March 16, 1965 R. W. DIKE 3,173,589

POP-UP RESEAL CLOSURE FOR PLASTIC POWDER CONTAINER

Filed Feb. 21, 1963

FIG. 1

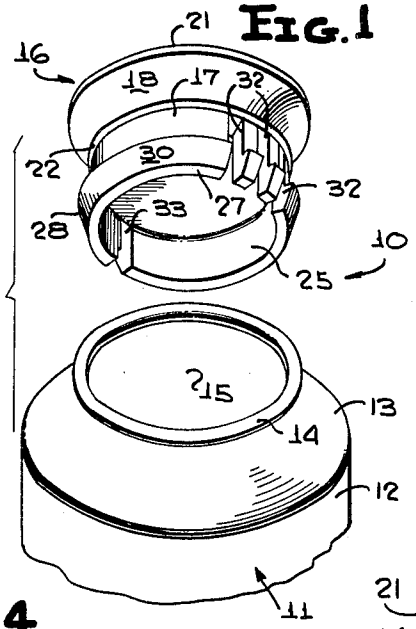


FIG. 2

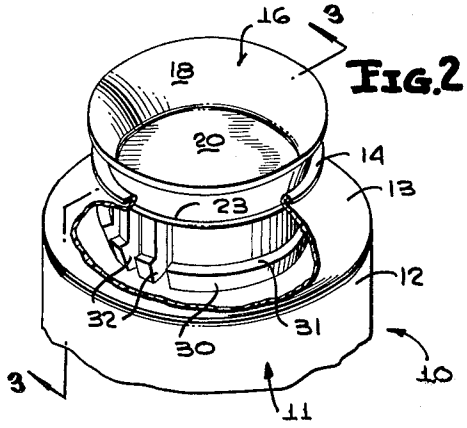


FIG. 3

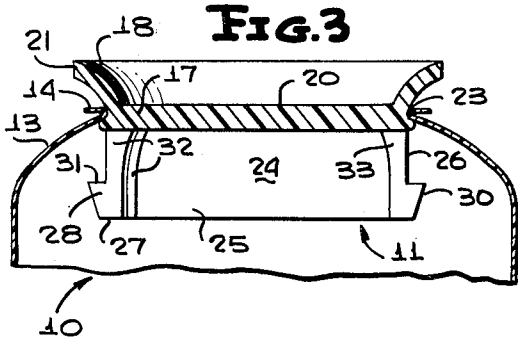


FIG. 4

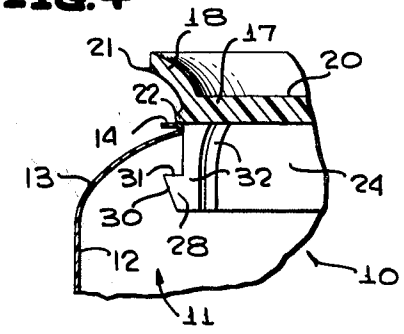


FIG. 5

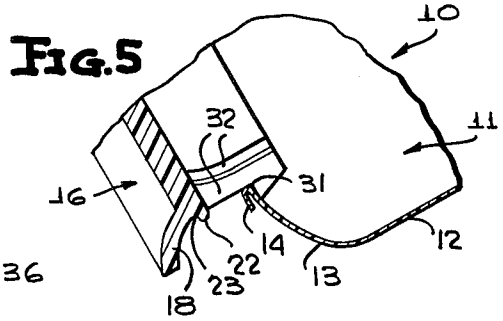


FIG. 6

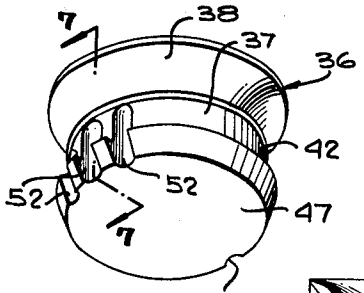
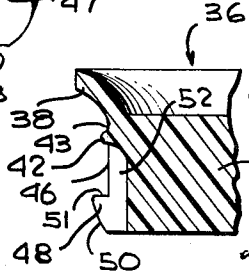


FIG. 7



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POP-UP RESEAL CLOSURE FOR PLASTIC POWDER CONTAINER

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16 Claims. (Cl. 222—479)

This invention relates to a novel pop-up releasable closure particularly adapted for use with plastic containers filled with a dry or semi-dry dispensable product such as powdered soap, cleaners, granular flavorings, crystalline chemicals and various food products.

