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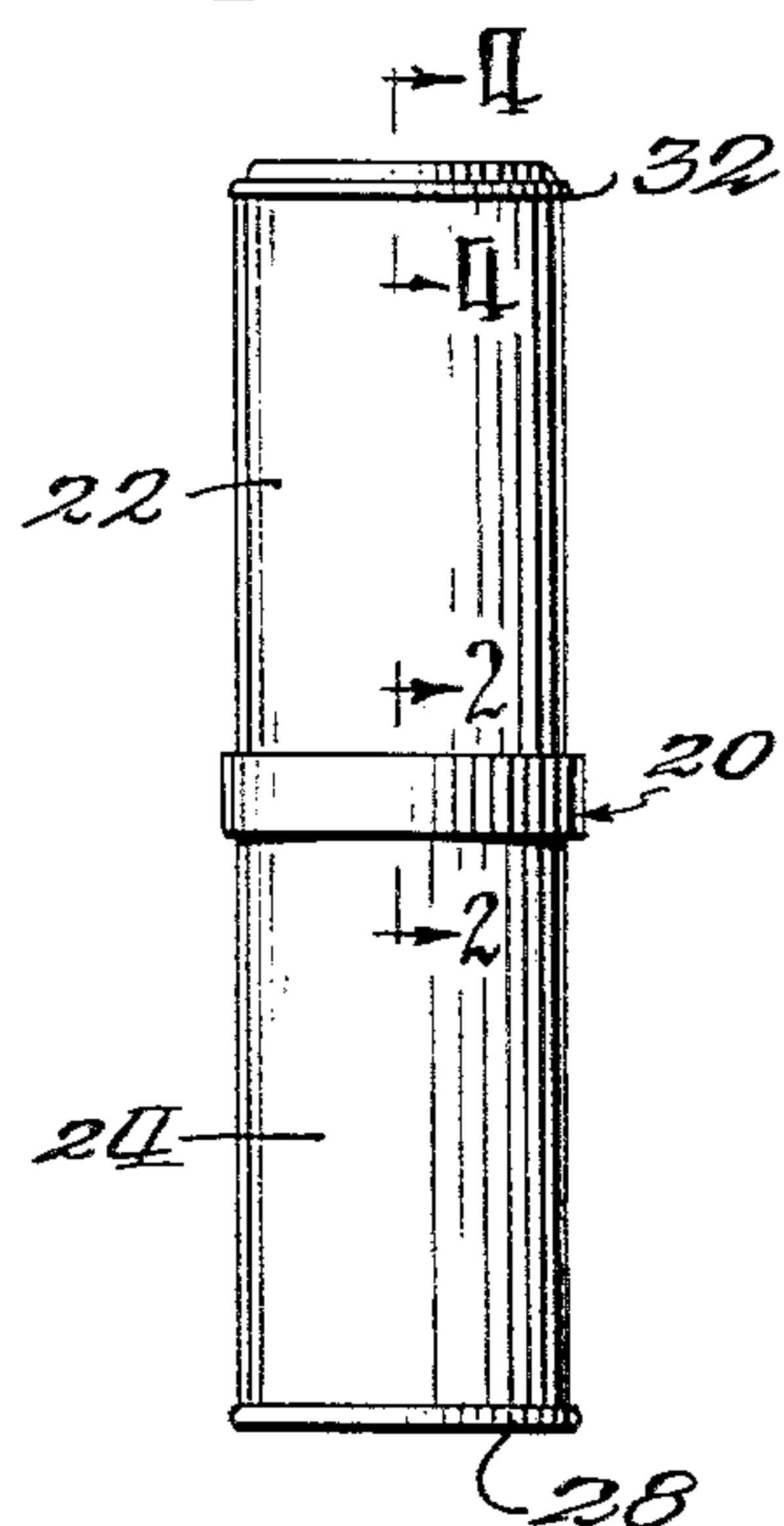
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