

Nov. 3, 1964

C. W. DEARING

3,155,295

CONTAINER WALL CLOSURE COMBINATION AND ASSEMBLIES

Original Filed Dec. 13, 1957

3 Sheets-Sheet 1

Fig. 1.

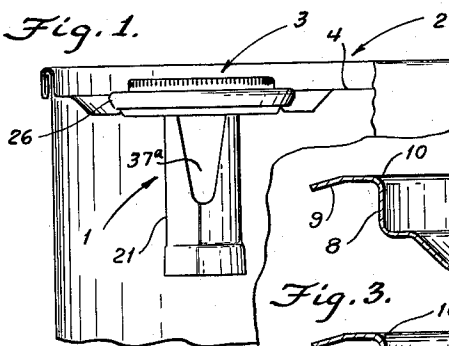


Fig. 2.

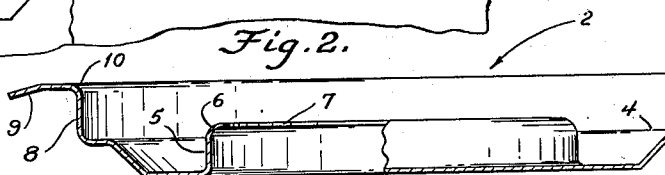


Fig. 3.

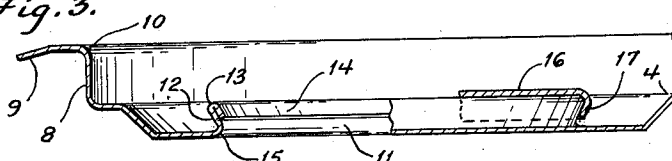


Fig. 4.

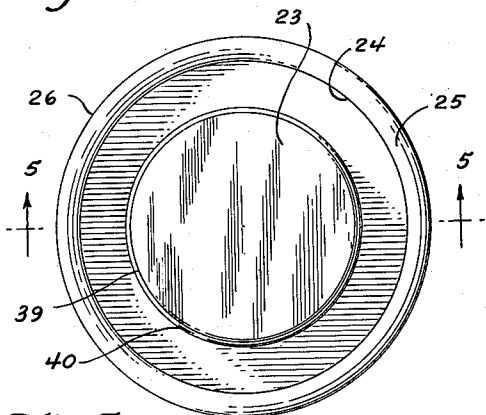


Fig. 6.

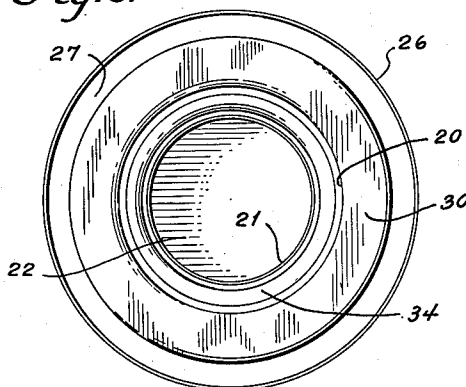


Fig. 7.

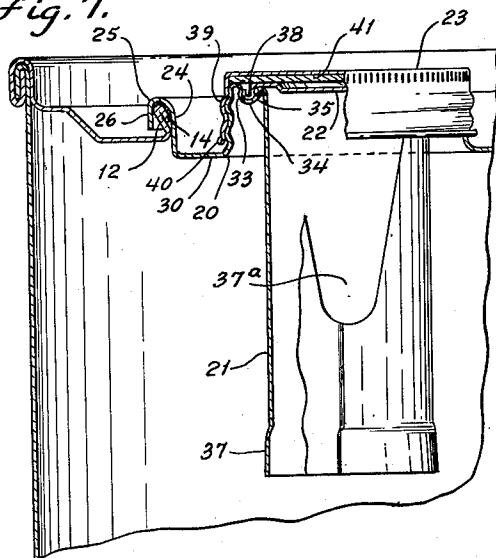
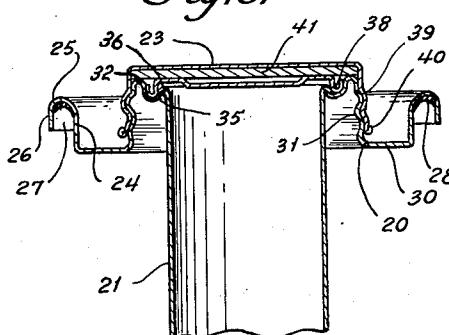


Fig. 5.



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Fig. 8.

