LOUIS R. BOYD.

Improvement in Screw-Caps for Cans.

No. 115,927. Patented June 13, 1871.

Fig. 1.

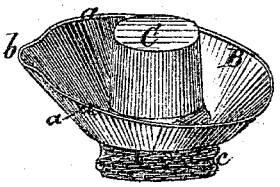
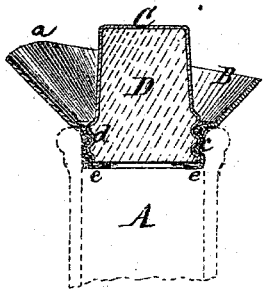


Fig. 2.



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UNITED STATES PATENT OFFICE.

LOUIS R. BOYD, OF NEW YORK, N. Y.

IMPROVEMENT IN SCREW-CAPS FOR CANS.

Specification forming part of Letters Patent No. 115,927, dated June 13, 1871.

To all whom it may concern:

Be it known that I, LOUIS R. BOYD, of the city, county, and State of New York, have invented a new and Improved Screw-Cap for Oil-Cans and other analogous vessels, which constitutes a combined stopper and mouth-piece; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings which accompany and form a part of this specification.

In the drawings, Figure 1 is a view of my improved cap in perspective, and Fig. 2 is a vertical section taken through the center of the cap, and also through the nozzle or vent of a can or vessel of the class to which my improvement is adapted.

The object of my invention is to produce, for use in vessels of the character mentioned, a screw-stopper combined within a small compass, and in a convenient and efficient manner, with a suitable mouth-piece, so that the vent of the can or other vessel can be readily and effectually stoppered and unstoppered; and, also, so that its contents can quickly and with great ease and accuracy be discharged through the mouth-piece, while at the same time the cap is capable of being manufactured of cheap material and in a ready and rapid manner, so that its cost is inconsiderable.

In the drawings, A represents the nozzle or vent of an oil-can of the ordinary construction, or of any vessel of an analogous nature. Into the upper portion of this vent is preferably soldered or otherwise firmly secured the lower end of a peculiarly-shaped screw-socket or mouth-piece, B, formed, by preference, by being "spun" from sheet-metal. This screw-socket is made somewhat flaring at its upper part, so as to produce a slight flange, as shown at *a*, and is provided with the nose or short spout *b*, by which the contents of the can or vessel may be poured out, the whole constituting a mouth-piece of a convenient form and nature. In the lower end of the socket, where it is secured in the vent of the can or vessel, a short female-screw thread, *c*, is spun or produced in any convenient manner. Into this thread fits the screw-stopper, C, which is also, by preference, made of sheet-metal spun into the shape of a hollow cap, as represented, and provided at its lower extremity with a male-screw thread, *d*, fitting the female thread *c* of the socket B. This stopper is adapted, when screwed down into place, as shown in the drawings, to close or stopper the can or vessel air-tight, while, as is obvious, it can readily be screwed in or out to confine or discharge the contents of the vessel. I usually prefer to fill the hollow portion of the stopper C with a cork, D, or other suitable filling material. This filling may be made to constitute a very efficient packing between the stopper and the socket, inasmuch as the extremity of the female-screw thread may be turned somewhat inward so as to make a slight internal flange, as seen at *e*, Fig. 2, against the upper surface of which the bottom of the cork or other filling material is forced, and caused to press very tightly when the stopper is screwed into place, thereby considerably aiding to close the can or vessel so that it shall be air-tight. In addition to this, the filling serves to give stiffness to the stopper and to prevent the contents of the vessel from entering or acting upon the hollow portion of the stopper, the latter being made hollow for the purpose of ease and cheapness of manufacture. I prefer that the screw-socket B should be so attached to the nozzle or vent of the can or vessel that it shall form a permanent part thereof. But this, of course, is not essential, as it might be made to screw into the vent. In this case it would be found that when the stopper was screwed into place it would tighten the socket in the vent, as the thread by which the socket is screwed into the vent would, almost of necessity, be the same, or else run in the same direction, as that by which the stopper screws into the socket. There would then, however, be a tendency to loosen the socket when the stopper was unscrewed. If the socket was made of cast metal the screw-thread by which it was secured to the vent might run in the opposite direction from that on the stopper; but this would tend to loosen the socket when the stopper was screwed in. The method of fastening by soldering or other permanent attachment of the socket to the vent will, on these accounts, be greatly preferable in practice.

My improved stopper and mouth-piece will be found very desirable in use, for the reason that it will enable the contents of a vessel to be discharged with accuracy, and the exact

quantity thereof be removed which is required without making it necessary to return any surplus, and will prevent all spilling or dripping of the contents upon the outside of the vessel when the pouring is stopped. At the same time the great facility and cheapness with which it can be manufactured of sheet-metal adapt it to a large class of vessels in universal use without adding materially to their cost.

Having thus described my invention, what I claim is—

1. A metallic mouth-piece for cans and other vessels, having at its lower end a screw-thread and at its upper end a nose or spout, substantially as described.

2. The combination, with a mouth-piece having the character described, of a screw-stopper, substantially as set forth.

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