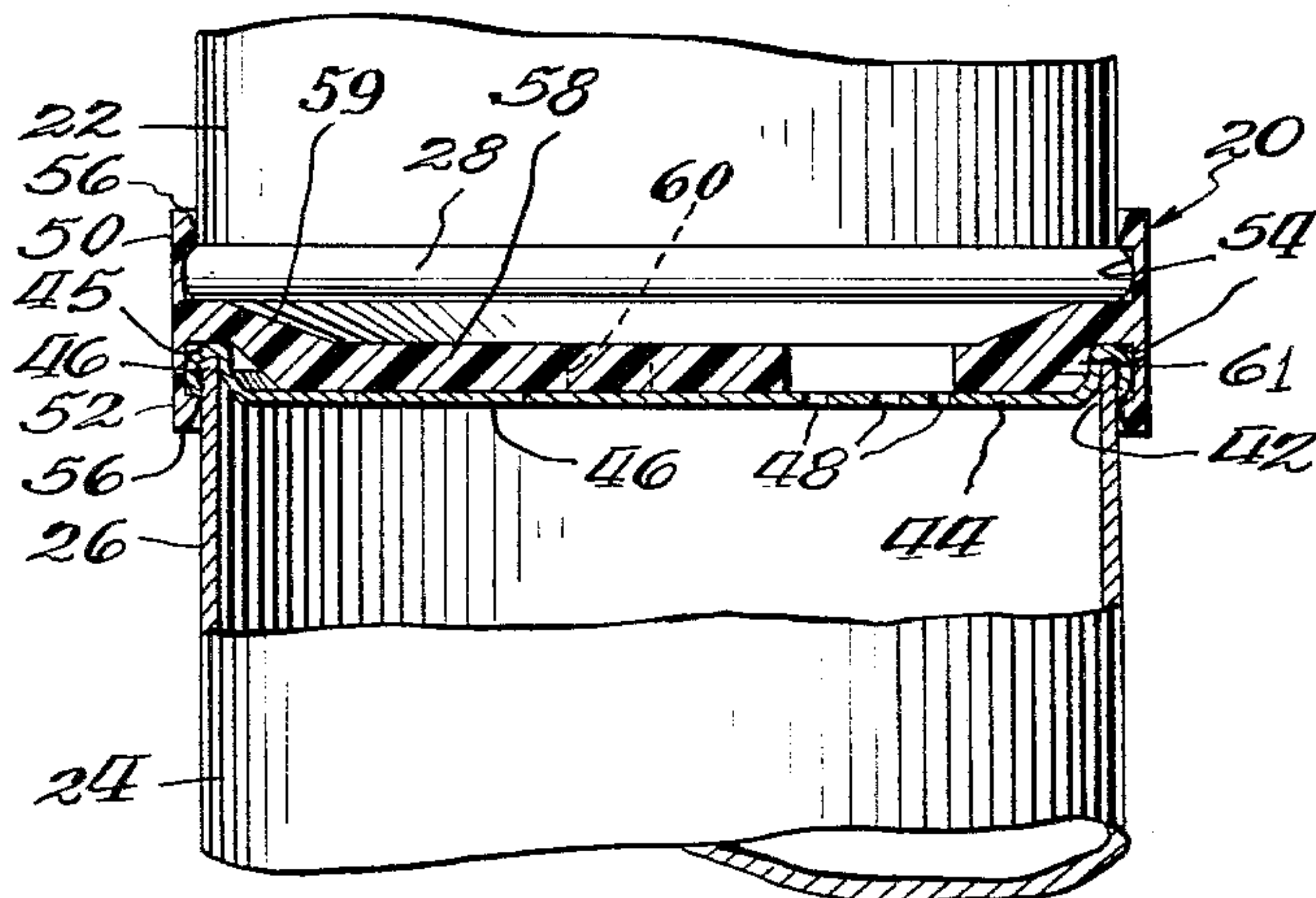
COMBINED COUPLING AND CLOSURE FOR DISPENSING CANISTERS