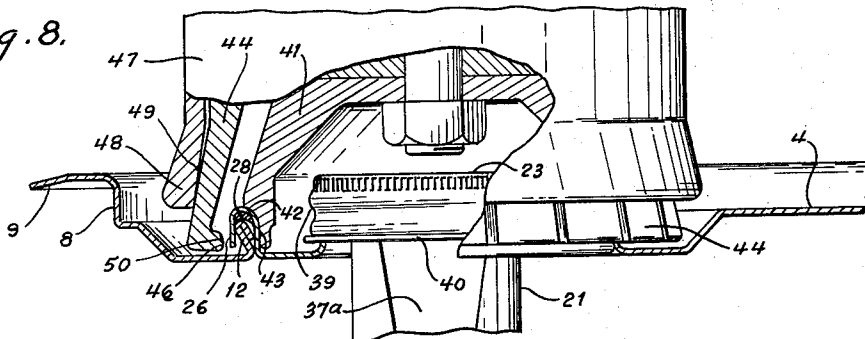


Fig. 9.

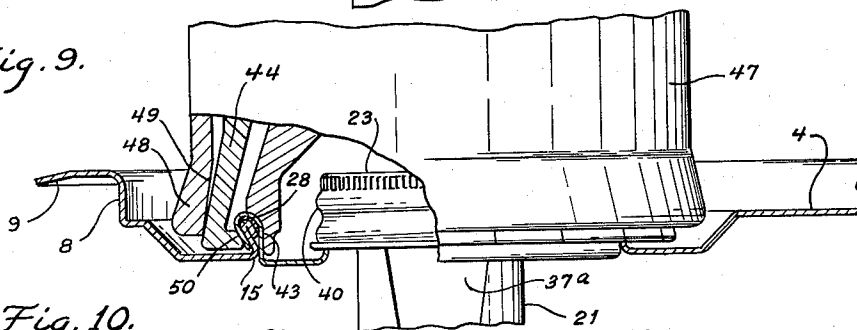


Fig. 10.

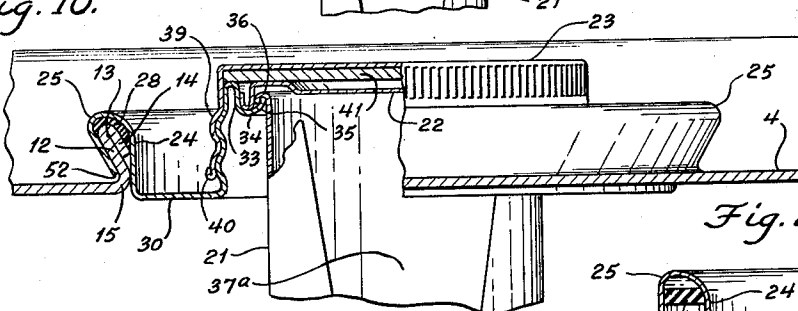


Fig. 20.

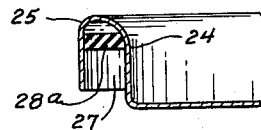


Fig. 11.

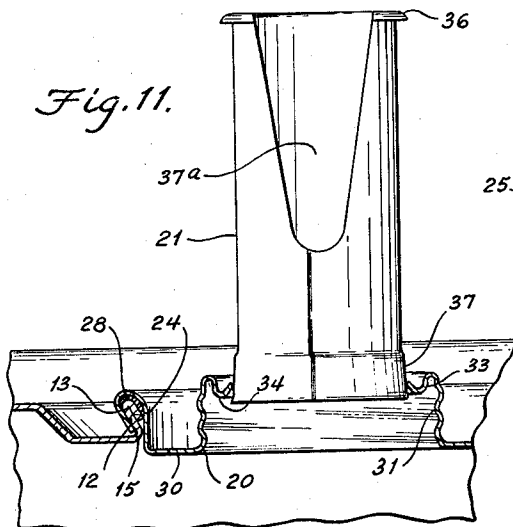
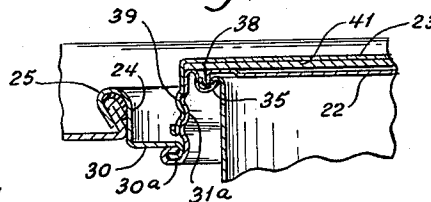


Fig. 19.



