J. A. SAUER.

DISCHARGE SPOUT FOR CANS.

APPLICATION FILED MAY 28, 1908.

942,522. Patented Dec. 7, 1909.

Fig. 1.

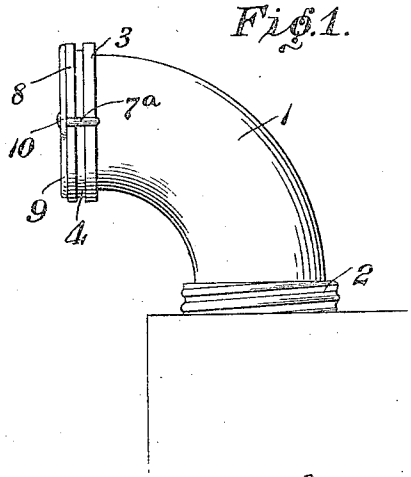


Fig. 2.

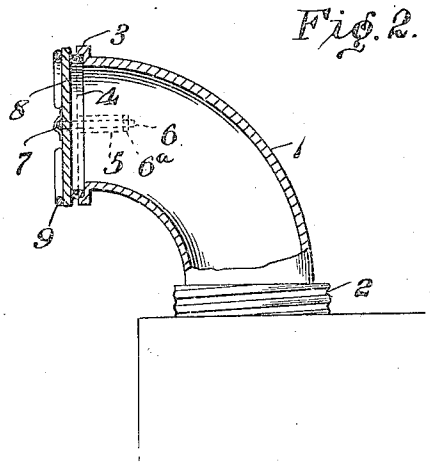


Fig. 3.

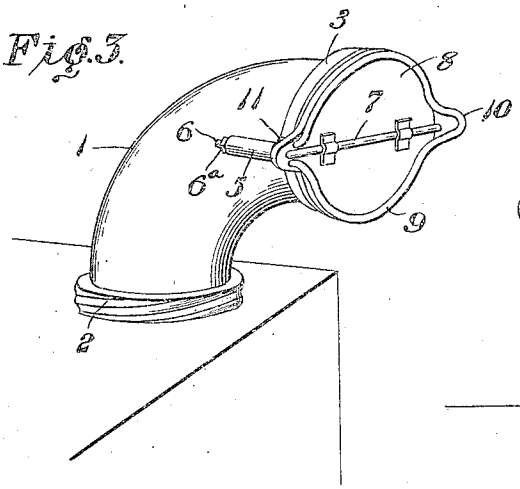
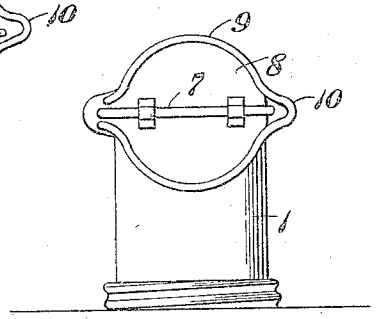


Fig. 4.



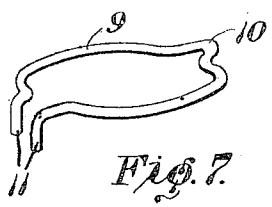


Fig. 7.

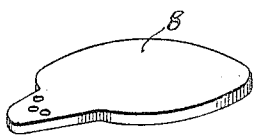


Fig. 5.

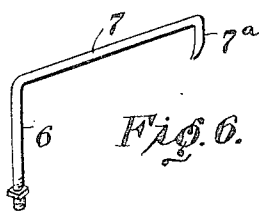


Fig. 6.

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UNITED STATES PATENT OFFICE.

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DISCHARGE-SPOUT FOR CANS.

942,522. Specification of Letters Patent. Patented Dec. 7, 1909.

Application filed May 28, 1908. Serial No. 435,541.

To all whom it may concern:

Be it known that I, JOHN A. SAUER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Discharge-Spouts for Cans, of which the following is a specification.

The present invention relates to an improved faucet or spout which is designed to be applied to a can or receptacle for the purpose of facilitating the removal of the contents therefrom.

The object of the invention is to provide a simple and inexpensive discharge spout which can be readily applied to a receptacle or removed therefrom and which will prevent the liquid contents from running down upon the exterior of the receptacle and being wasted as frequently occurs when trying to pour a liquid from a full receptacle.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of a discharge spout embodying the invention. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a perspective view of the discharge spout. Fig. 4 is an end view of the same. Fig. 5 is a detached view of the closure. Fig. 6 is a detail view of the spring for holding the closure normally in a closed position. Fig. 7 is a detail view of the reinforcing wire extending around the closure.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the discharge spout which has a tubular formation as shown and is preferably curved longitudinally. The base of this spout 1 is enlarged at 2 and threaded so as to be screwed upon the annular flange which usually surrounds the discharge opening of a can. It will thus be obvious that the spout is applied to the flange in the same manner as the usual cap which is employed for closing the receptacle, the cap being employed for sealing the can while the spout is employed when it is desired to remove the contents from the can. The outer or discharge end of the spout is enlarged at 3 to form an annular space which receives a washer 4 of leather or other analogous material, the said washer preferably projecting outwardly slightly beyond the end of the spout.