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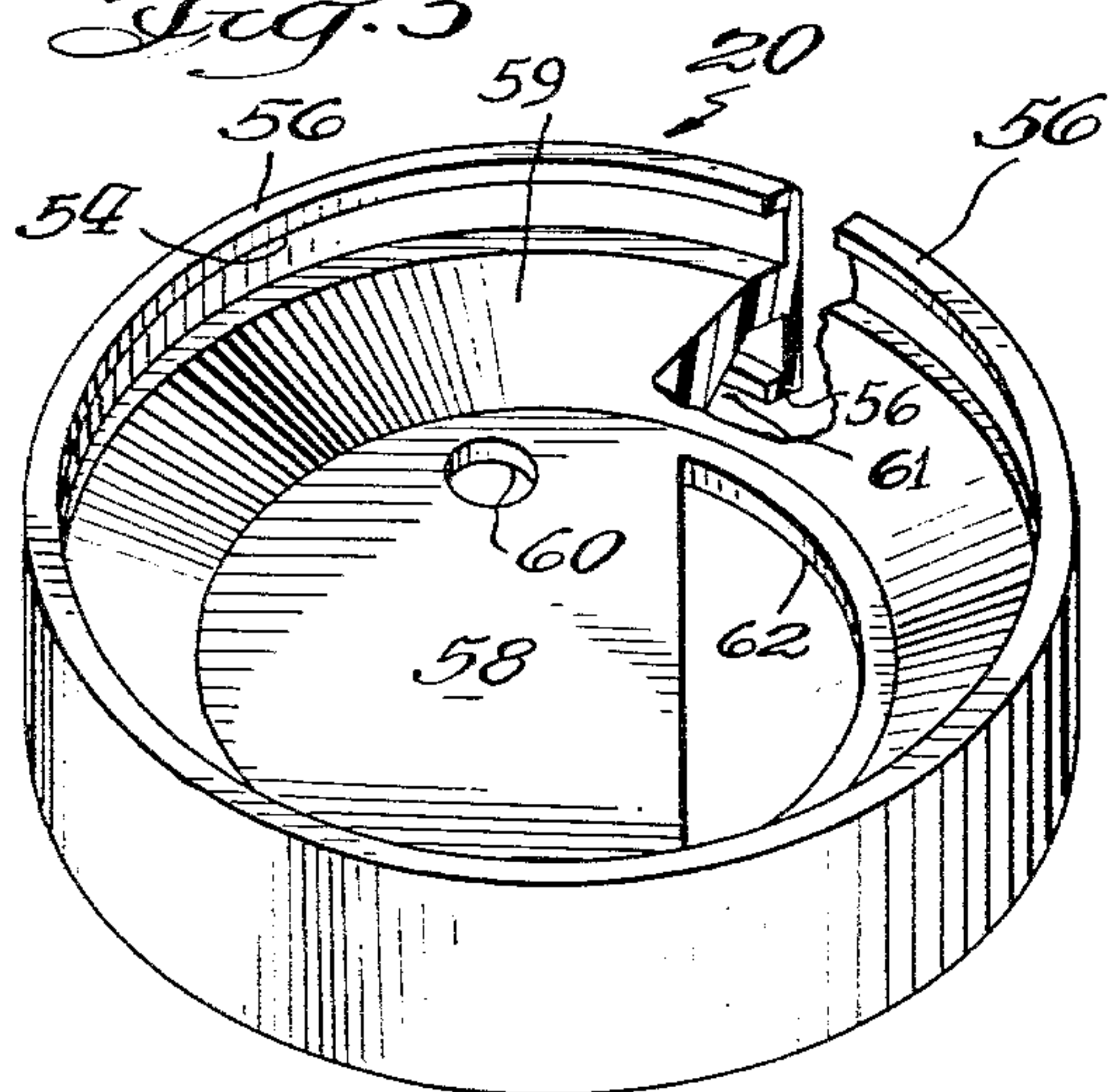
*Fig. 1*



