

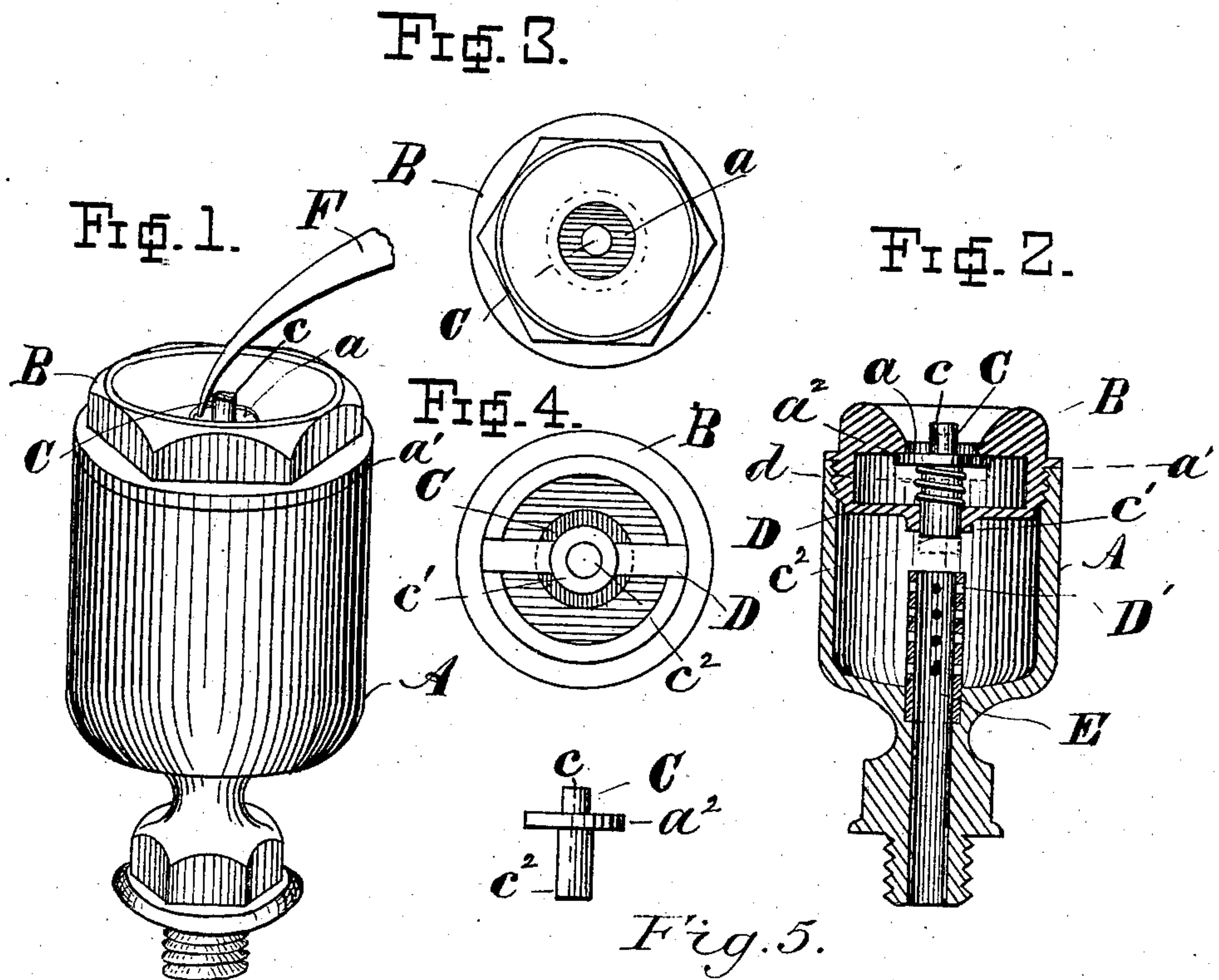
(No Model.)

J. J. FAWCETT.

OIL CUP.

No. 294,022.

Patented Feb. 26, 1884.



Attest.

*W. M. Converse*

INVENTOR.

*John J. Fawcett.*  
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# UNITED STATES PATENT OFFICE.

JOHN J. FAWCETT, OF SPRINGFIELD, OHIO.

## OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 294,022, dated February 26, 1884.

Application filed December 17, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. FAWCETT, a citizen of the United States of America, residing at Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Oil-Cups, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in oil-cups.

My invention relates to that class of oil-cups in which the usual cap is dispensed with for closing the top of the cup after filling the same.