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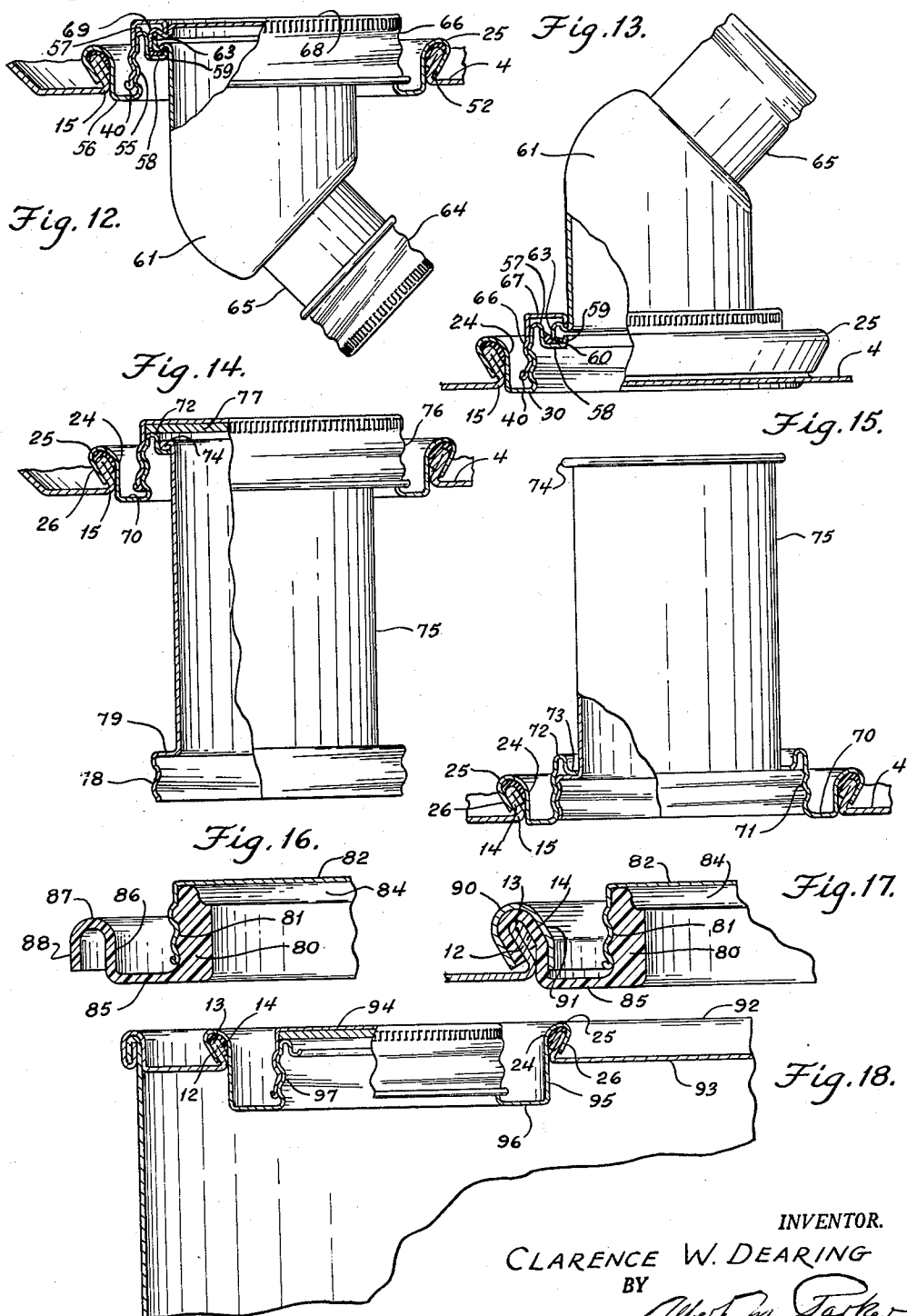
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3 Sheets-Sheet 3



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CONTAINER WALL CLOSURE COMBINATION AND ASSEMBLIES

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Continuation of application Ser. No. 702,698, Dec. 13, 1957. This application Oct. 8, 1962, Ser. No. 230,786
2 Claims. (Cl. 222—525)

This invention relates to containers and closures therefor and methods for forming the same, and is particularly concerned with container wall and closure assembly combinations and methods for forming the same, wherein the container manufacturer merely needs to specially form the standard opening, leaving it to the filler of the container to apply the desired closure assembly thereto.

This application is a continuation of my application, Serial No. 702,698 filed December 13, 1957, for Container Closures and Methods for Forming the Same, now abandoned.

The invention is particularly, though by no means primarily, applicable to the smaller sized metallic containers of which the container known in the trade as a "pail" is a typical, though not a limiting, example. Heretofore, in the equipping of such containers with closures, the common practice has been for the container manufacturer to not only form the opening in a container wall but to also secure the closure assembly in place thereabout. There being considerable variety of closure assemblies available for this application and there being considerable diversity in preference among the various container users for their closure assemblies, the situation has been a difficult one for the container manufacturers.

First off the container manufacturers had to either have an inventory of or to handle the various closure assemblies of the various types and manufacture as required by their customers. These closure assemblies, manufactured by various closure manufacturers, would be specified by the container customer in his order to his container manufacturer, so the container manufacturer had no choice in the matter. In addition, the container manufacturers had to have always available suitable dies for the forming of container wall openings and the application of the particular closure assemblies thereto.

All of this involved time and labor in handling, record keeping and dispatching, in addition to the production time involved in setting the dies in the machines, forming the openings and applying the assemblies thereto.

This manner of providing containers with these closure assemblies increased the difficulties for the container manufacturer, with increases in the number and types of closure assemblies produced. The greater the number of types that had to be handled, the greater the number of errors, complaints and adjustments to be made.