An object of this invention is the provision of a novel closure constructed of a single piece of substantially rigid material such as polyethylene or a similar thermoplastic, the closure being snapped into an opening of a container after the container has been provided with a suitable dispensable fill, the closure including a plurality of outwardly directed peripheral ribs, one of the outwardly directed peripheral ribs being effective to maintain the container in sealed relationship within the closure during storage and shipment of the container and another of the outwardly directed peripheral ribs prevents the removal of the closure from within the container during the dispensing operation thereof.

A further object of this invention is the provision of a novel container and pop-up resealable dispensing closure, the container including a body having an opening defined by a peripheral portion, the pop-up resealable dispensing closure being slidably received in the opening of the container, the closure including a body having an upper peripheral rib, a lower peripheral rib and an intermediate peripheral rib, the intermediate peripheral rib normally underlying the peripheral portion in a first position but being capable of intimately overlying and sealing the peripheral portion in a second position and being spaced from the peripheral portion in a third position of the intermediate peripheral rib, a plurality of passages being provided in the closure body in a peripheral surface thereof and extending at least between the lower and intermediate peripheral ribs, the passages placing the interior of the container in communication with the atmosphere when the intermediate peripheral rib is in the third position thereof.

Another object of this invention is to provide a novel container and pop-up resealable dispensing closure of the type immediately above-described, wherein the plurality of passages are formed in diametrically opposed peripheral portions of the closure body and the number of the passages differs in each of the diametrically opposed peripheral portions whereby the fill of the container can be selectively dispensed at a different flow rate depending upon the plurality of passages employed during the dispensing operation.

Still another object of this invention is to provide a novel container and pop-up resealable dispensing closure of the type heretofore described, and in addition, to form the plurality of passages as elongated grooves opening outwardly of a peripheral surface of the closure between the lower and intermediate peripheral ribs and substantially parallel to the axis of the container.

A further object of this invention is the provision of a novel dispensing container and a pop-up resealable dispensing closure of the type having a closure body slidably received in an opening of a container defined by a peripheral portion thereof, the closure body having an upper, lower and intermediate radially outwardly directed peripheral rib, the closure body being formed from an integral piece of plastic material having an axial bore, the axial bore defining a depending peripheral skirt terminating in a free peripheral edge, a plurality of elongated slots being formed in the depending peripheral skirt and extending from the free peripheral edge thereof to the intermediate peripheral rib of the closure body, the intermediate peripheral rib being shiftable into any one of three positions and the plurality of elongated slots placing the interior of the dispensing container in communication with the atmosphere in one of these three positions of the intermediate peripheral rib.

Another object of this invention is to provide a novel three-position resealable dispensing closure adapted for use with a container having an inwardly directed peripheral portion defining an opening of the container into which the closure is adapted to be received, the closure including an integral substantially rigid body having upper, lower and intermediate outwardly directed peripheral ribs, a plurality of passages in the closure extending between the lower and the intermediate outwardly directed peripheral ribs, the plurality of passages opening radially outwardly of the closure and in substantial parallel alignment to an axis of the closure, the plurality of passages being in the form of either elongated grooves or slots formed in diametrically opposed peripheral portions of the closure and the number of the grooves or slots differing in each of the diametrically opposed peripheral portions whereby different dispensing rates are achieved.

With the above, and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawings:

In the drawings:

FIGURE 1 is a fragmentary perspective view of a novel container and pop-up resealable dispensing closure constructed in accordance with this invention, and illustrates a plurality of elongated slots extending from a free peripheral lower edge of the closure toward an outwardly directed peripheral intermediate rib of the closure and the plurality of elongated slots being formed in diametrically opposed peripheral portions of the closure.

FIGURE 2 is a fragmentary top perspective view with a part broken away for clarity, and illustrates the pop-up resealable dispensing closure inserted in an opening of the container and the outwardly directed intermediate peripheral rib of the closure lockingly underlying an inwardly directed peripheral portion of the container.

