(No Model.)

A. F. CHABLE.

LIQUID EMPTYING DEVICE FOR CANS.

No. 524,754. Patented Aug. 21, 1894.

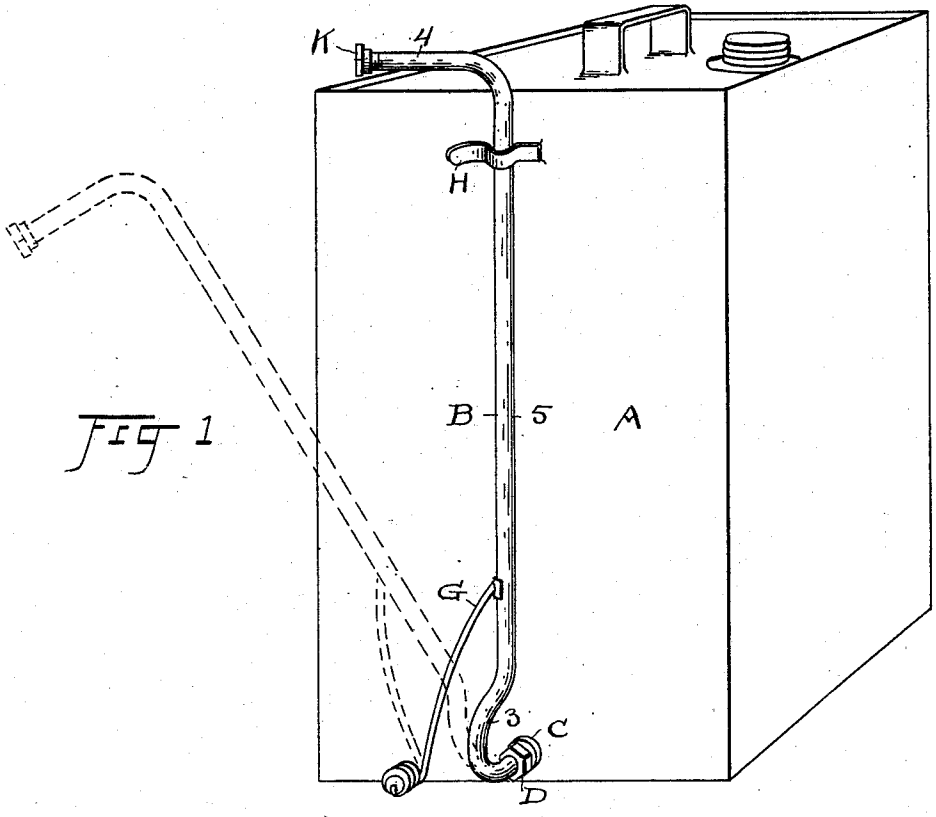

Fig 1

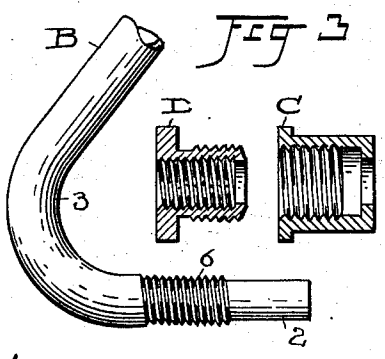

Fig 3

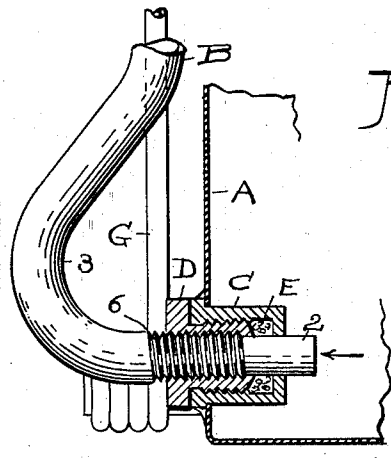

Fig 2

WITNESSES
R. B. MOSER.
G. L. Schaffer

INVENTOR
August F. Chable.

BY H. G. Fisher ATTORNEY

UNITED STATES PATENT OFFICE.

AUGUST F. CHABLE, OF CLEVELAND, OHIO.

LIQUID-EMPTYING DEVICE FOR CANS.

SPECIFICATION forming part of Letters Patent No. 524,754, dated August 21, 1894.

Application filed October 9, 1893. Serial No. 487,547. (No model.)

To all whom it may concern:

Be it known that I, AUGUST F. CHABLE, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Liquid-Emptying Devices for Cans; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a liquid emptying device for cans, and my invention consists in a device or attachment for cans which is simple and cheap in construction, and which is adapted to take the place of pumps and other means usually introduced into the can for emptying the same, and which is made and sold as a separate article of manufacture, and is adapted to be used with cans of different styles and kinds and for different purposes and serves for emptying liquids of any kind, such as water, oil, milk, liquid paints, and other like fluids, all as hereinafter more fully shown and described and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of a can with my improved emptying device attached thereto, and shown in vertical position in full lines and in inclined position in dotted lines. Fig. 2 is a vertical central sectional elevation of the lower part of the can, and showing in full lines the lower part of the emptying tube with a cross section of the means whereby the tube is secured to the can. Fig. 3 is an elevation of the emptying tube or spout separate from the can, and showing also in section the parts by which the tube is attached to the can.

A represents the can which, as already indicated, may be of any fashion, form or style which taste or convenience may dictate, and which is adapted to hold liquids of any kind.