This invention is an improvement upon the device embraced in application No. 114,143, filed December 10, 1883, by John J. Fawcett. Like that oil-cup, there is a central opening in the cover or cap of the same, through which the cup is filled, said opening being closed automatically by means of a spring-valve operating from the interior of the cup. This invention differs from the one mentioned, in having the valve and the spring for closing it all embraced within the cap, so that when the latter is removed the whole will be detached with it, and the cup then will be free from any obstruction to its being cleansed. Besides this advantage, this cup will allow of waste packing around its central tube without any danger of its interfering with the operation of the spring which operates the valve, and which in this cup is supported upon a bridge-tree (which forms the lower part of the cap) above the space allotted to the waste packing, and is entirely protected from contact with the latter, as will be hereinafter explained.

Figure 1 is an isometric view of my improved oil-cup. Fig. 2 is a vertical section of an oil-cup differing only from that shown in Fig. 1 in the contour of its cap. Fig. 3 is a top view of the cap of the oil-cup shown in Fig. 1. Fig. 4 is a view of the under side of the same. This view corresponds exactly with the under side of the cap shown in Fig. 2. The detail, Fig. 5, shows the valve detached.

A is the oil-cup, which can be made of any suitable material and of any form adapted to the purpose. The one herein shown is made with parallel sides, as being more easily and cheaply constructed. The cap B, which embodies the major part of the invention, is screwed down into the top of the cup, having

a flange,  $a'$ , which extends over the top edge of the cup, forming a continuation of the outside of the latter. This cap has a central opening,  $a$ , with a conical cavity in the top leading down to the latter. This cavity may be of any desired degree of inclination. In the one shown in Fig. 2 the pitch of its sides is greater than the one shown in Fig. 1. The cap is also rounded over the top, to prevent the lodgment of dust, presenting an outside inclined surface also. Extending across diametrically from one side to the other of the lower end of the cap is a bar, D, having a collar,  $c'$ , in the center, forming a bridge-tree for the support of the spiral spring  $d$ , which operates the valve C. The stem  $c^2$  extends down through a hole in the collar  $c'$  of the bridge-tree, terminating a little below the latter, and is fitted so as to work snugly therein. The valve has a flanged head,  $a^2$ , ground to a seat on the under side of the cap, and from its center a small stem,  $c$ , projects upward. This stem may be finished with a button or knob terminal, and may be of any desired length; or it may be left short, as shown in the figures. Its object is to aid in opening the valve should the latter be at any time agglutinated with old oil, so as to prevent its being readily opened by the pressure of the nozzle of the oil-can. Sufficient space is left in the opening around stem  $c$  for the introduction of the oil-can nozzle F in filling the oil-cup, as represented in Fig. 1.

It will be noticed that the valve and the means for automatically closing it are wholly contained within the cap, and its frame-bar or bridge-tree D extends across the lower end of the same, and that the operation of this valve cannot be affected by the packing of cotton or wool waste, which will not be filled higher than the top of the central perforated tube, D', which latter is coincident with the discharge or outlet tube extending through the stem of the oil-cup. In operating the valve, the finger of the left hand may be applied to the stem  $c$  at the same time that the oil-can nozzle F is pressed upon the valve, and both means used, if required, to open it for filling the cup; or it may be pushed down, when in good working order, by either the hand or the pressure of the nozzle of the oil-can, as before stated.

In many oil-cups, where they are often filled,



the top stem, *c*, can be dispensed with, if desired, although it affords additional means for opening the valve, which in most cases would be desirable.

5 In the view of the oil-cup, Fig. 2, the movement of the valve C is shown in dotted lines. The collar *c'* in the bridge-tree D, through which the lower stem, *c''*, extends and is operated, serves as a vertical guide for the valve, preventing any liability of its displacement from a perpendicular. The perforated tube 10 D' is made shorter than that shown in the application referred to, in order to give sufficient space for the operation of the valve without interfering with the latter.

15 I claim as my invention—

1. In an oil-cup, the combination, with a cap having a conical cavity and an inlet-opening therein, as described, of a bridge-tree extending diametrically across the lower end of 20 said cap, a collar central in said bridge-tree, a valve having its lower stem extending through the collar of said bridge-tree, and a spiral spring supported upon the latter and adapted to operate said valve in automatically 25 closing the same, as set forth.

2. In an oil-cup, a cap having an opening

therein, and a valve and means for operating the same inclosed therein, said valve being provided with a central upright stem projecting from the top as means for operating the same in addition to the pressure of the can- 30 nozzle, substantially as set forth.

3. The combination, with an oil-cup, A, having a discharge-outlet, E, of the screw-threaded 35 cap B, having a rounded top to prevent the lodgment of dust, a conical cavity, and an opening, *a*, therein, a bridge-tree, D, extending diametrically across the lower end of said cap, provided with a central collar, *c'*, and a 40 valve, C, with its lower stem extending through said collar and its upper stem projecting centrally through said opening *a*, said valve being operated in closing the latter by a spiral spring, *d*, surrounding the valve-stem *c''*, with- 45 in said cap and supported upon the bridge-tree D of the same, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN J. FAWCETT.

Witnesses:

B. C. CONVERSE,

H. G. ROTH.