J. M. HOTHERSALL.

SEALED NOZZLE POURING SPOUT FOR CANS.

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1,145,896.

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Fig. 1

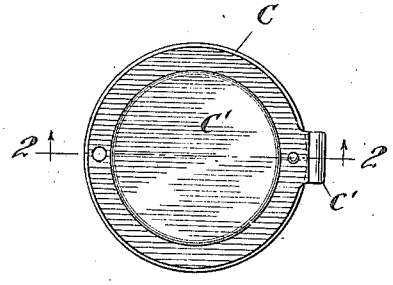


Fig. 3

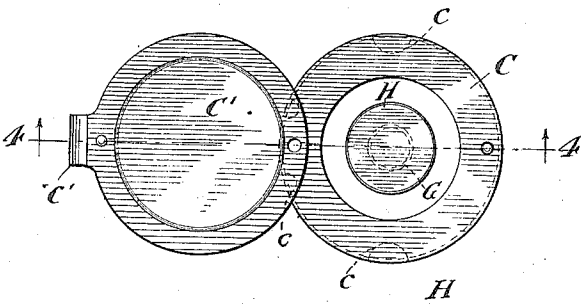


Fig. 2

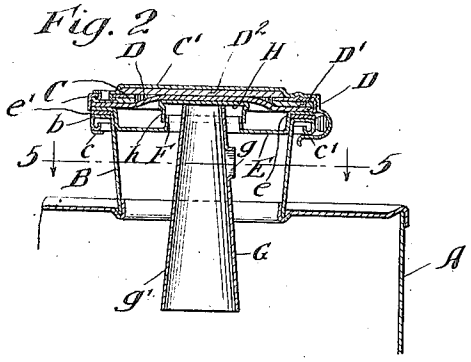


Fig. 4

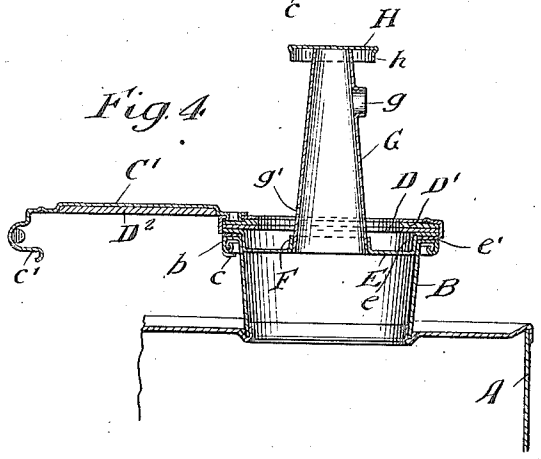
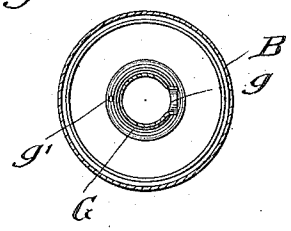


Fig. 5



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UNITED STATES PATENT OFFICE.

JOHN M. HOTHERSALL, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SEALED-NOZZLE POURING-SPOUT FOR CANS.

1,145,896. Specification of Letters Patent. Patented July 13, 1915.

Application filed October 16, 1911. Serial No. 654,808.

To all whom it may concern:

Be it known that I, JOHN M. HOTHERSALL, a citizen of the United States, residing in the borough of Brooklyn, New York, in the county of Kings and State of New York, have invented a new and useful Improvement in Sealed-Nozzle Pouring-Spouts for Cans, of which the following is a specification.

This invention relates to an improvement in sealed nozzle pouring spouts for cans, and it consists in the novel devices and combinations of parts and devices hereinafter set forth and claimed.

In the accompanying drawing which forms a part of this specification, Figure 1 is a top view of the improved nozzle. Fig. 2 is a vertical section of Fig. 1 on the line 2—2. Fig. 3 is a top view of the nozzle, showing the swinging cap of the nozzle opened, the seal broken and the pouring spout elevated. Fig. 4 is a vertical section on the line 4—4 of Fig. 3. Fig. 5 is a horizontal section on the line 5—5 of Fig. 2.