FIGURE 3 is an enlarged fragmentary vertical sectional view of the container and pop-up resealable dispensing closure taken along line 3—3 of FIGURE 2, and more clearly illustrates the outwardly directed intermediate peripheral rib of the closure in underlying sealing contact with the inwardly directed peripheral portion of the container.

FIGURE 4 is a fragmentary vertical sectional view of the dispensing container and pop-up resealable dispensing closure of FIGURES 1 through 3, and illustrates the outwardly directed intermediate peripheral rib of the dispensing closure in overlying sealing contact with the inwardly directed peripheral portion of the container prior to the movement of the container and closure into a dispensing position.

FIGURE 5 is a fragmentary vertical sectional view of the dispensing container and pop-up resealable dispensing closure of FIGURE 4 after the movement thereof into a dispensing position, and illustrates one of the plurality of elongated slots placing the interior of the container in communication with the atmosphere and a lower outwardly directed peripheral rib of the dispensing closure preventing the complete withdrawal of the closure from within the container.

FIGURE 6 is a bottom perspective view of a pop-up

resealable dispensing closure, and shows a plurality of elongated grooves formed in diametrically opposed peripheral portions of the closure.

FIGURE 7 is an enlarged fragmentary sectional view taken along line 7—7 of FIGURE 6, and more clearly illustrates the axial extent of one of the plurality of grooves from an intermediate outwardly directed peripheral rib of the dispensing closure through an outwardly directed lower peripheral rib thereof.

A dispensing container and pop-up resealable dispensing closure constructed in accordance with this invention is best illustrated in FIGURES 1 through 5 of the drawings, and is generally designated by the reference numeral **10**.

The dispensing container and pop-up resealable dispensing closure **10** includes a container **11** having a body **12** and an integral upwardly and inwardly sloping neck **13**. The neck **13** terminates in an integral peripheral reinforcing portion **14** defining an opening **15** of the container **11**. The container **11** is preferably blow-molded from plastic material, but may also be fabricated from shet metal. Any dry or semi-dry dispensable "fill" such as granular flavorings, crystalline chemicals, grated dry or semi-dry food products, cleaners or powdered soap may be packaged in the dispensing container **11**.

A pop-up resealable dispensing closure **16** of the dispensing container and closure **10** comprises a substantially rigid body **17** which is preferably injection-molded from polyethylene or a similar thermoplastic material.

The body **17** of the pop-up resealable dispensing closure **16** includes an integral rib **18** which flares upwardly and outwardly from a recessed end **20** of the body **17**. The upper outwardly directed peripheral rib **18** terminates in a free peripheral edge **21**.

An intermediate peripheral rib **22** projects radially outwardly with respect to the axis of the body **17**. The diametrical dimension of the intermediate peripheral rib **22** is slightly greater than the diameter of the opening **15** in the neck **13** of the container **11** to enable the intermediate peripheral rib **22** to be snapped from the position shown in FIGURE 4 (sealingly overlying the peripheral portion **14** of the dispensing container **11**) to the position shown in FIGURE 3 (sealingly underlying the peripheral portion **14** of the dispensing container **11**) and vice versa, for a purpose to be more fully described hereafter.

An annular sealing recess **23** is formed in the body **17** of the dispensing closure **16** between the upper peripheral rib **21** and the intermediate peripheral rib **22**. The annular sealing recess **23** is slightly greater in circumference than the circumference of the opening **15** in the container **11**. Thus, as is best illustrated in FIGURE 3 of the drawings, when the dispensing closure **16** is snapped into the dispensing container **11** to a position in which the intermediate peripheral rib **22** of the dispensing closure **16** underlies the peripheral portion **14** of the dispensing container **11**, a positive seal between the dispensing closure **16** and the dispensing container **11** is formed.

The body **17** of the dispensing closure **16** is provided with an axial bore **24**. The axial bore **24** forms an interior chamber of an integral depending peripheral skirt **25** of the body **17**. The peripheral skirt **25** includes an exterior circumferential wall **26** which has a diameter and a circumference substantially equal to the diameter and the circumference of the opening **15** of the dispensing container **11**. This dimensioning in effect forms a slip-fit between the circumferential wall **26** of the dispensing closure **16** and the peripheral portion **14** of the dispensing container **11**, thereby permitting the dispensing closure **16** to slide freely into and out of the dispensing container **11** along the entire axial length of the circumferential wall **26**.

