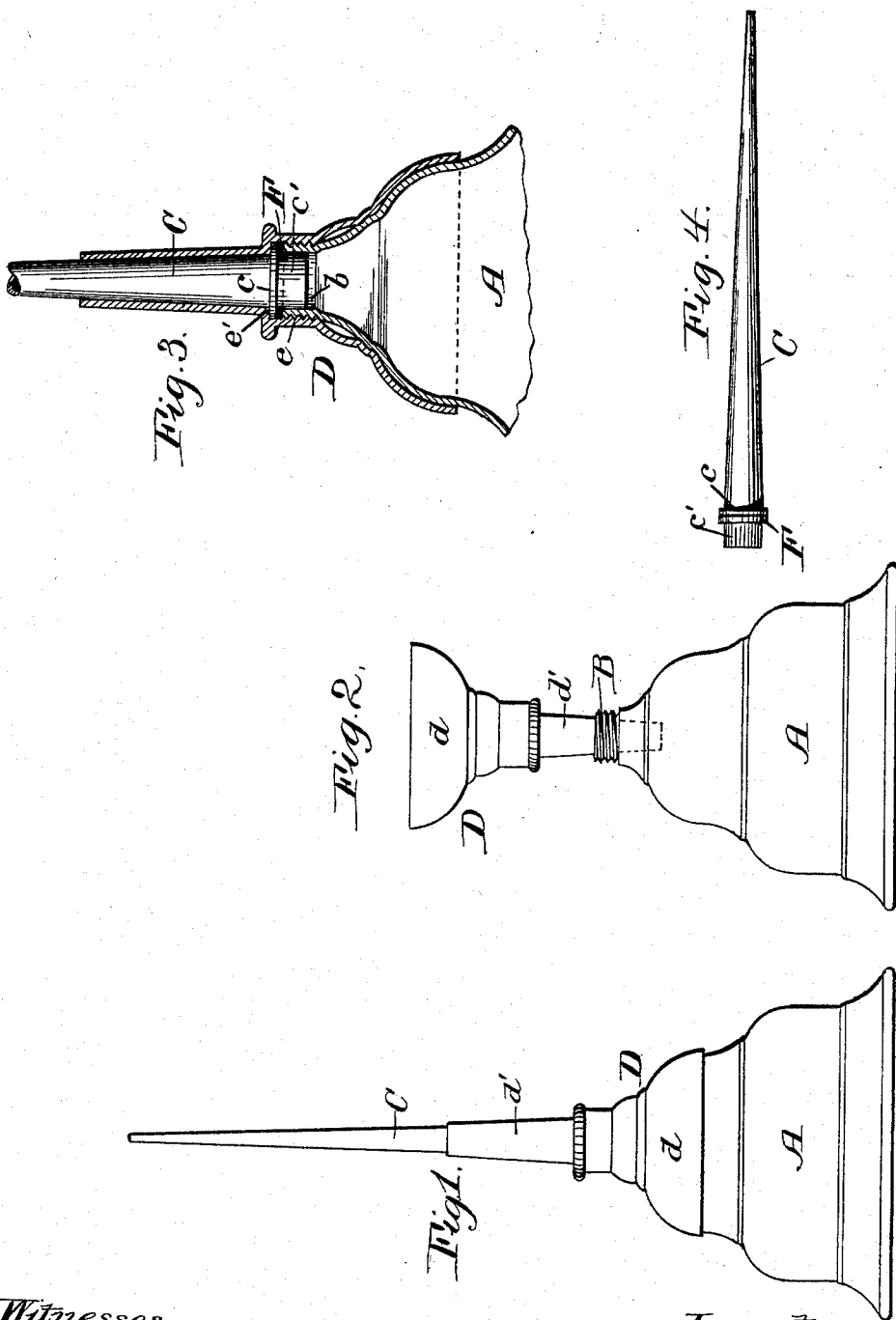


(No Model.)

F. E. WILLIAMSON.
OIL CAN.

No. 518,539.

Patented Apr. 17, 1894.



Witnesses.
Charles Parker
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Inventor.
Frank E. Williamson
by J. S. Barker,
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UNITED STATES PATENT OFFICE.

FRANK E. WILLIAMSON, OF CHICAGO, ILLINOIS.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 518,539, dated April 17, 1894.

Application filed February 15, 1894. Serial No. 500,316. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. WILLIAMSON, a citizen of the United States, residing temporarily at Chicago, Illinois, have invented certain new and useful Improvements in Oil-Cans; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Much difficulty is experienced in filling the ordinary spring-bottom oil cans, as they are now usually constructed, because of the comparatively small size of the orifice through which the filling must take place, and it frequently happens that the amount of oil wasted in such filling is very considerable. Ordinary funnels have been employed to facilitate the filling of these cans, but they become lost or misplaced, and prove in the main unsatisfactory. It has also been proposed to employ a specially constructed funnel which when not in use is intended to be slipped over the nozzle and the upper part of the can, but not to be secured thereto. But this is also unsatisfactory for the reason that the funnel often becomes loosened from its seat and finally lost, especially when the can is being carried on some moving piece of machinery, such as a harvesting machine; and further, it cannot be insured that the workman, after using the funnel, will place it upon the can so that it will be at hand when it is next desired.

