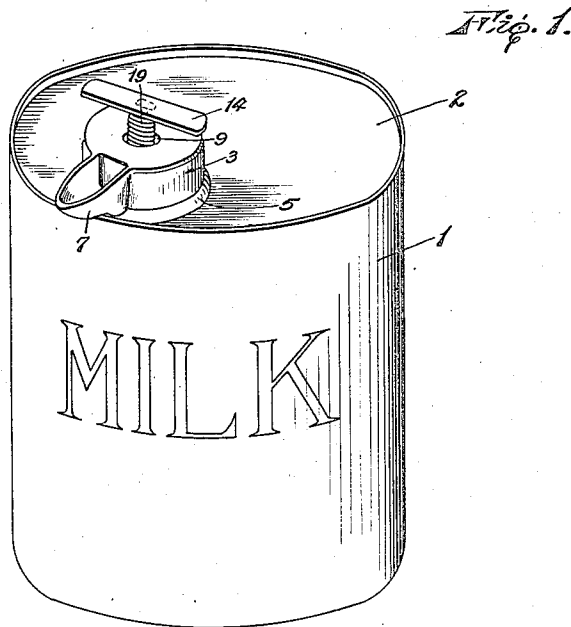
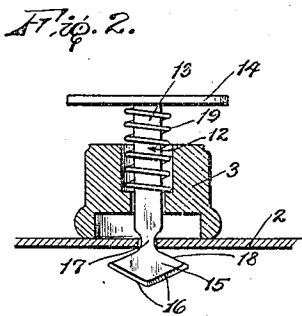
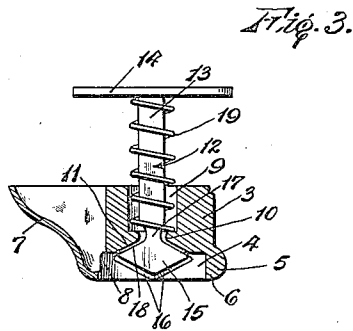
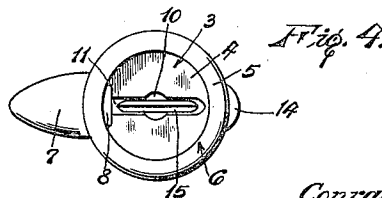
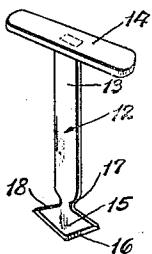


C. C. DORNER.
CAN SPOUT.
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1,401,968.

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CAN SPOUT.

1,401,968.

Specification of Letters Patent.

Patented Jan. 3, 1922.

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To all whom it may concern:

Be it known that I, CONRAD C. DORNER, a citizen of Germany, residing at Alton, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Can Spouts, of which the following is a specification.

This invention relates to pouring spouts for cans and has as its general object to provide a pouring spout which may be readily and conveniently applied to the top of a can containing condensed milk or any other commodity and which at the time of its application will perforate the top of the can so as to permit of the discharge of its contents.

One of the primary objects of the invention is to provide a pouring spout for the purpose stated which may be repeatedly used and which will be convenient to manipulate and may therefore be readily applied by any inexperienced person.

Another object of the invention is to so construct the spout that the means provided for perforating the top of the can to which the spout is applied will serve also as a means for locking the spout to the can so that the spout cannot become accidentally disengaged and so that it will at all times be held in proper position upon the can top.

Another object of the invention is to so construct the spout that the base thereof will closely fit the upper surface of the can top and surround the perforation made therein thereby excluding dust and dirt and other foreign matter from the vicinity of the perforation.

A further object of the invention is to provide a spout for the purpose stated which in use will deliver a steady stream of the contents of the can as poured therefrom.

Another object of the invention is to so construct the device that while when it is applied to a can it will be securely locked thereto, yet when the can has been emptied of its contents, the spout may be readily removed from the can for application to another can.

In the accompanying drawings:

Figure 1 is a perspective view of the can

spout embodying the present invention applied to an ordinary type of can;

Figure 2 is a vertical transverse sectional view through the spout applied to the can top;

Figure 3 is a view similar to Figure 2 taken in a plane at right angles and illustrating the perforating and locking member turned to a position at right angles to that illustrated in Figure 2;

Figure 4 is a bottom plan view of the spout;

Figure 5 is a perspective view of the combined perforating and locking member removed from the spout.

In the drawings the numeral 1 indicates a can to which the spout embodying the present invention is to be applied, the said can being for example one containing condensed milk, and the numeral 2 indicates the top of the can. The spout embodying the invention comprises a head 3 provided in its under side with a recess 4 surrounded by a rim 5 the lower edge 6 of which describes a complete and unbroken circle and is designed to rest flat upon and snugly against the upper surface of the can top 2 when the spout is applied thereto. The head 3 is provided at one side with a pouring spout which is indicated by the numeral 7 and which is placed in communication with the recess 4 by a passageway 8 so that the contents of a can to which the spout is applied may flow through the recess 4 and passage 8 and out through the pouring spout 7 and be in this manner dispensed.