Moreover this prior art manner of equipping containers with these closure assemblies involved expense which had to be passed on to the container customer, more commonly referred to as the filler. In addition to the initial cost of their containers so equipped, the fillers had additional cost since they normally had to remove elements such as screw caps and spouts, in order to open the containers for filling and then had to replace those elements again after filling. Each of these steps took time and involved labor costs.

The combination and method of the instant invention eliminate the foregoing and other drawbacks of the prior art and introduce further simplification and advantages into the field of equipping containers with the desired closure assemblies. With regard to the container manufacturer, it reduces his work to the forming of one

standard type and size opening in the container wall with its special bordering formation, plus the simple hand application of temporary closure caps, commonly referred to as "dust caps," thereover, to keep the containers closed during shipment to the filler's plant. The dust caps are likewise standard and, being reuseable, are returned periodically by the filler so that the only expense involved is their initial cost plus partial replacements from time to time. They are of most inexpensive construction so the cost of an adequate supply of them is at no time a factor of any consequence.

When the filler is ready to make use of containers formed with such standard openings and equipped with dust caps they are placed on the filling line; the dust caps are removed, the containers are filled, pre-selected closure assemblies are hand applied over the standard openings in about the same manner as the dust caps had been applied and a clinching tool is brought into position to quickly clinch the assembly in place about the opening. The mounting rim of the nozzle portion of the assembly fits the opening in the same way and receives the clinching tool in the same way regardless of the type or size of the cap, or cap and spout, employed with the nozzle to form the spout assembly.

It is, accordingly, the principal object of this invention to improve upon closure assembly-container wall combinations.

Another object is to improve upon the application of said closure assemblies to container walls for the formation of such combinations.

Another object is to eliminate a substantial portion of the work heretofore involved in the forming of closure assembly-container wall combinations.

Still another object is to provide for the formation of standard openings of a single size and formation in container walls for the reception of a wide variety of closure assemblies.

A further object is to provide for closure assemblies of various types and sizes, all incorporating the same standard securing formation for securing to pre-formed container wall openings.

A still further object is to provide such closure assemblies incorporating spouts of various forms and sizes. Further and more detailed objects of the invention will in part be obvious and in part be pointed out as the description of the invention, taken in conjunction with the accompanying drawings, proceeds.

In that drawing:

FIG. 1 is a fragmentary elevation of the upper part of a container in accordance with the invention, with a fragment broken away and shown in section to illustrate the application of a closure assembly, in accordance with the invention, to the head of the container.

FIG. 2 is a fragmentary sectional view of a head of a container, showing the first step in the forming of the standard opening therein.

FIG. 3 is a similar view showing that opening completed.

FIG. 4 is a top plan view of a closure assembly of the type shown in FIG. 1 prior to the application thereof to the container wall.

FIG. 5 is a vertical section taken on line 5—5 of FIG. 4 and looking in the direction of the arrows.

FIG. 6 is a bottom plan view of the assembly as shown in FIGS. 4 and 5.

FIG. 7 is a part elevation and part section of the head and upper portion of a container, showing the closure assembly of FIG. 5 hand applied to the standard opening ready to be clinched in place.

FIG. 8 is a view similar to FIG. 7, but showing the application of the clinching tool thereto.

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FIG. 9 is a view, similar to FIG. 8, showing the clinching as having been effected.

FIG. 10 is an enlarged showing, partly in section, of the completed assembly of FIG. 9, with the clinching tool removed therefrom.

FIG. 11 is a vertical section of the assembly of FIGS. 1, 7, 9 and 10, with the closure cap removed and with the spout in extended position.

FIG. 12 is a view similar to FIG. 10, showing a different size and shape of nozzle equipped with a standard clinching rim and applied to the same standard opening.

FIG. 13 is a fragmentary sectional view of the assembly of FIG. 12, showing the spout thereof reversed into extended pouring position.

FIGS. 14 and 15 are views similar to FIGS. 12 and 13, illustrating the application of a different form of spout to the container by the application of the same clinching ring to the same standard container wall opening.

FIGS. 16 and 17 are fragmentary sectional views, illustrating, respectively, a nozzle formed of plastic material and the assembly of the same with the container wall opening in substantially the same manner as the previous forms.

FIG. 18 is a view, similar to FIG. 10, illustrating another form of assembly applied in the standard manner.

FIG. 19 is a fragmentary vertical section of a two-part nozzle, formed by seaming the threaded neck to the mounting element; and

FIG. 20 is a fragmentary sectional view of the clinching rim, containing a preformed gasket, forming part of the closure.

The standard container wall opening and application of a closure assembly thereto has been illustrated as applied to the head of a tight head container. It is to be understood, however, that, if desired, the standard opening and the closure assembly therefor can be applied to the container wall at different positions from that here illustrated and can be applied to the heads, for application to the open ends of otherwise fully formed containers.

In the illustrative embodiment of FIG. 1 a container, generally indicated at 1, is shown as equipped with a head 2, to which a closure assembly 3 has been clinched on to the formation about an opening formed in the base 4 of the head.