My invention has for its object to combine with an oil-can of the character referred to, a filling funnel, by such means, or in such manner that the funnel is necessarily always at hand when it is desired; and it has as a further object to strengthen the can at its weakest points, and to otherwise improve it.

With these objects in view my invention consists of the combinations and arrangements of the parts of an oil can and a filling funnel to be presently pointed out.

In the drawings wherein my invention is illustrated as being applied to a spring bottom oil can of ordinary shape, Figure 1 is an elevation of a can provided with my invention and ready for use. Fig. 2 is an elevation showing the arrangement of the parts when the can is to be filled. Fig. 3 is a vertical

section of the parts, when assembled as illustrated in Fig. 1. Fig. 4 is an elevation of the oiler nozzle, detached.

In said drawings A represents the body of the can which may be of any usual or approved construction.

The neck, B, of the can is externally screw-threaded, while its inner surface or orifice *b* is finished smooth, as illustrated in Fig. 3.

C designates the tapering nozzle through which the oil is delivered. It is provided near its lower or large end with an externally arranged annular flange *c*, below which flange there is a smooth portion, *c'*, of the nozzle which is adapted to fit closely into the aperture, *b*, in the neck of the can, this fit being as tight as can practically be made, while allowing the nozzle to be easily slipped into or removed from its seat.

D is the filling funnel, consisting of a body part *d* adapted to fit the outside of the upper part of the can body and a neck or spout *d'* which is adapted to fit over, and quite closely upon, the nozzle C. The funnel is provided with an internal screw-thread *e* which may be made to engage with the threaded neck of the can, and with an internal shoulder *e'*, against which the flange *c* upon the spout bears when the funnel is slipped over the spout.

F represents a packing ring which may be used between the flange *c* and the end of the neck of the can.

In Fig. 2 the can is shown ready to be filled. The nozzle has been removed and the neck of the funnel is introduced into the orifice of the can, which may now be easily filled, as will be understood. Having been filled, the funnel is removed, and the nozzle put in place by inserting its cylindrical portion into the neck of the can. It will be observed that the nozzle is not securely held in place by this operation, but that the co-operation of the funnel is necessary in order to secure it in position for use. This is effected by slipping the funnel down over the nozzle and screwing it upon the neck of the can, which results not only in attaching the funnel to the can where it is held securely and is ready at hand when desired for use, but also in securing the nozzle in place, and in packing the orifice in the neck B. It will thus be

seen that it is practically impossible for the funnel and the can to become accidentally separated, or the funnel left when the can is moved, for the reason that the can is practically useless without the funnel.

In the cheaper grades of oil-cans of the character illustrated they fail, sooner or later, almost invariably through breakage in one of two places, namely just below the screw threaded neck of the can, or at the lower end of the nozzle. My invention reduces loss from such breakage to a great extent, because the funnel when in place upon the can operates to brace and strengthen it in both of these weak places.

It will be observed that the joint between the can body and the nozzle is particularly adapted to prevent leakage of the oil, by reason of the sliding joint formed by the surfaces *b* and *c*, the packing *F*, and the screw joint *e*. The packing *F* might be dispensed with, and the flange *c* on the nozzle, and the end of the neck *B* be made to fit together closely when the funnel is screwed down.

The addition of my improvements but slightly increases the cost of an oil-can, while it largely increases its usefulness and its durability, as I have pointed out.

It will be seen that the funnel, when constructed as described to screw directly to the body of the can, is in effect a clamping nut by means of which the detachable nozzle is held in place on the can.

What I claim is—

1. In an oil can, the combination of the can body having its neck with an external screw thread and a smooth orifice, a nozzle having a smooth portion adapted to fit tightly in the

said orifice and thereby form a slip joint and a flange above the said smooth portion, and a clamping nut adapted to engage with the screw-thread of the neck and with the flange on the nozzle, whereby the nozzle is held in place on the can, substantially as set forth.

2. In an oil can, the combination with the can body having the neck *B* externally screw-threaded, and having a smooth orifice through it, a detachable nozzle having a smooth portion *c'* adapted to fit the said orifice, and a flange *c* above the said smooth portion, and a funnel adapted to slip over the nozzle and having an internal screw-thread which is adapted to engage with the thread on the neck of the can body, and having a shoulder which is adapted to be brought against the flange on the nozzle, substantially as set forth.

3. In an oil can, the combination of the can body having an externally screw-threaded upper portion and a funnel having a body portion which fits onto and conforms to the upper or top part of the can body, and having a spout which fits closely around and extends along the nozzle, the said funnel being arranged to screw onto the said threaded part of the can body, whereby it is drawn down close upon the upper portion of the can and the lower part of the nozzle, thereby serving to strengthen them, substantially as set forth.

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

FRANK E. WILLIAMSON.

Witnesses:

J. S. BARKER,

JOS. H. MILANS.