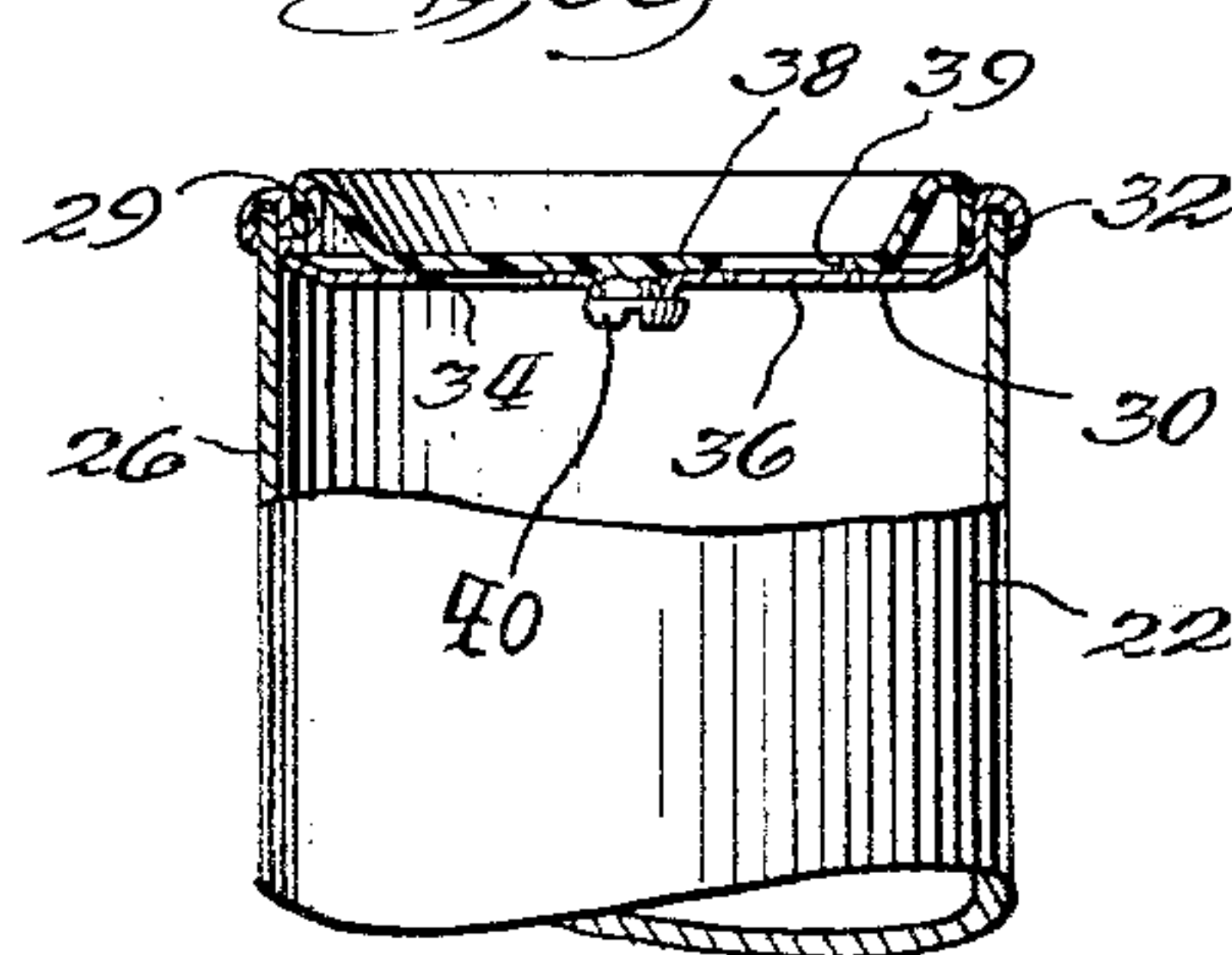
*Fig. 2*



*Fig. 3*



*Fig. 4*



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## COMBINED COUPLING AND CLOSURE FOR DISPENSING CANISTERS

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5 Claims. (Cl. 222-480)

This invention relates generally to canisters for dispensing granular food products and more particularly, relates to a combined coupling and closure device for use with dispensing canisters of the character described which enables a pair of such canisters to be nested one on top of the other for shipment, storage and display as a unitary assemblage.