Considering the forming of that opening, reference is made to FIG. 2 wherein the base of the head 4 is shown as formed up into the neck 5, which turns inwardly at 6 to border the opening 7. This formation is achieved by the first of the two die operations employed in the production of the standard opening in the head. This forming of the head material can be effected at the same time as, or separately from, the formation of the flange portions 8, 9, out of the flat sheet from which the head is formed. This flanging of the border of the head has the effect of recessing the base 4 of the head downwardly with respect to the chime 10 bordering the head.

Going on to FIG. 3, the formation bordering the opening is here shown in its completed form. This is achieved by the simple additional die operation by which the neck, bordering the full opening 11, is flared outwardly at 12 and then turned tightly inwardly and downwardly at the bead 13 to terminate in a portion 14 lying against the inner surface of the outwardly inclined portion 12. The portion 14 extends for a substantial portion of the height of the neck leaving little other than the rounded portion 15 at the base of the neck 12, unreinforced by any doubling. This rounded portion, however, is strengthened by the formation of it into the curve shown.

The opening 11 is made of such a size that it will accommodate a wide variety of closure assemblies, ranging up to the largest likely to be employed with containers within the size range contemplated for the invention. The bordering formation for this opening, made up of the outwardly flared neck 12 with its internal

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doubled portion 14, is of such strength and conformation that by a simple clinching operation the properly formed securing formation or mounting rim, readily formed on a wide variety of nozzles, can be effectively clinched to the container wall, solely from the outside, after the container is completed and filled. Furthermore, as will be apparent from the description to follow, the bordering formation is very easily received within the mounting rim of the nozzle by simply placing the mounting rim down over it.

A fragment of a dust cap is illustrated in FIG. 3 as being applied to the right hand portion of the bordering formation 12, 13 and 14. This cap, similar to those previously used on containers, is made of cheap light weight metal, or plastic, and is generally formed with a disc-like top 16 bordered by a downwardly and inwardly extending rim 17. The rim is sufficiently resilient, and may be either vertically fluted, or otherwise formed, to enable it to be sprung over the bead 13 by simple hand action and to be removed therefrom in the same manner. Nevertheless it would hold in place to cover the opening and keep dirt out of it while the container is in transit to the filler and until it is put into use.

Once the dust cap is removed the bordering formation around the opening is ready for the reception of the closure assembly. This assembly may take many different forms, save for the mounting rim for engagement with the bordering formation. An economical advantageous, form of assembly, ready for application to the container wall opening, is shown at FIG. 5. This includes a nozzle 20, a spout 21 slideably mounted in the opening of the nozzle, a tamperproof inner seal 22 and a one-piece screw cap 23 applied over the spout and inner seal to retain the spout in place in the opening and prevent leakage of the contents of the container.

The peripheral portion of the nozzle 20 is formed into the securing formation or mounting rim for reception by the bordering formation around the opening in the container wall. This mounting rim provides a downwardly opening channel, formed by an upwardly extending portion 24 of the nozzle, an outwardly beaded portion 25 and a downwardly extending rim portion 26. Within the downwardly opening channel 27 so formed, there is a suitable gasket 28 seated in the base thereof. As here shown, this gasket is of the flowed-in type and that is the preferable method of application of the same, due to its economy and simplicity.

This mounting rim is formed, as seen in FIG. 7, to seat down over the bordering formation 12, 13, 14 and to receive that formation within its channel. The mounting rim is applied onto the bordering formation by a simple, short, downward hand action. When this is accomplished the gasket 28 seats down on top of the bead 13, ready to be flowed around the same by the clinching action to be subsequently effected. The important point here is, however, that all nozzles, regardless of their other characteristics, are formed with this mounting rim to be so receivable over the one standard container wall opening bordering formation.

Inwardly of the upwardly extending portion 24 the nozzle 20 is formed with an annular web portion 30, which will be of varying widths depending upon the size, or type, of nozzle opening and spout, if any, to be carried thereby. This web must have a minimum width, sufficient to permit the inner anvil of the clinching tool to be introduced between the portion 24 and the skirt of the particular screw cap employed. Aside from this minimum requirement the web 30 may be of varying width to enable nozzles, providing openings of various sizes, to be applied to the one standard size container wall opening. In the embodiment of an assembly here illustrated, the nozzle 20 has a screw threaded inner side wall 31 extending upwardly from the web 30, which side wall 31 terminates at its upper end in an in-turned bead 32, from which a down-turned portion 33 extends, that in turn

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being curved inwardly at 34 and terminating in a short-up-turned sleeve 35.