The depending peripheral skirt **25** of the body **17** terminates in a free peripheral edge **27**. The depending peripheral skirt **25** of the body **17** is also provided with an integral outwardly directed lower peripheral rib **28**. The lower peripheral rib **28** includes a radially inwardly and downwardly tapering peripheral wall **30** which facilitates the insertion of the dispensing closure **16** into the opening **15** of the dispensing container **11**. An upper annular abutment wall or shoulder **31** of the lower peripheral rib **28** prevents the dispensing closure **16** from being accidentally or inadvertently removed from within the body **12** of the dispensing container **11** when the latter is in the dispensing position shown in FIGURE 5 of the drawing.

The depending peripheral skirt **25** of the dispensing closure **16** is interrupted along a plurality of diametrically opposed peripheral skirt portions thereof by a plurality of elongated passages or slots **32** and a single passage or slot **33**. Both the passages or slots **32** and the passage or slot **33** extend the entire axial length of the peripheral skirt **25** from the recessed end **20** and the intermediate peripheral rib **22** of the body **17** to the free peripheral edge **27** of the peripheral skirt **25**. The plurality of slots **32** and the diametrically opposed slot **33** place the axial bore or chamber **24** of the dispensing closure **16** in radial communication with the interior of the container body **12** when the dispensing closure **16** is positioned as shown in FIGURE 3 of the drawings. However, when the dispensing closure **16** is snapped-out of the container body **12** to the position shown in FIGURE 4, (with the intermediate peripheral rib **22** overlying the reinforced peripheral portion **14**) and the dispensing container **11** is moved to the dispensing position of FIGURE 5, the plurality of slots **32** and the slot **33** place the interior of the dispensing container **11** in communication with the atmosphere. Any desirable fill in the dispensing container **11** may now be dispensed through the plurality of slots **32** in the depending peripheral skirt **35**. It should be noted that while FIGURE 5 illustrates the dispensing container **11** in a position enabling fill to be dispensed through the plurality of slots **32**, the dispensing container **11** need only be revolved substantially 180° from the position illustrated in FIGURE 5 to dispense the fill through the single passage or slot **33**. Thus, a faster dispensing rate is achieved when the dispensing container **11** is in the position shown in FIGURE 5, while a much slower dispensing rate is achieved when the dispensing container **11** is revolved as above-described.

In operation, the dispensing container **11** is first filled with any dry or semi-dry product. The dispensing closure **16** is then snapped down into the opening **15** of the dispensing container **11** to the position shown in FIGURE 3 of the drawing in which the peripheral reinforcing portion **14** of the container body **12** is in sealing contact with the annular sealing recess **23** of the dispensing closure **16**. The intermediate peripheral rib **22** of the dispensing closure **16** underlies the peripheral portion **14** of the dispensing container **11** and cooperates with the outwardly flaring upper peripheral rib **21** to effect a positive seal. In this position, (FIGURE 3) the dispensing closure and container **10** may be shipped to a consumer for subsequent use.

A consumer can then open the dispensing closure and container **10** by forcing his forefinger and thumb and/or second finger under the flared upper peripheral rib **21** to "pop" the dispensing closure **16** out of the dispensing closure **11** to the position shown in FIGURE 4. At this point the dispensing closure **16** may be completely removed from the body **12** of the dispensing container **11** to enable the consumer to spoon-out the product in the dispensing container **11**. Once the intermediate peripheral rim **22** of the dispensing container **11** is snapped-over the peripheral reinforcing portion **14** of the dispensing container **11**, the dispensing closure **16** can be manually withdrawn from the body **12** until the annular abutment wall or shoulder **31** of the peripheral skirt **25** contacts the peripheral reinforcing portion **14** of the dispensing container **11**. In this position the interior of the dispensing container **11** is placed in communication with the atmosphere through the plurality of passages or slots **32** and the diametrically opposed passage or slot **33**.

The dispensing container **11** may then be revolved, or alternatively, the dispensing closure **16** may be revolved with respect to the dispensing container **11**, to dispense the package product either through the plurality of passages or slots **32** or the single diametrically opposed slot or passage **33**.