Nested or stacked canisters, each of which contains a granular food product, such as, grated cheese, condiments, or the like, have been utilized heretofore with recognized advantages. In practice, it is contemplated that the nested canisters will be separated and used individually; consequently, each canister must have means for dispensing the granular contents and some manner of closure for the dispensing means when the contents are not being dispensed. Various dispensing and closure means for this type of canister are known, such as the well known dredge top. To realize a nested or stacked assemblage of such dispensing canisters, resort is had to some manner of separate coupling device which will hold the pair of canisters in nested assembly and permit their separated for dispensing the contents of canisters.

A primary object of the invention is to provide a novel coupling and closure device of the character described which is characterized by structural features which enable the device to function both as a coupling member for nesting the dispensing canisters and as a dispensing means and closure for one of the canisters after they are separated.

Another important object of the invention is to provide a coupling and closure device of the character described which is formed as an integral ring member having oppositely opening circular skirts for coupling a pair of dispensing canisters together and a transverse wall intermediate the open mouths of said skirts capable of functioning as a dispensing means and closure for one of the canisters by means of selective rotation of said device on said one canister.

A further object of the invention is to provide a novel device of the character described which is economical to manufacture and install; which is capable of being used on commercially available dispensing canisters without requiring modification of the canister; which can be used advantageously with a large variety of different canister constructions; and which is simple and easy to install and use.

The foregoing and other objects of the invention will become apparent from the ensuing disclosure in which a preferred embodiment has been described in detail in the specification and illustrated in the accompanying drawing. It is contemplated that minor variations may be made in the size, arrangement, construction and proportions of the several parts thereof without departing from the scope or sacrificing any of the advantages thereof.

In the drawing:

FIG. 1 is a side elevational view showing a pair of dispensing canisters coupled together by means of the combined coupling and closure device embodying the invention.

FIG. 2 is a sectional view taken along the line 2-2 of FIG. 1 and in the general direction indicated.

FIG. 3 is a top perspective view of the device embody-

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ing invention with a portion broken away to shown cross-sectional details.

FIG. 4 is a sectional view taken along the line 4-4 of FIG. 1 and in the general direction indicated.

Referring now to the drawing, the combined coupling and closure device embodying the invention is identified generally by the reference character 20 in FIG. 3. As will appear more particularly from the ensuing disclosure, the device 20 is capable of coupling together a pair of dispensing canisters 22 and 24 in a nested or stacked assemblage one on top of the other, as seen in FIG. 1. Each of said canisters 22 and 24 is representative of a type of a conventional package for dispensing granular foods, such as grated cheese, condiments, or the like, and the canisters are generally similar in construction. Such a canister has an elongated cylindrical sleeve 26 of cardboard, sheet metal or other suitable material providing a circumferential wall open at opposite ends thereof. According to the invention, it is contemplated that the bottom end of each of the canisters will be closed off in a conventional manner, such as, by a circular metal plate providing a marginal bead or flange 28 which is crimped or otherwise secured around the marginal lip of the open bottom end of the sleeve 26. The bead or flange 28 is slightly larger in diameter than the outside diameter of the sleeve.

Referring to FIG. 4, the open upper end 29 of sleeve 26 of the upper canister 22 is closed by a dish-shaped circular metal plate 30 having a marginal bead 32 crimped over the marginal lip of said open end. The plate 30 has a circular opening 34 therethrough and a segment-shaped knock-out section 36. Engaged in the hollow of said plate 30 is a conventional dredge top 38 with an opening 39 and a second opening which correspond respectively to the opening obtained when section 36 is removed and opening 34. The dredge top 38 is rotatable selectively about the depending pin 40 integral with top 38 which extends through a suitable medial opening in plate 30 to open and close the canister 22. The construction of canister 22, as described, is typical, but it can vary as to the means for dispensing materials therefrom without interfering with the invention.