A spout 21 is slideably received within the sleeve 35 and has an out-turned rim 36 at its upper end which overlies and is receivable within the bead like channel 34 formed between the portion 33 and the sleeve 35. At its opposite end the spout 21 is flared outwardly at 37. Being of light weight sheet metal and the nozzle being formed of similar material, there will be sufficient yieldability between the part 37 and the sleeve 35 for the spout to be pulled up by hand into the FIG. 11 position where it will form a leak-tight joint and will hold rigidly in place for pouring, even though the spout be employed for a rest for the container while the pouring is being effected.

The tamperproof inner seal 22 has a main portion which seats down snugly within the upper end of the spout 21, serving not only to seal the end of the spout but, also, to make sure that its beaded upper end 36 remains on the seat provided therefor by the nozzle. This is desirable since a portion of the upper rim 36 of the spout and the V-shaped portion of the upper body thereof, illustrated at 37a is cutaway to facilitate pouring. Thus the presence of this inner seal prevents the possibility of the rim 36 collapsing inwardly and the spout falling down through the sleeve 35. Outwardly of its body 22 the inner seal is turned upwardly, outwardly and downwardly again into a rim 38 whose outer border seats snugly within the down-turned portion 33 of the nozzle.

The one-piece screw cap 23, as here shown, has a downturned skirt 39 formed with screw threads for mated engagement with the exterior of the screw threaded neck 31 of the nozzle and terminates in a reinforcing bead 40. A continuous lining and gasketing disc 41 is provided within the screw cap 23 to overlie the bead 32 of the nozzle, so as to provide a leakproof closure when the screw cap 23 is screwed down into closing position on the nozzle.

Turning now to the manner of securing the nozzle in place in the container wall opening, FIG. 8 shows the initially assembled nozzle and opening formation of FIG. 7, with a clinching tool in place over the assembly, ready for the effecting of the clinching operation. The tool here illustrated for effecting the clinching is provided with an innermost member in the form of a downwardly opening cup 41 which serves as means for seating the tool on the mounting rim of the nozzle and also provides a pressure pad portion 42 to hold that mounting rim down on the bordering formation of the opening. The pad portion 42 also provides an inner annular anvil portion 43 which engages the inner surface of the upwardly extending wall 24 of the mounting rim.

A plurality of jaws 44 is suitably swingably mounted on the tool above the member 41. These jaws have outwardly inclined surfaces 45 on their exteriors and have inwardly extending actuating projections 46 at their lower inner ends. A circular actuating bell 47 is mounted for suitable vertical movement over and with respect to the jaws 44. This bell has its lower portion 48 strengthened and formed with an inner inclined surface 49 on slightly less of an incline than that of the surface 45 on the jaws. Thus as the bell 47 is forced downwardly the jaws 44 will be swung inwardly so that their projections 46 will engage the downturned outer portion 26 of the mounting rim.

The upper side of the projection 46 is downwardly inclined and rounded at 50, corresponding with the downward incline of the outer surface of the neck 12. Thus as the bell 47 moves downwardly with the pressure pad 41 seated on the mounting rim, the lower ends of the jaws 44 will be swung inwardly, and the portion 26 of the nozzle will not only be bent inwardly but will also be drawn downwardly somewhat along the incline of the neck portion 12. At the same time, due to the presence

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of the anvil 43, the portions 26 and 24 will be brought towards each other to tightly encompass the reinforced bordering formation 12, 13, 14 and, at the same time, to compress the gasket 28.

The resultant formation, illustrated with the tool in its final position in FIG. 9, and also by the enlarged showing in FIG. 10, is one where the reinforced and inclined bordering formation 12, 13, 14, is, in effect, held within a chamber whose mouth is now too small to permit it to escape therefrom. This mouth, as best seen in FIG. 10, lies between the bottom end 52 of the downwardly extending portion 26 and the opposed wall of the upwardly extending portion 24 of the mounting rim. Thus the doubling and downward inclining of the bordering formation 12, 13, 14, not only provides for a substantial strengthening of that portion to readily withstand the clinching action of securing the nozzle in place, but it also provides an enlargement about which the mounting rim of the nozzle can be clinched to hold the nozzle securely in place about the opening. This is so even though the clinching be effected wholly on the outside of the finished container and whether by means of a simple hand tool or one operated by air, as desired. Furthermore the securing is just as effective and just as resistant to displacement as if it were a seaming effected in a press prior to completion of the container.

An illustrative example of the standard securing of the invention for applying another form of closure assembly to a container, is shown in FIGS. 12 and 13. Here the closure assembly incorporates a different type spout and one of substantially larger diameter than that illustrated in FIGS. 1 and 4 to 10. The bordering formation for the opening, however, and the mounting rim of the nozzle, as well as the securing of the same together, are exactly the same and of exactly the same size as shown in the previous forms. Thus the same reference characters are applied thereto and no further description thereof is necessary.

Since the opening in the container wall and the formation therearound is of one standard size, while the opening through the nozzle and the upstanding neck 55 of the nozzle are of substantially greater diameter than the nozzle and neck shown in the form of FIGS. 1 and 4 through 10, the nozzle structure must have a part which compensates for the difference. This is found in the annular web 56 which, in this instance, is of substantially less width than the web 30 of the previous form. The presence of such a web in this position then enables the diameters of spout and nozzle neck to be varied throughout a substantial range up to the maximum nozzle neck diameter that any filler would normally call for.