Located upon the exterior of the spout at the free end thereof is a longitudinally disposed sleeve 5 in which is supported a laterally extended end 6 of a spring rod 7, the extremity of the end 6 being threaded to receive the nut 6^a which coöperates with the sleeve to retain the spring securely in position. This spring rod 7 extends transversely across the closure 8 and normally holds the same yieldingly against the washer 4 so as to prevent all leakage. In the preferred construction the extremity of the strip 7 is hooked at 7^a so as to engage the outwardly bent portion 3 of the spout and lock the cover 8 in a closed position.

Extending around the edges of the cover 8 is a reinforcing wire 9, the middle portion of the wire being looped at 10 and projecting beyond the edge of the cover to form a finger-piece, while the extremities of the wire are extended rearwardly at 11 to form stops which operate to limit the swinging movement of the cover. It will thus be obvious that by pressing upwardly upon the finger-piece 10 the closure 8 may be swung away from the mouth of the spout so as to permit the discharge of the liquid therefrom.

The operation of my device is as follows: It will be seen from the drawing that the closure 8 is pivotally mounted upon the sleeve 5 by means of the rod 7 with its bent end 6 which forms the pivot of the closure. This rod 7 is, as before remarked, resilient, and normally acts to force the closure against the end of the mouth of the spout and against the packing carried therein. The resilient nature of the rod 7 causes its hooked end 7^a to bind against the shoulder 3 on the end of the spout, and thus tends to prevent any lateral movement of the closure. When it is desired to use the device, however, the closure is forced out of its closed position by pressing upward on the projecting end 10 of the reinforcing wire 9, or by slightly raising the closure against the force of the spring 7 until it sufficiently clears the mouth of the spout, whereupon it may be swung laterally, it requiring, however, a forcible movement to detach the hooked end 7^a of the spring from its engagement with the shoulder 3. When swung upward in

this manner, the resiliency of the spring 7 will tend to press the closure disk against the edge of the spout, thus frictionally engaging the same and preventing any dropping of the closure. The projecting ends 11 of the reinforce act as stops to limit the arc of movement of the closure in either direction, so that the closure is stopped by one of the pins when it registers with and closes the opening in the spout, and is prevented by the other stop from being moved entirely out of contact with the end of the spout, and thereby out of frictional engagement therewith.

Having thus described the invention, what is claimed as new is:

1. In a device of the character described, the combination of a discharge spout provided upon one side with a longitudinally disposed sleeve, a closure for the discharge spout, and a spring rod extending transversely across the closure and normally holding the same in a closed position, one end of the spring rod being extended laterally and pivotally supported within the sleeve while the opposite end is hooked for engagement with the spout to lock the closure in a closed position.

2. In a device of the character described, the combination of a spout, a sleeve upon one side of the spout, a swinging closure for the discharge end of the spout, a spring rod engaging the swinging closure for holding the same in a closed position, one end of the spring strip being bent at an angle and pivotally mounted in the before mentioned sleeve, and a reinforcing wire extending around the closure, an intermediate portion of the reinforcing wire being looped to form a finger-piece while the ends of the wire are extended laterally to form stops for limiting the movement of the closure.

3. In a device of the character described, the combination of a spout provided at one end with an enlargement designed to be applied to the discharge opening of a receptacle, the opposite end of the spout being formed with an annular space, a washer member received within the space, a swinging closure coöperating with the washer member to control the discharge through the spout, a sleeve upon one side of the spout, a spring rod having one end thereof bent at an angle and pivotally mounted in the sleeve and normally tending to hold the closure in a closed position, and a reinforcing wire extending around the closure, an intermediate portion of the reinforcing wire being looped to form a finger-piece while the ends of the wire are extended inwardly to form stops for limiting the swinging movement of the closure.

4. In a device of the character described, the combination of a spout, a laterally swinging closure pivoted upon the spout, a reinforcing wire extending around the closure, an intermediate portion of the reinforcing wire being looped to form a finger-piece, while both ends of the wire are extended at right angles to the plane of the closure and engage the spout to limit the swinging movement of the closure in either direction, and a spring arm forming the pivot of said closure and forcing the closure inward into engagement with the spout.

5. In a device of the character described, the combination with a spout, of a laterally swinging closure therefor, an angular spring arm, one end of which engages with the face of the closure and the other end of which has pivotal engagement with the spout to permit the closure to be turned in a plane transverse to the spout, the free extremity of said wire being inwardly turned across the edge of the closure to form a locking projection, and a reinforcing wire extending around a margin of the closure, an intermediate portion of the reinforcing wire being looped over the inwardly projecting free end of the spring arm to form a finger-piece whereby the closure may be moved, the ends of said wire being both angularly bent and extended to engage the spout and thereby limit the swinging movement of the closure in either direction.

6. In a device of the character described, the combination with a spout provided at one side with a longitudinally disposed sleeve, of a disk-like closure for the spout, and a spring arm, angular in form, one end of which passes through the sleeve to engage the same for a rotative movement, the other end of the spring arm passing across the face of the closure, said arm at its extremity which passes through the sleeve being provided with a nut, whereby it may be adjusted to hold the closure in adjustable engagement with the end of the spout.

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

JOHN A. SAUER. [L. S.]

Witnesses:

PHILIP PARISER,

ARTHUR H. CAMERON.