetting of the can, evaporation, or otherwise, thereby enabling dangerous and explosive fluids to be kept or used in cans with great safety and without offensive exhalations. At the same time the cap is readily removed from the spout when the contents of the can are to be discharged, and immediately closed again upon removing the finger from the knob, thereby preventing the spout being left open by inadvertence or carelessness.

I claim as my invention—

The combination, with the spout A, of the cap or stopper B, push-rod *e*, provided with arm *e'*, spiral spring *f*, and inclosing-tube D, provided with slot *d*, substantially as and for the purpose hereinbefore set forth.

WILLIAM COLLINS.

Witnesses:

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