In the present instance the threaded neck 55 extends up to a reverse bead 57 and down to a gasket seat 58, terminating in an upstanding lip 59 which assists in holding the gasket 60 in place. Preferably this gasket is flowed onto the seat provided for it. The spout 61, in this instance, is of the reversible type which can be carried within the container during shipment and can be removed and set up into pouring position, as illustrated in FIG. 13. To make a tight joint in either position the spout is provided with a bordering edge at its bottom end which is substantially S shaped in cross-section. It accordingly provides an upwardly extending bead 62 which engages the gasket 60 while the spout is in carrying position within the container. It also provides a terminating down-turned portion 63 which engages the gasket 60 when the spout is located in pouring position. Completion of a leakproof closure, when the spout is suspended within the container, is effected by means of the screw cap 64 secured in leaktight engagement over the reduced extension 65 of the spout body.

In closed position a screw threaded ring 66, having a down-turned lip 67, is secured to the neck 55 and holds a closing disc 68 in place over the end of the spout. This closing disc 68 has a bordering portion 69 which holds

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the spout down on the gasket while the lip 67 of the ring holds the disc down on the spout.

When the spout is set up in the FIG. 13 position for pouring, the disc 68 is, of course, eliminated. The ring 66 then serves to hold the spout tightly on its seat due to the engagement of its lip 67 with the bordering rim of the spout.

The application of a different type of spout to the same standard opening is shown in FIGS. 14 and 15. Here again the bordering formation around the opening and the mounting rim of the nozzle engaging the same are exactly the same as those previously described and thus carry the same characteristics. Here an annular web 70, of appropriate width, separates the mounting rim from the screw threaded neck 71 of the nozzle. Again the web 70 is of the appropriate width for accommodating the particular nozzle to the standard opening.

At its upper end the screw threaded neck 71 is beaded over at 72 and terminates in a reversely bent portion 73. No gasket is needed here, for during shipment the bead 74, at the upper end of the spout body 75, seats into the reverse portion 73 and a complete screw cap 76 screws down over the threaded neck 71 of the nozzle. This cap carries a complete circular gasketing liner 77 which lies down on top of the nozzle bead 72 and provides the necessary sealing against leakage.

In its pouring position, as seen in FIG. 15, this spout is extended upwardly. It has an enlarged screw threaded bottom portion 78 which is threadedly engaged with the internal threads provided by the nozzle neck 71. At the upper end of the threads 78 it is provided with an abrupt inwardly extending shoulder 79. When the spout is threaded all the way up into the nozzle, this shoulder 79 is brought up into tight contact with and beneath the reversed portion 73 of the nozzle. This contact makes a sufficiently tight joint for the prevention of leakage during pouring without the need of a gasket.

A nozzle formed integrally of a plastic material, of which polyethylene is an effective example, is shown per se in FIG. 16 and as secured to a standard opening in FIG. 17. The body 80 of this nozzle is of substantial thickness and has its exterior surface provided with screw threads 81 for the reception of a suitable cap or ring 82. The interior wall 83 and the upper end 84 of this nozzle are suitably formed for the reception of a mated spout which may be of either slideable or reversible type.

An annular web 85 here extends outwardly from the body 80 to a mounting rim comprising an upturned portion 86, an upwardly curved portion 87 and downturned portion 88. These portions 86, 87 and 88 conform as nearly as possible, considering the inherent differences between plastic material and metal, to the elements 24, 25 and 26 of the mounting rim previously described. Thus this mounting rim can be seated down over the bordering formation 12, 13, 14 of the standard opening, but for effective securing together of the bordering formation and mounting rim, an overlying metal ring is preferably employed. This ring, formed as an inverted channel member, has an outer portion 89, a top portion 90 and an inner portion 91. It is shown in FIG. 17 as overlying the plastic formation 85, 87, 88, being clinched thereto and clinching that plastic formation tightly over to the standard opening formation.

A slightly different form of nozzle is illustrated in FIG. 18. This can be employed with a smaller type container, or those having a shallower recess between their chimes 92 and the bases 93 of the heads. In such a case, where a substantial opening is desired, but it is still necessary to have the complete closure assembly including the screw cap 94 lying level with, or below the level of, the chime 92, an additional element is added to the nozzle. This takes the form of a sleeve portion 95 which extends downwardly a substantial distance from the standard mounting rim 24, 25, 26. Thus a portion of the nozzle lies within the container. As in the pre-

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vious forms, however, a web 96 joins the portion 95 with the screw threaded neck 97 of the nozzle so that the diameter of the nozzle may be anything desired below the maximum. It is important to note, however, that even in this form the same standard opening and securing of the nozzle thereto is effected as in the other forms illustrated.