Referring to FIG. 2, it will be seen that the open upper end 42 of the sleeve 26 of canister 24 has a circular metal plate 44 of dish-shaped configuration secured across the end 42 by means of the peripheral flange 45 engaged around the marginal lip 46. The plate 44 forms a cover or lid for said end 42 and has a knock-portion 46 to provide a large crescent-shaped opening, for instance, and a series of smaller openings 48 for dispensing smaller quantities of the contents of canister 24.

The device 20 embodying the invention preferably is molded as an integral structure of a suitable plastic material such as polyethylene, however, other materials such as metals, also would be feasible. The device 20 comprises an annular ring having a first skirt 50 and a second skirt 52, said skirts opening in opposite directions. Each skirt has a circular groove 54 in the internal circumferential surface thereof and spaced inwardly a short distance from the end face 56 of the skirt. Inside the ring is a transverse wall 58 which functions as a dispenser top or lid. Referring to FIG. 2, it will be seen that the dispenser top 58 is connected to the ring by means of a short downwardly slanted section 59 so that the lid or top 58 is spaced to one side of the transverse center line of the ring and surrounded by the skirt 52. There results also an annular recess 61 between the wall 58 and skirt 52 toward which the groove 54 in skirt 52 opens.

Referring to FIG. 2, to nest the canisters 22 and 24, the bottom end of supper canister 22 has the bead 28 thereof engaged in the groove 54 of skirt 50 which is at the upper end of the coupling device as shown in FIG. 2.



The canister 24 has its upper end received in the skirt 52 with bead or flange 45 engaged in the groove 54 of skirt 50. The dispenser wall 58 is engaged directly upon the plate 44. Further, the wall 58 has a pair of openings 60 and 62, opening 62 being larger than opening 60. Each of the skirts 50 and 52 are made sufficiently resilient to permit a bead 28 or 45 to be snapped into the appropriate groove 54.

The canisters 22 and 24 are shown nested in FIG. 1. When canister 22 is separated from the ring device 20, the device 20 remains installed on the bottom canister 24. By rotation of the device 20, each of the openings 60 and 62 can be aligned selectively with an opening in the plate 44 for dispensing the contents of the canister 24. Of course, the canister 22 has its own dispenser top and hence, canister 22 need not be reassembled to the device 20.

It will be noted that the device 20 can be used with different structures of dispenser packages since the wall 58 provides a separate dispenser top for the bottom canister of the nested pair. Consequently, the top canister 22 can have any kind of dispenser top so long as the bottom end of this canister can be engaged in the skirt 50. The lower canister 24 requires only a top cover or lid plate 44 either with or without dispensing openings. Where no such openings are provided, the user can punch his own holes to align with the openings 60 and 62 of the dispenser top wall 58. Also, the upper canister 22 can be made with an upper end wall similar to plate 44 and without a dredge top. When canister 24 is exhausted, device 20 can be removed and installed on canister 22 overlying such an end plate. Thus, device 20 could be used also for two identical canisters 24.

It is believed that the invention has been described in sufficient detail to enable the skilled artisan to practice the same. In the appended claims, the invention has been pointed out in language intended to be liberally

construed commensurate with the advance in the arts and sciences contributed thereby.

What it is desired to secure by Letters Patent is:

1. A combined coupling and closure device for a pair of dispensing canisters of the character described comprising, a ring member having a pair of annular skirt formations each provided with an open end, said open ends facing in opposite directions, resilient means on the inner circumferential surface of each skirt for removably securing one end of a canister in the skirt for nesting the pair of canisters one on top of the other in a unitary assemblage, one of said canisters being separable from the second canister without requiring removal of the ring from the second canister, said ring having an intermediate transverse wall having dispensing perforations and imperforate portions for closing the adjacent end wall of said second canister, said ring being rotatable for selectively positioning said perforations and portions with respect to said end wall.
2. A device as described in claim 1 in which said means comprises an annular groove spaced from the end face of the skirt formation.
3. A device as described in claim 1 in which said transverse wall extends entirely across the interior of the ring.
4. A device as described in claim 3 in which said wall is offset relative to the transverse center line of said ring.
5. A device as described in claim 1 in which said device comprises an integral plastic member.

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