In the inverted dispensing position of FIGURE 5, it should be noted that the abutment between the annular abutment wall or shoulder **31** and the peripheral reinforcing portion **14** of the dispensing container **11** precludes the dispensing closure **16** from dropping out of the body **12**. Furthermore, in this position the intermediate peripheral rib **22** overlies and is spaced from the peripheral reinforcing **14** of the container body **12**.

When a sufficient amount of the product has been dispensed, the dispensing container **11** is then inverted from the position shown in FIGURE 5 to the position of FIGURE 4. As the dispensing container **11** is being inverted, the dispensing closure **16** slides back into the body **12** until the intermediate peripheral rib **22** overlies and contacts the peripheral reinforcing portion **14** of the container body **12**. As has been heretofore noted, it is because of the sliding fit of the circumferential wall **26** of the peripheral skirt **25** within the opening **15** of the dispensing container **11** that the dispensing closure **16** can automatically re-seat itself to the position illustrated in FIGURE 4 of the drawings. Because the dispensing container **11** is constructed of polyethylene, a seal is created between the intermediate peripheral rib **22** and the peripheral reinforcing portion **14** of the dispensing container **11** when the same are in contact, and the interior of the container body **12** is no longer in communication with the atmosphere. This is particularly advantageous when a product such as salt, which is adversely affected by a high moisture content of the atmosphere, is packaged in the dispensing container **11**. Similarly, if crystalline chemicals are packaged within the dispensing container **11**, the sealing contact between the intermediate peripheral rib **22** and the peripheral reinforcing portion **14** of the container body **12** prevents contaminants from adversely or undesirably coacting with the crystalline chemicals, which coaction might otherwise occur if the chemicals were temporarily exposed to the atmosphere.

It should be further noted that since the seal of FIGURE 4 is not a "mechanical" seal, the dispensing container **11** need but be inverted and the dispensing closure **16** will be pushed out of the container body **12** by the packaged product, due to gravity and the slip-fit between the circumferential wall **26** and the opening **15** previously described.

A pop-up resealable dispensing closure adapted to be used with a dispensing container such as the dispensing container **11** of FIGURES 1 through 5 of the drawings is illustrated in FIGURES 6 and 7, and is generally referred to by the reference numeral **36**. The dispensing closure **36** is substantially identical to the dispensing closure **16**, and includes an integral plastic body **37** having an integral upwardly and outwardly flaring upper peripheral rib **38**, an integral intermediate outwardly directed peripheral rib **42** and a lower outwardly directed peripheral rib **48**. The dispensing closure **36** further includes an annular sealing recess **43** between the upper peripheral rib **38** and the intermediate peripheral rib **42**. The body **37** of the dispensing closure **36** is solid and has a circumferential wall **46** depending axially from the intermediate peripheral rib **42** to an annular abutment wall or shoulder **51** of the lower peripheral rib **48**. The lower peripheral rib **48** is inwardly and downwardly tapered at **50**, in a manner identical to the tapered wall portion **30** of the dispensing closure **16**.

The relative dimensions, functions and construction of the components **38**, **42**, **43**, **46**, **48**, **50** and **51** of the dispensing closure **36** are identical to the respective dimensions, functions and construction of the components **18**, **22**, **23**, **26**, **28**, **30** and **31** of the dispensing closure **16** of FIGURES 1 through 5 of the drawing.

In lieu of the plurality of elongated slots **32** and the diametrically opposed slot **33** of the dispensing closure **16**, the dispensing closure **36** is provided with a plurality of elongated passages or grooves **52** and a diametrically opposed elongated passage or groove **53** in the periphery of the closure body **37**. The plurality of passages or grooves **52** and the diametrically opposed passage or groove **53** extend from the intermediate peripheral rib **42** downwardly through the lower peripheral rib **48** and opened outwardly through a bottom surface **47** of the body **37**.

The dispensing closure **36** along with the plurality of grooves **52** and the diametrically opposed groove **53**, operate in a manner substantially identical to that heretofore discussed in connection with the dispensing closure **16**.

