G. J. RECORD.

DISPENSING DEVICE INCLUDING A POURING LIP.

APPLICATION FILED OCT. 18, 1915.

1,191,464. Patented July 18, 1916.

Fig. 1.

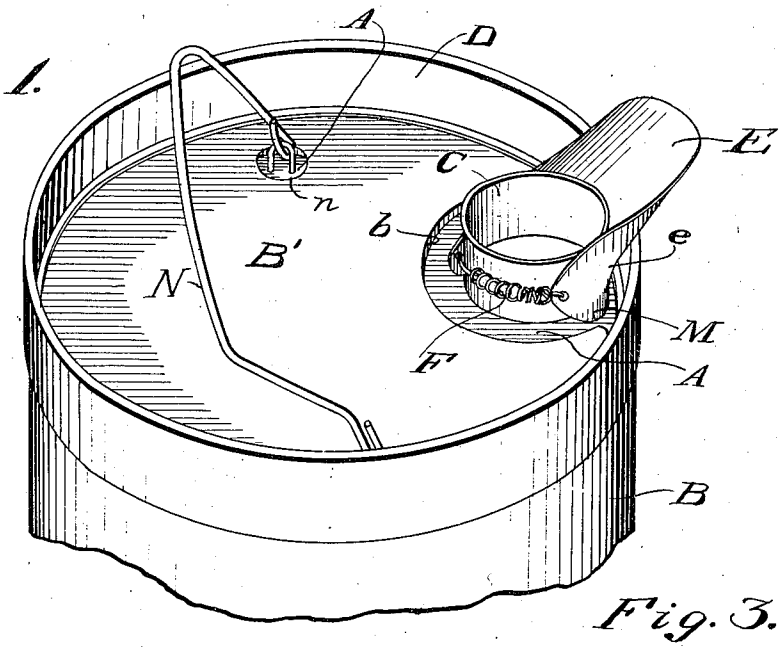


Fig. 3.

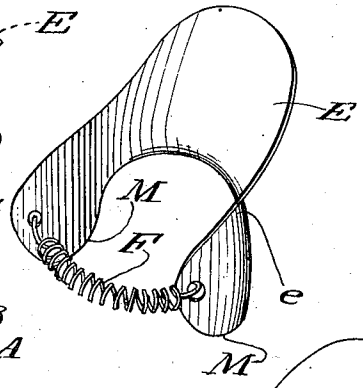


Fig. 2.

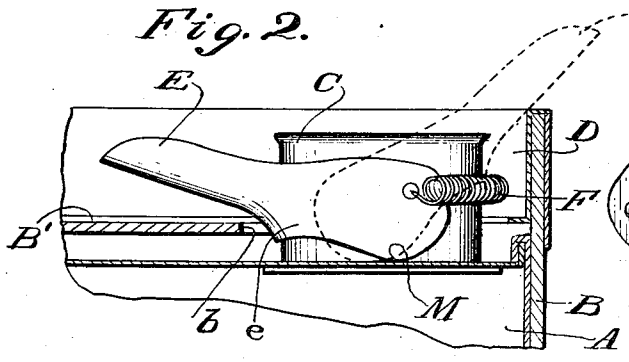


Fig. 4.

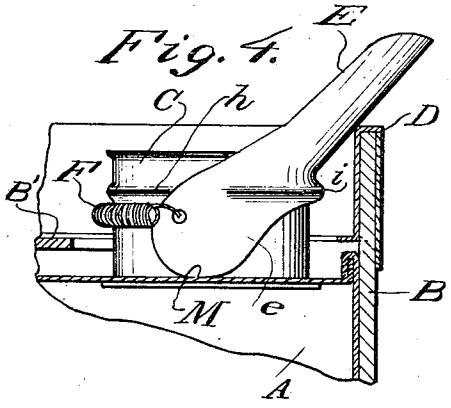
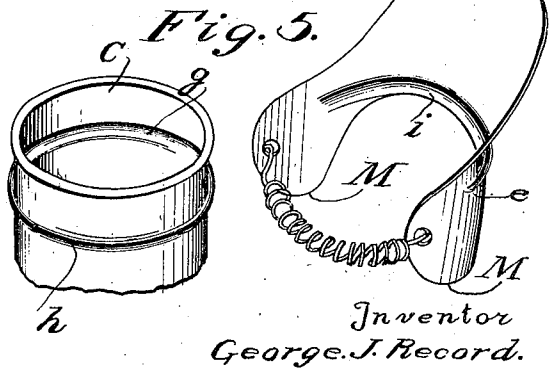


Fig. 5.



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UNITED STATES PATENT OFFICE.

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DISPENSING DEVICE, INCLUDING A POURING-LIP.

1,191,464. Specification of Letters Patent. Patented July 18, 1916.

Application filed October 18, 1915. Serial No. 56,420.

To all whom it may concern:

Be it known that I, GEORGE J. RECORD, a citizen of the United States, residing at Conneaut, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Dispensing Devices, Including a Pouring-Lip, of which the following is a specification.