The head 3 is formed axially with relation to the recess 4 and rim 5, with a vertically extending bore 9 opening through its upper and lower ends, this bore being reduced near its lower end as indicated by the numeral 10, and the upper wall of the recess 4 or what may be considered as the under side of the head 3, being formed preferably with notches 11 located at diametrically opposite sides of the corresponding end of the bore 9. Associated with the spout is a combined perforating and locking member which is clearly shown in Figure 5 of the drawing and indicated in general

by the numeral 12. The member 12 comprises a shank 13 which may be either flat-sided as shown in the drawings or circular in cross section and which is slidably fitted through the reduced portion 10 of the bore 9, the shank being provided at its upper end with a handle member 14 and at its lower ends with a perforating blade 15 having a V-shaped cutting edge 16. The blade 15 is of a width greater than the width or diameter of the shank 13 and is joined to the lower end of the shank by a relatively narrow neck 17 which is flanked by the shoulders 18 provided by the upper side of the blade 15. A spring 19 is assembled with the shank 13 of the perforating and locking member and bears at its lower end against the shoulder formed by reducing the bore 9 as at 10, and at its upper end against the upper side of the handle 14. As will be observed by reference to Figure 3 of the drawings, the spring 19 normally holds the perforating and locking member in an elevated position, and when the member is turned to the position shown in the said figure, the shoulder portions 18 of the blade 15 will seat in the notches 11 in the head 3, the parts being so proportioned that when the said member 12 is in this position, the piercing point of the blade 15 will occupy a plane not lower than the lower edge 6 of the rim 5. With the parts arranged as shown in Figure 3, the spout may be readily applied and locked to a can top by first disposing the head 3 upon the top in the position shown in Figure 1 and then striking a blow upon the handle 14 in a downward direction. This will result in the member 12 being bodily forced downwardly causing the blade 15 to pierce the can top 2 and form an incision therein through which the contents of the can may flow. The device may then be locked to the can top by turning the member 12, through the medium of the handle 14, to such position that the blade 15 will occupy a plane at right angles to the plane which it formerly occupied. When the member 12 is rotated to the position stated and as shown in Figure 2 of the drawing, the neck 17 which connects the blade 15 with the shank 12 will be turned in the incision formed in the can top, and the shoulders 18 will prevent any upward movement of the member 12 to its original position, and inasmuch as the blade 15, in this position of the member, extends at right angles to the incision in the can top, and the spring 19 is under compression, the device as a whole will be securely locked in position upon the top and cannot become accidentally displaced or lost. It will be understood of course that when the blade 15 is disposed at right angles to the incision formed in the can top, the incision will be uncovered and therefore the contents of the can may readily flow through the incision and into the recess 4 and out through the passage 8 to the spout 7 when the can is tilted in the act of dispensing its contents.

It will be evident that when the device is applied to a can top the lower edge of the rim 5 will snugly fit against the upper surface of the top so as to exclude dust, dirt, and other foreign matter from the vicinity of the incision made in the top. It will also be evident that while the device is securely locked to the can top after its application thereto, nevertheless it may be removed at any time as for example when the can has been emptied of its contents and it is desired to apply the spout to an unopened can.

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

1. A device of the class described comprising a head having a pouring spout, and a recess in its under side in communication with the spout, and a combined puncturing and locking means carried by the head and having its puncturing element normally housed within the said recess.
2. A device of the class described comprising a head having a pouring spout, a member slidably assembled with the head and provided with a piercing blade adapted to be positioned at different angles, and means normally holding the member in position with its blade retracted.
3. A device of the class described comprising a head having a pouring spout, and a combined puncturing and locking means carried by the head and comprising a shank slidably and rotatably assembled with the head and provided with a perforating blade.
4. A device of the class described comprising a head having a pouring spout, and a combined puncturing and locking means carried by the head and comprising a shank slidably and rotatably assembled with the head and provided with a perforating blade, the said blade at its upper side being provided with shoulders to engage beneath the top of a can through which the blade has been forced.
5. A device of the class described comprising a head having a pouring spout, and a combined perforating and locking means carried by the head and comprising a shank slidably and rotatably assembled with the head, a blade at the lower end of the shank, and a handle at the upper end of the shank.
6. A device of the class described comprising a head having a pouring spout and a combined perforating and locking means carried by the head and comprising a shank slidably and rotatably assembled with the head, a blade at the lower end of the shank,

a handle at the upper end of the shank, and a spring assembled with the member and yieldably holding the same in a retracted position.

- 5 7. A device of the class described comprising a head having a recess in its under side surrounded by a rim, the lower edge of which is designed to seat against a can

top upon which the head is disposed, the said head having a pouring spout in communication with the recess, and a combined puncturing and locking means carried by the head, and including a blade normally housed within the recess. 10

In testimony whereof I affix my signature. 15
CONRAD C. DORNER. [L. s.]