While various forms of a dispensing container and a pop-up resealable dispensing closure particularly adapted for use with a plastic dispensing container have been shown herein for purposes of illustration, it is to be clearly understood that various changes in the details of construction and arrangement of parts may be made without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a body having an upper peripheral rib, a lower peripheral rib and an intermediate peripheral rib between said upper and lower peripheral ribs, said intermediate peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said peripheral portion in a second position and spacingly overlying said peripheral portion in a third position, at least one passage in a peripheral surface of said closure body and said passage extending at least between said lower and intermediate peripheral ribs whereby said one passage places the interior of said container body in communication with the atmosphere when said intermediate peripheral rib is in the third position thereof.

2. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral portion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, at least one passage in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs whereby said passage places the interior of said container body in communication with the atmosphere when the intermediate outwardly directed peripheral rib is in the third position thereof yet is closed to the atmosphere when the intermediate outwardly directed peripheral rib is in the first or second position thereof.

3. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral por-

tion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, a plurality of passages in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs whereby said passages place the interior of said container body in communication with the atmosphere when the intermediate outwardly directed peripheral rib is in the third position thereof yet is closed to the atmosphere when the intermediate outwardly directed peripheral rib is in the first or second position thereof.

4. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral portion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, a plurality of passages in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs, said plurality of passages being formed in a peripheral surface of said closure body and substantially parallel to the axis of said container body whereby said passages place the interior of said container body in communication with the atmosphere when the intermediate outwardly directed peripheral rib is in the third position thereof yet is closed to the atmosphere when the intermediate outwardly directed peripheral rib is in the first or second position thereof.

5. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral portion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, a plurality of passages in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs, said plurality of passages being formed in diametrically opposed peripheral portions of said closure body, the number of passages differing in each of said diametrically opposed peripheral portions, whereby said passages place the interior of said container body in communication with the atmosphere when the intermediate outwardly directed peripheral rib is in the third position thereof yet is closed to the atmosphere when the intermediate outwardly directed peripheral rib is in the first or second position thereof.

6. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral portion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, a plurality of passages in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs, said plurality of passages being formed in diametrically opposed peripheral portions of said closure body, the number of passages differing in each of said diametrically opposed peripheral portions, said plurality of passages being substantially parallel to the axis of said container, whereby said passages place the interior of said container body in communication with the atmosphere when the intermediate outwardly directed peripheral rib is in the third position thereof yet is closed to the atmosphere when the intermediate outwardly directed peripheral rib is in the first or second position thereof.

7. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a solid plastic body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral portion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, a plurality of passages in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs, said plurality of passages being formed in diametrically opposed peripheral portions of said closure body, the number of passages differing in each of said diametrically opposed peripheral portions, said plurality of passages being substantially parallel to the axis of said container, the plurality of passages being elongated grooves opening outwardly entirely of said solid plastic body between the lower and intermediate outwardly directed peripheral ribs thereof, whereby said grooves place the interior of said container body in communication with the atmosphere when the intermediate outwardly directed peripheral rib is in the third position thereof yet is closed to the atmosphere when the intermediate outwardly directed peripheral rib is in the first or second position thereof.

8. A combined container and closure wherein said container comprises a body having an opening defined by an inwardly directed peripheral portion, said closure being slidably received in said opening and including a solid plastic body, said closure body being formed from plastic and including an axial bore, said axial bore defining a depending peripheral skirt portion terminating in a free peripheral edge, said closure body having a lower outwardly directed peripheral rib and an intermediate outwardly directed peripheral rib spaced from said lower outwardly directed peripheral rib, said intermediate outwardly directed peripheral rib normally underlying and engaging said inwardly directed peripheral portion in a first position thereof but being capable of contactingly overlying said inwardly directed peripheral portion in a second position and spacingly overlying said inwardly directed peripheral portion in a third position, a plurality of passages in a said closure body extending between said lower and intermediate outwardly directed peripheral ribs, said plurality of passages being formed in diametrically opposed peripheral portions of said closure body, the number of passages differing in each of said diametrically opposed peripheral portions, said plurality of passages being substantially parallel to the axis of said container, the plurality of passages being elongated slots in said depending peripheral skirt and opening entirely radially outwardly of said axial bore at least between the lower and intermediate outwardly directed peripheral ribs.