In said drawing, A represents the can; B is the nozzle made with the usual flat topped flange *b*, fitted to receive an annular flanged frame piece C and swinging cover C^1 of a common type of seal, the frame piece of which is secured to the flat topped flange *b* by the downwardly and inwardly turned lips *c* and the spring finger c^1. In this frame C is secured a glazed paper disk D and the annular paper gasket D^1, while in the cover C^1 is also the yielding paper packing disk or pad D^2.

So far as thus described, the parts are, or may be, such as are well known in the art.

Combined with the above described features is the peculiar pouring spout now to be described: A countersunk supplemental cover E, having a flange *e* is fitted tightly in the upper end of the nozzle B, a packing ring e^1 being interposed between the flange of the nozzle and the flange of this supplemental cover to prevent leaks. This cover E at the center is perforated and formed up with the conical collar F, to receive the extensible, conical pouring spout G. Near the upper end of this spout G is the lateral pouring orifice *g* and near the base is formed the vent opening g^1. To the top of the pouring spout is soldered the small cap H, having a hanging flange *h*, which, when the spout is lowered, fits snugly over the conical collar F. The construction of the spout G, the collar F and the small cap H, is such that when the spout is lowered into the can in the position shown at Fig. 2, the opening through the supplementary cap E is tightly closed by the fitting of the flange *h* of the cap H over the collar F; and when the pouring spout is extended or raised into the position shown at Fig. 4, the lower end of said spout forms a tight fit with the conical collar F in such manner as to prevent the escape or leakage of the contents of the can into the sealing part of the nozzle.

The operation is as follows: The can is to be filled through the open nozzle, after which the supplementary cover carrying the pouring spout is put in place and the seal is then applied on top of all and fastened, the frame piece of the seal serving to secure the supplementary cover E to the nozzle. The parts should preferably be so adjusted, that when the seal is closed, as shown in Fig. 2, the glazed paper disk will come down into contact with the small cap H of the discharging spout and be pressed upon by the pad D^2, so that this spout and the cover are held down when the swinging seal is closed. To open the package, the swinging cover C^1 is swung out as shown in Fig. 4, carrying the pad D^2 with it. The glazed paper seal is then cut out at the margin of the frame C, leaving the small cap H exposed. This cap is then lifted, then pulled up until fully extended in the manner indicated in Fig. 4, when the contents of the can may be poured out through the spout.

I claim:—

1. The combination with the nozzle, of a cover for the same, provided with an extensible spout fitted to move through said cover, said spout being conical and fitting a conical opening in the cover formed with a collar, the spout being capped with a flanged cover to fit said collar, and provided with a lateral pouring opening, substantially as specified.

2. The combination with the nozzle, of a cover for the same, provided with an extensible spout fitted to move through said cover, said spout being conical and fitting a conical opening in the cover formed with a collar, the spout being capped with a flanged cover to fit said collar, and provided with a lateral pouring opening located near the top of the spout and a vent opening lo-

cated near the base of the spout, substantially as specified.

3. The combination with a can nozzle provided with a swinging cover and a seal to be broken in opening the can, of a supplementary cover provided with an extensible pouring spout closed with a cap, upon the upper end of which the swinging seal cover bears when the same is closed, substantially as specified.

4. The combination with a nozzle, of a closure therefor comprising an unbroken sealing disk having its margin permanently secured in place, and having its middle portion separable by disruption from said margin, a countersunk supplemental cover below the sealing disk, an extensible pouring spout mounted and vertically movable in an opening in the supplemental cover and having above the latter laterally extending means for closing the opening in the same, and a removable and replaceable exterior cover which protects the sealing disk and holds down the spout in its depressed closing position both before and after the middle portion of the sealing disk has been removed.

5. The combination with a nozzle, a supplemental cover having a marginal flange which engages on the top of the nozzle, an unbroken sealing disk having its margin arranged on the flange of the supplemental cover and having its middle portion separable by disruption from said margin, means for permanently securing in place the margin of the sealing disk and the flange of the supplemental cover, an extensible pouring spout mounted and vertically movable in an opening in the supplemental cover and having means for engaging on the top of the supplemental cover when the spout is retracted, and a removable and replaceable exterior cover which protects the sealing disk and holds down the said spout both before and after the middle portion of the sealing disk has been removed.

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