B is my improved can emptying attachment. This attachment is designed as a substitute for any of the means hitherto known or used for emptying cans of their liquid contents in whole or in part, at one time or as it becomes necessary to draw liquid from the can at different times, as, for example, in drawing oil for filling lamps, or drawing liquid paint for filling paint-pots, jugs or the like.

The favorite and popular means for drawing liquid from cans in more or less quantity, and especially oil as used for domestic purposes, such as kerosene and the like, is to have a suitable pump set into the can with a spout leading out at the top from the bottom thereof, and then pumping the liquid out of the can from the bottom. Of course other means than these have been used, but these are the popular and most generally used instrumentalities for this purpose, and it may be said that my invention is especially designed to take the place of the commonly used pump and spout.

As here shown, it will be seen that the tube B is formed in a single piece throughout its entire length and bent to the shape desired. Thus, beginning at the bottom, the lower end of the tube —2— is bent inward at right angles to the body thereof by means of a curved elbow —3—, and the extremity —2— is of sufficient length to pass through the stuffing box in which the tube is secured and adapted to turn, as hereinafter described. The upper end —4— of the said tube likewise is bent at right angles to the body thereof and at right angles to the extremity —2—, and the position which the tube occupies at the side of the can is such as to bring the body part —5— thereof close to the side of the can and thus to make the tube practically no obstruction as an attachment to the can, either for local use or when the can is shipped from place to place, as may occur. If preferred, there may be even a more abrupt curvature of the tube at —3— than is here shown. The lower inward bent portion —2— is threaded as seen at —6—, and in this instance is shown as having the immediate extremity inside of the threaded portion somewhat reduced as compared with the diameter of the tube proper, and to attach the tube as thus constructed to the can, or to secure it therein, I employ a stuffing box consisting of the box proper C and the follower D.

My method is to solder the box C in the can at the bottom and side thereof substantially as here shown, and as near the bottom as practicable in order that all the liquid possible may be subject to draft by the tube, and the box C and the follower D are suitably threaded, and packing E is provided at the

bottom of the box for making a perfectly tight union upon the end —2— of the tube. It thus occurs that the follower D is threaded both interiorly and exteriorly, the exterior thread engaging the thread of the box, and the interior thread being engaged by the thread on the tube. It also is obvious that when the box C has been fixed in position in the can and the follower placed therein, that the tube may be inserted or removed at pleasure, if, for any reason, its removal be desired, but ordinarily when the parts are placed in position for use they remain connected until they become impaired.

Now in order that my invention may be made available for the purpose for which it is designed, and made to serve with cans that are filled full of liquid as well as with those that may be more or less full, I extend the tube, as seen in Fig. 1, above the top of the can, so that when the tube is in raised position and out of use it effectually closes the can against discharging by reason of its length and position. It also is obvious that if the tube be lowered into a horizontal position the full pressure of the can will be thereon, and that it will discharge the liquid to the extent of its capacity without hinderance from any source. It thus occurs in operation that an exceedingly simple means and way of drawing liquid from the tube are provided, because any one who desires to do so may fill a vessel as full as he wants with the liquid by simply lowering the tube B into position for discharge, and then as soon as the vessel is filled the flow is instantly stopped by restoring the tube B to its upright position and leaving it without further effort or trouble. I have shown here two means for holding the tube. The first of these is the spring G fixed to the can at its lower end, and to the tube at its upper end and serving of itself to lift the tube after its use to a raised position. This spring may be of greater or less strength, and it may of course be of a different construction and arrangement from that here shown, but a spring of the kind shown serves the purpose very well. Then, I have a latch spring H higher up in the can behind which the tube is adapted to pass when raised, and which serves to hold the tube in raised position until it is again lowered. Then as a further precaution I may employ a threaded cap K for the end of the tube and thus close the tube so that even if it were to drop down into discharge position it would be closed against discharge and no harm could possibly come of its being lowered. The tube of course turns on its thread when it is turned down and up, but it will be seen that whether it be turned or not it is equally secure against leakage by reason of the packing E. Of course the slight turn which a quarter turn gives the tube is not noticeable on its thread, and even if it were the tube would be packed equally as well when down as when up, but the thread on the tube also makes the tube itself detachable from its stuffing box, and I may sell the tube alone as an article of manufacture and sale, or I may sell it with the stuffing box as a part of the attachment, if I desire. My method of doing buisness is to keep both of these articles in stock and to sell to the trade according to orders, and I provide can manufacturers with the tube alone or the tube and its box according to order, or the article manufactured may include the can also.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A can, a stuffing box consisting of the internally screwthreaded box proper C secured in the can and provided with an opening at its inner end, the internally and externally screwthreaded follower D arranged in said box and engaging the screwthread therein, and the packing E arranged in the box and at the inner end of said follower, combined with an emptying tube B having its upper end bent at right angles to its body, and its lower end bent at right angles to its upper end and to the body, and threaded part way on its exterior and terminating in an unthreaded portion and having its screwthreaded part screwed into the internally screwthreaded follower and its unthreaded part extending through the packing E and also through the opening in the box into the can, whereby the tube is securely affixed to the can and a liquid tight joint therewith insured without interfering with the freedom of motion of the tube, substantially as described.

Witness my hand to the foregoing specification.

AUGUST F. CHABLE.

Witnesses:
H. T. FISHER,
GEORGIA SCHAEFFER.