9. A three position closure adapted for use with a container having an inwardly radially directed peripheral portion defining an opening of the container into which the closure is adapted to be received, said closure comprising a body having an upper peripheral rib, a lower peripheral rib and an intermediate peripheral rib between

said upper and lower peripheral ribs, each of said peripheral ribs being directed outwardly with respect to the axis of said closure body, said intermediate peripheral rib being adapted to normally underlie and engage the peripheral portion of a container in a first position thereof but being capable of contactingly overlying the peripheral portion in a second position and spacingly overlie the peripheral portion in a third position, a plurality of passages in said closure body extending between the lower and intermediate outwardly directed peripheral ribs and said plurality of passages opening radially outwardly of said body and in substantial parallel alignment to the axis of said body.

10. A three position closure adapted for use with a container having an inwardly radially directed peripheral portion defining an opening of the container into which the closure is adapted to be received, said closure comprising a solid body having an upper peripheral rib, a lower peripheral rib and an intermediate peripheral rib between said upper and lower peripheral ribs, each of said peripheral ribs being directed outwardly with respect to the axis of said closure body, said intermediate peripheral rib being adapted to normally underlie and engage the peripheral portion of a container in a first position thereof but being capable of contactingly overlying the peripheral portion in a second position and spacingly overlie the peripheral portion in a third position, a plurality of passages in said closure body extending between the lower and intermediate outwardly directed peripheral ribs and said plurality of passages opening radially outwardly of said body and in substantial parallel alignment to the axis of said body, said plurality of passages being elongated grooves opening outwardly of said solid plastic body between the lower and intermediate outwardly directed peripheral ribs thereof.

11. A three position closure adapted for use with a container having an inwardly radially directed peripheral portion defining an opening of the container into which the closure is adapted to be received, said closure comprising a solid body, said solid body being formed from plastic and including an axial bore, said axial bore defining a depending peripheral skirt portion terminating in a free peripheral edge, said body having an upper peripheral rib, a lower peripheral rib and an intermediate peripheral rib between said upper and lower peripheral ribs, each of said peripheral ribs being directed outwardly with respect to the axis of said closure body, said intermediate peripheral rib being adapted to normally underlie and engage the peripheral portion of a container in a first position thereof but being capable of contactingly overlying the peripheral portion in a second position and spacingly overlie the peripheral portion in a third position, a plurality of passages in said closure body extending between the lower and intermediate outwardly directed peripheral ribs and said plurality of passages opening radially outwardly of said body

and in substantial parallel alignment to the axis of said body, said plurality of passages being elongated slots in the depending peripheral skirt, said elongated slots opening entirely radially outwardly of said axial bore between the free peripheral edge of said peripheral skirt portion and said intermediate outwardly directed peripheral rib.

12. The three position closure as defined in claim 10 wherein said plurality of grooves are formed in diametrically opposed peripheral portions of said body, and the number of grooves in each peripheral portion differs from the number of grooves in any other peripheral portion.

13. The three position closure as defined in claim 11 wherein said plurality of slots are formed in diametrically opposed peripheral portions of said body and the number of slots in each peripheral portion differs from the number of slots in any other peripheral portion.

14. The three position closure as defined in claim 13 wherein the lower outwardly directed peripheral rib includes a tapered peripheral surface adapted to facilitate insertion of the closure into an opening of a container and is further provided with an annular abutment wall to preclude withdrawal of the closure when the same has been inserted in a container.

15. A combined container and closure wherein the container comprises a body having an opening defined by an inwardly directed peripheral portion, locking means forming a part of said peripheral portion, said closure being slidably received in said opening and including a body having an upper portion, a lower portion, and an intermediate peripheral sealing portion between the upper and lower portions, said intermediate sealing portion normally underlying and engaging the peripheral portion of the container in a first position thereof and being positively locked thereat by said locking means, said peripheral portion contactingly overlying the peripheral portion of the container body in a second position upon the release of said locking means, and in spacingly overlying relationship to the peripheral portion of the container body in a third position, and passage means placing the interior of the container body in communication with the atmosphere only upon the release of the intermediate sealing portion by the locking means.

16. The combined container and closure as defined in claim 15 wherein the intermediate sealing portion is a radially outwardly directed peripheral rib having a diameter greater than the opening defined by said peripheral portion to form said locking means.

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