Flat-top cans whether cylindrical, square or of other convenient form are commonly provided with shipping cases, boxes, inclosures or jackets of corresponding form, the upper ends of which rise protectively above the level of the can-top, forming a surrounding rim on or above the level of the rim of the raised inlet and outlet neck ordinarily formed on said can top. In order that such cans, thus incased, may be packed together in quantity with the cans of the upper layers resting securely on those below them with the utmost economy of space, it becomes important that no part of or attachment to a can should extend above the level of the rim of the case at the time of packing: but it is very important to provide for pouring without dripping and without removing the case or jacket so that each individual can on removal from storage or shipment may be used as a convenient dispenser or discharger of liquid without requiring any modification of the form of the rim of the case. I obtain these ends by providing the inlet and outlet neck of the can with a pouring lip adapted to be extended outward over the rim of the case for pouring and to be turned back over the can top within said rim and moved to lower all parts of it below the horizontal plane of said rim when the cans are to be packed for shipment or storage.

It is not new to provide the necks of receptacles with movable pouring spouts; but these have not been used as above described, nor in combination with a raised rim of a shipping case as a provision for packing, requiring no change in said rim from the ordinary circular form and presenting no obstruction to packing one shipping case on another with the cans contained therein.

To insure the best action of said pouring lip in moving from one position to another and that it shall be at all times braced and supported I provide said lip with rounded shoulders which at all times bear on the can top, permitting the pouring end of said lip to be tilted up for pouring or tilted down to prevent it from obstructing the packing operation. These shoulders do not at all prevent the said lip from turning around the neck toward or from said rim, they being formed on the lower edge of a half-collar integral with said lip and held to said neck by yielding resilient means. Said neck and half-collar may have a bead and groove connection with each other to prevent leakage between them when said lip is in pouring position: but such bead and groove may be omitted without making the device inoperative or less desirable.

My invention consists in the construction and combination of parts first above generally indicated, in the improvements in detail subsequently above referred to and in divers minor features all hereinafter more particularly set forth and shown.

In the accompanying drawings: Figure 1 represents a perspective view of the upper part of a shipping case or jacket, the flat top can inclosed therein and the pouring lip removably attached to the inlet and outlet neck and in contact with the top of the can, said lip being shown in pouring position; Fig. 2 represents a vertical section of the upper end of the case and can, taken in a plane along the nearer side of the pouring lip and parallel to its central longitudinal line when in pouring position or reversed therefrom, the former position being shown in dotted lines, the latter position in full lines; Fig. 3 represents an enlarged detail view of the lip, the same being without the groove as in the preceding figures; Fig. 4 represents a detail section of a grooved pouring lip in pouring position fitting on the bead of the can neck and in contact with the can top, only a part of the latter being shown; and Fig. 5 represents a detail view of a beaded can neck and grooved pouring lip separated and set side by side.

A designates a flat top can for containing liquid and B the shipping case or jacket therefor, both of the ordinary cylindrical make, the top B′ of the latter being provided with a considerable opening *b* around the usual cylindrical inlet and outlet or pouring neck C raised on the top *a* of said can. The upper end of said case is extended above its flat top B′ and forms a rim D on or above a level with the rim of said neck. Of course with the parts thus constructed

one layer or row of cases and cans can be packed on another with perfect security of support and no loss of space. To retain this advantage when adding any other part it becomes necessary that such part should be within said rim and below the horizontal plane of its upper edge when ready for packing. Of course, also, it is desirable to provide better means than the neck C alone for pouring beyond the rim of the case and to prevent dripping over the top and side of the latter. To this end I use the pouring lip E, which is held to said neck by yielding resilient means, preferably helical spring F, and adapted to be tilted up into the position shown in full lines in Fig. 1 and in dotted lines in Fig. 2, said lip then being presented outward over and beyond the rim D of said case. Said lip is made integral with a half collar *e*, the ends of which are connected around said neck by a spring F, above mentioned, which holds the lip tightly on said neck C but will yield to permit said pouring lip to be turned around said neck to any other radial position than that above mentioned and will also permit upward or downward tilting movement of lip or sliding movement of said lip even to the extent of separation therefrom. Said neck usually is provided with an internal groove *g* near its upper end adapted to receive the sealing disk or cap (not shown) commonly used as a closure for such cans during transit or storage. This groove, as shown in Figs. 4 and 5, forms an external bead *h* on said neck which may fit into a groove *i* in the inner face of the half collar *e*, this bead and groove connection serving to prevent leakage between the neck and half collar. When the latter is tilted downward into position for packing, the groove *i* no longer fits on the bead *h*, but this is of no consequence as such engagement is useful only in the pouring position. Of course the bead might be in the half collar of the lip and the groove in the exterior of the neck; but the construction described permits the employment of the neck as usually made and the utilization of the inner groove *g* of bead *h* for engagement with a spring seal disk or cap as before mentioned.