If for any reason it is desired to make the nozzle of a built up construction instead of one integral piece, that can, of course, be done. One manner of doing it is illustrated in the FIG. 19 showing. There the standard annular web portion 30 and the bottom end of the threaded neck 31a are shown as seamed together at the inner end of the web 30, as seen at 30a. This construction still permits the standard clinching of the mounting rim over the bordering formation. Further it is still a construction which would be fabricated by the closure manufacturer and applied by the filler to the outside of the container.

A fragment, including merely the standard mounting rim, is shown in FIG. 20. Here the only difference over the previous disclosure is that a preformed gasket 28a is secured in the base of the channel 27, in position to be properly deformed about the upper end of the bordering formation and the nozzle is clinched about a container wall opening.

The novel method of the invention resides not only in the specific forming of the bordering formation around the opening, the specific forming of the nozzle with the mounting rim for engaging that bordering formation and the forming of the combination of the bordering formation and mounting rim, but goes beyond that and involves a novel method of packaging. Gone is the old method of application of the closure assemblies by the container manufacturer, the removal of the closing member thereof, usually by unscrewing it, for filling, followed by the reclosing for shipping. Instead the new packaging method enables immediate filling and a single clinching operation for complete closing. It has ramifications too in that the filler need not decide, until he comes to fill his containers, what type of closure assembly he is going to use, no matter what type or size. Within the normal acceptable range, he can apply it to any containers he may happen to have on hand, so long as they are formed with a standard opening and bordering formation. Thus the invention facilitates and introduces substantial improvement into the whole field of packaging fluids in containers.

Though in most instances the closure assemblies have been shown as incorporating spouts, it is, of course, to be understood that should one merely wish an opening without a spout, the spouts, in certain of the instances shown, can be omitted, or nozzles, devoid of any adaptation for the reception of spouts, can be employed. Speaking more generally any form of pouring opening, or means for pouring, may be employed so long as it is carried by a nozzle or other appropriate member formed for application to a standard opening as described in the foregoing and shown in the accompanying drawings.

It will also be apparent that though a preferred and several illustrative embodiments of the invention have been shown in the accompanying drawing and described in the foregoing description, such disclosure is for illustrative and not limiting purposes, while others, skilled in the art, can devise additional modifications and variations without departing from the spirit and scope of the invention.

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

1. A container wall closure assembly combination which comprises a container wall formed with a large standard opening therein and a closure assembly secured thereto, said standard opening having a bordering formation in the form of a neck formed integrally from the stock of said container wall surrounding said opening, said opening neck including a first portion of a single thickness of container wall stock extending upwardly from said

container wall and a second portion formed as an extension of said first portion and having a double thickness of said container wall material, said second portion having an upwardly extending first part, a rounded upper end and an inwardly extending second part extending downwardly and inwardly from said rounded end and being seated throughout its extent tightly against the inner surface of said first part, said first portion of said opening neck being curved outwardly and said second portion extending outwardly from said curved portion in frusto conical form at an angle of substantial extent with respect to the axis of said opening, said closure assembly having a securing formation secured to said opening neck and having the remainder of said closure assembly positioned radially inwardly of said opening neck, said assembly being capable of providing various sized pouring openings and closures therefor within the confines of said standard opening and said assembly being formed for application to said opening neck from the outside of a completed container after the same is filled, said assembly including a nozzle and a screw closure member secured thereto, said nozzle being formed as an annular member and said securing formation forming the peripheral portion of said nozzle, said securing formation having an upwardly extending inner portion overlying the inner surface of said opening neck, gasket material between part of said inner portion and inner surface, and said inner portion tightly engaging said gasket material and the exposed part of said inner surface, said securing formation also having an upper portion overlying the rounded upper end of said opening neck and having an outer portion extending downwardly in tight engagement with the outer portion of said opening neck to form a tight joint between said neck and said securing formation on the outer side of the wall of said container, an annular web extending integrally radially inwardly from said securing formation, a screw threaded neck

formed with a dispensing opening therethrough, extending laterally away from the radially inner most portion of said web and in spaced relation with respect to said securing formation and a gasketing portion at one end of said screw threaded neck for the leakproof engagement of said screw closure member therewith, said screw closure member including means for engaging said gasketing portion for effecting a leakproof joint and said screw closure member being formed with a side wall threadedly engaged with the threads of said screw threaded neck, the radial extent of said annular web determining the size of said dispensing opening through said screw threaded neck whereby containers equipped with standard openings will have the full areas of said standard openings available for fast filling of the containers and after filling will have the desired size and type of assembly applied to close said opening and provide the desired size of dispensing opening within the confines of said larger standard opening.

2. An assembly as in claim 1 and including a retractable spout positioned within said dispensing opening and means carried by said screw threaded neck for maintaining said spout in extended pouring position for dispensing the contents of the container and in a retracted position for shipment and storage.

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