It is not broadly new to use a bead and groove connection between a receptacle and a pouring lip, the latter being movable around the same. In the present improvement and in combination with the other parts named said groove and bead are not essential elements, but comparatively unimportant. It is more often convenient to use a pouring lip such as shown in Figs. 1, 2 and 3 having neither groove now bead, for the advantage gained by the groove and bead is offset by some extra trouble in manufacture and if the half collar be accurately formed the leakage between it and the neck will be slight. I do not at all confine myself, therefore, to the bead and groove connection, but desire to protect my improvement whether used with these parts or without them.

When the lip E is in upwardly tilted pouring position the rounded shoulders M bear on the can top at points in advance of the points of attachment of said spring to said pouring lip, with relation to the point of pouring, and said shoulders act with said spring as a sort of tripod to support securely said pouring lip against the can neck and fit it tightly on the bead of said neck if such bead be used.

The most distinctive feature of my pouring lip *per se* is a pair of shoulders M formed on the under parts of the half collar near the ends thereof, the said shoulders being extended downward for contact with the top of the can and rounded to permit the lip to be tilted up into the pouring position or down into position for packing. At all times the said shoulders bear upon said can top and are supported thereby, bracing the pouring lip. This is most important when the lip is in use for pouring. When no longer needed for that purpose it may be turned around the neck into any radial position which will bring it within the circle of the rim of the jacket or case, during which movement the contact of the rounded shoulders M with the can top will oppose very little frictional resistance. The pouring lip E is then tilted downward, the shoulders turning on the can top, until its tip is below the horizontal plane of the edge of rim D of the casing, all other parts of said lip being also necessarily within said rim and below said plane. Thus arranged the lip is out of the way of all garments and other external things and will not interfere with placing another shipping case and contents flatly on top of said rim. When the lip is to be used for pouring, the procedure is reversed, the rounded shoulders turning on the top of the can as the lip is tilted up into pouring position, its tip being then above the horizontal plane of the edge of said rim. Said lip is then turned around said neck until its tip extends over and outside of said rim, to be ready for pouring. The opening *b* in the case top B′ is made large enough to permit these movements of the pouring lip in contact with the can top, both in turning horizontally about the neck and in tilting up and down.

The can is preferably provided with the usual folding handle N, the ends of which pass through openings *n* in the casing top B′ for attachment to the can top *a*. This, however, forms no part of the invention. When the ungrooved pouring lip is used (as will generally be the case) the bead *h* on the neck C is without function and neither

it nor the groove *g* which forms it need be retained for the purposes of this invention, though helping to provide convenient and usual sealing means for said neck.

The rounded shoulders M guide the lip into exactly the proper position for pouring when it is tilted up for that purpose, also down into position within and below the casing rim. Said rim constitutes a stop and support for the projecting part of said lip during the operation of pouring. As said lip rests at one end on said rim and at the other end by said shoulders on the can top, said lip is very securely held during said operation.

The word can as used in this specification does not import any restriction in material or form; but includes receptacles generally if of construction suitable to the invention.

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

1. In combination with a shipping case or inclosure having a raised continuous rim around its top at least as high as the neck hereinafter mentioned, and a receptacle within said casing having a raised neck, a pouring lip yieldingly attached to said neck and free to turn around the latter, also adapted to be turned down within said rim for packing, or to be turned up to rest on the top of said rim for pouring.

2. In a combination with a receptacle having a neck raised above its top, a pouring lip held yieldingly to said neck and provided with rounded shoulders constantly bearing on said top, but permitting said lip to be tilted into pouring position or into position for packing as said shoulders turn on said top.

3. In combination with a can having a neck raised above its top, a pouring lip provided with a half-collar which fits on said neck and an attaching spring connecting the ends of said half-collar and permitting said lip to turn on said neck and to be tilted up and down, the under part of said half-collar being provided with downwardly extended shoulders near its ends, the lower edges of said shoulders being constantly supported by said can top and rounded to permit said lip to be tilted up and down as set forth.

4. A pouring lip provided with a half collar and downwardly presented shoulders rounded on their lower edges, in combination with a spring connecting the ends of said half-collar and a can having its top in contact with said shoulders which bear thereon, the said half-collar and neck having a horizontal bead and groove connection when the said lip is in position for pouring, the said shoulders permitting the lip to be tilted downward out of such pouring position and restored to the same at will, and the said spring permitting said lip to be turned around said neck so as to be presented outward beyond said top for pouring or inward above said top out of the way of external objects.

5. In combination with a receptacle having a neck raised above its top and a shipping case having a rim extending upward as high as said neck, a pouring lip held to said neck but permitted to turn around the same and to tilt upward into pouring position or downward below the level of said rim at will, said lip being provided with rounded shoulders always bearing on the top of said receptacle, said lip being also supported and braced in pouring position by the said rim and by the contact of the shoulders with said top.

6. In combination with a can having a raised neck, a pouring lip provided with rounded shoulders bearing against the top of said can and a spring holding said lip to said neck, the said shoulders and the points of attachment of said spring being arranged with relation to each other in such manner that said spring and shoulders constitute a tripod-like support continuing to hold said lip against said neck in pouring position and also permit said lip to be turned down on said can top in position for packing and to retain such position.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE J. RECORD.

Witnesses:
H. G. KINGDOM,
BERTHA D. KINGDOM.